Credit Card Services Optional Features

Simple Order API

Supplement





© 2021. Cybersource Corporation. All rights reserved.

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

Restricted Rights Legends

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

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 Unpublished rights reserved under the copyright laws of the United States.

Trademarks

Authorize.Net, eCheck.Net, and The Power of Payment are registered trademarks of Cybersource Corporation. Cybersource, Cybersource Payment Manager, Cybersource Risk Manager, Cybersource Decision Manager, and Cybersource Connect are trademarks and/or service marks of Cybersource Corporation. Visa, Visa International, Cybersource, the Visa logo, and the Cybersource logo are the registered trademarks of Visa International in the United States and other countries. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners.

Version: 21.01

Contents

| ecent Revisions to This Document | | |
|---|----|--|
| tional Features | 9 | |
| 0 Authorizations | 9 | |
| Additional Amounts | ç | |
| Shipping and Handling Fees | | |
| Taxes | 10 | |
| Aggregator Support | 11 | |
| Aggregator Terminology | | |
| Aggregating Transactions on American Express Direct | 12 | |
| Aggregating Transactions on Cielo 3.0 | | |
| Aggregating Transactions on FDC Compass | 14 | |
| Aggregating Transactions on FDC Nashville Global | 15 | |
| Aggregating Transactions on Getnet | 17 | |
| Aggregating Transactions on Rede | 18 | |
| Aggregating Transactions on Software Express | | |
| Aggregating Transactions on Visa Platform Connect | 20 | |
| Airline Data | 23 | |
| American Express SafeKey | 24 | |
| Authorizing an AESK Transaction | 24 | |
| Android Pay | 25 | |
| Apple Pay | 25 | |
| Authorization Only | 25 | |
| Authorization Refresh | 26 | |
| Authorizations with Payment Network Tokens | | |
| Automated Address Verification Plus | 26 | |
| Auto Rental | 27 | |
| AVS Only | 27 | |
| Balance Inquiries | 27 | |
| Bill Payments with Mastercard | | |
| Bill Payments with Visa | 28 | |
| BNDES | | |
| Indicate that a Transaction on Visa Platform Connect is a BNDES Mastercard Transaction | 29 | |

| Indicate that a Transaction on Visa Platform Connect is a BNDES Visa Transaction | 29 | | | |
|--|----|--|--|--|
| Capture after Void | 30 | | | |
| Card-on-File Transactions | | | | |
| Card-Present Data | | | | |
| Card Type Indicators | | | | |
| Receive CTI Information on Chase Paymentech Solutions | | | | |
| Receive CTI Information on Worldpay VAP | 32 | | | |
| Cash Advances | | | | |
| Chase Pay | | | | |
| Credentials-on-File Transactions | 33 | | | |
| Credit Authorizations | | | | |
| Customer Profiles | 36 | | | |
| Discretionary Data | 36 | | | |
| Example for Visa Guatemala | 36 | | | |
| Example for VisaNet Uruguay | 36 | | | |
| Dynamic Currency Conversion with a Third Party Provider | | | | |
| Requirements and Limitations | 39 | | | |
| DCC Terminology | | | | |
| Authorize a Payment | 39 | | | |
| Reverse an Authorization | 40 | | | |
| Capture an Authorization | 41 | | | |
| Credit the Payment | 41 | | | |
| Electronic Verification | | | | |
| Electronic Verification Request Fields | 43 | | | |
| Electronic Verification Response Fields | 44 | | | |
| Encoded Account Numbers | 45 | | | |
| Enhanced AVS | 45 | | | |
| Final Authorization Indicator | | | | |
| Final Authorizations | 47 | | | |
| Preauthorizations | | | | |
| Undefined Authorizations | 48 | | | |
| Unmarked Authorizations | 49 | | | |
| Indicate Whether an Authorization is a Final Authorization or a Preauthorization | 50 | | | |
| Forced Captures | 50 | | | |
| Perform a Forced Capture | 52 | | | |

| Full-Financial Transactions | | | | |
|---|----|--|--|--|
| Google Pay | 52 | | | |
| Guaranteed Exchange Rates | 52 | | | |
| Installment Payments | | | | |
| Installment Payments on American Express Direct | 55 | | | |
| Installment Payments on Chase Paymentech Solutions and FDC Compass | 57 | | | |
| Installment Payments on Visa Platform Connect | 57 | | | |
| Installment Payments on FDC Nashville Global | 70 | | | |
| Installment Payments on FDI Australia | 71 | | | |
| Installment Payments on Processors in Latin America | 71 | | | |
| Installment Payments on Prosa | 73 | | | |
| Installment Payments on Other Processors | 74 | | | |
| Interchange Optimization | | | | |
| Japanese Payment Options | 75 | | | |
| JCB J/Secure | | | | |
| Authorizing a JCB J/Secure Transaction | 78 | | | |
| Least-Cost Routing | | | | |
| Request Least-Cost Routing for All Authorization+Capture Transactions | 80 | | | |
| Request Least-Cost Routing for One Transaction | 80 | | | |
| Partial Authorizations | | | | |
| Supported Features | | | | |
| Unsupported Features | | | | |
| Level II Data | | | | |
| Level III Data | | | | |
| Mass Transit Transactions | | | | |
| Mastercard Bill Payments | | | | |
| Mastercard Expert Monitoring Solutions | 83 | | | |
| Mastercard Identity Check | | | | |
| Authorizing a Mastercard Identity Check Transaction | | | | |
| Mastercard Send | 90 | | | |
| Merchant Descriptors | | | | |
| Merchant-Initiated Reversals and Voids | | | | |
| Use Merchant-Initiated Reversals and Voids on Visa Platform Connect | 91 | | | |
| Use Merchant-Initiated Reversals on OmniPay Direct | | | | |
| Use Merchant-Initiated Reversals and Voids on All Other Processors | | | | |

| Merchant-Initiated Transactions and Credentials-on-File Transactions | | |
|--|-----|--|
| Overview | | |
| Obtaining Customer Credentials | | |
| Cardholder-Initiated Transactions with Credentials on File | | |
| Merchant-Initiated Transactions | | |
| Micropayments | | |
| Multi-Currency Service | | |
| Multiple Partial Captures | | |
| Special Request Fields for Multiple Partial Captures | | |
| Multiple Partial Captures on Streamline | | |
| Network Tokens | | |
| Partial Shipments | | |
| Payer Authentication | | |
| Payment Tokenization | | |
| Payouts | | |
| POS Transactions | 115 | |
| ProtectBuy | | |
| Authorizing a ProtectBuy Transaction | 115 | |
| Purchase Return Authorizations | | |
| Quasi-Cash | | |
| Recipients | | |
| Recurring Billing | | |
| Recurring Payments | | |
| Create a Recurring Payment | | |
| AVS and Recurring Payments | | |
| CVN and Recurring Payments | | |
| Replacement Expiration Dates for Recurring Payments | | |
| Recurring Profiles | | |
| Relaxed Requirements for Address Data and Expiration Date | | |
| Report Groups | | |
| Retail POS Data | | |
| RuPay PaySecure | | |
| Authorizing a RuPay PaySecure Transaction | | |
| Samsung Pay | | |
| Secure Data | | |

| Secure Transactions for Credit Mutuel-CIC | | | | |
|--|-----|--|--|--|
| Authorizing a Secure Transaction for Credit Mutuel-CIC | 132 | | | |
| Service Fees | | | | |
| Single-Message Processing | 134 | | | |
| Soft Descriptors | | | | |
| Split Dial/Route | 134 | | | |
| Split Shipments | | | | |
| Benefits of Using Split Shipments | 135 | | | |
| Requirements for Using Split Shipments | 135 | | | |
| How Split Shipments Work | 135 | | | |
| Split-Shipment Scenarios | | | | |
| Obtaining the Status of a System-Generated Authorization | | | | |
| Staged Digital Wallets | 141 | | | |
| Strong Customer Authentication | 142 | | | |
| SCA Exemptions | 143 | | | |
| Subscriptions | | | | |
| Tax Calculation | 147 | | | |
| Token Management Service | 148 | | | |
| Tokens | 148 | | | |
| Type II Cards | | | | |
| Verbal Authorizations | 149 | | | |
| Visa Bill Payments | | | | |
| Visa Click to Pay | | | | |
| Visa Debt Repayments | | | | |
| Visa Direct | | | | |
| Visa Secure | 154 | | | |
| Authorizing a Visa Secure Transaction | 156 | | | |
| Zero Amount Authorizations | 158 | | | |
| Reference Information | 165 | | | |
| Electronic Verification Response Codes | | | | |

Recent Revisions to This Document

21.01

Initial Release

This document is a supplement to the *Credit Card Guide*.

Optional Features

This section provides information about the optional features that are available for credit card processing.

0 Authorizations

See Zero Amount Authorizations (on page 158).

Additional Amounts

Services:

- Capture
- Credit

Processor: American Express Direct

This feature enables you to provide detailed information about specific amounts included in a transaction. For example, if a transaction amount includes a gratuity of 5.00, you can include these fields in the capture or credit request:

```
purchaseTotals_additionalAmount0=5.0
purchaseTotals_additionalAmountType0=058
```

You can include a maximum of five additional amounts in a transaction. For each amount, you must include an amount field and an amount type field:

- purchaseTotals_additionalAmount0 through purchaseTotals_additionalAmount4
- purchaseTotals_additionalAmountType0 through purchaseTotals_additionalAmountType4

Shipping and Handling Fees

Additional amount fields for shipping and handling fees take precedence over item-level fields.

Shipping and Handling Fees

1. You include the following lines in a request:

purchaseTotals_additionalAmount0=9.95
purchaseTotals_additionalAmountType0=055
item_0_productCode=shipping_and_handling
item_0_unitPrice=12.95

2. Cybersource processes the additional amount fields for the shipping and handling amount of 9.95. The item-level fields for the shipping and handling amount are ignored.

Taxes

Additional amount fields for taxes take precedence over item-level fields.

Taxes

1. You include the following lines in a request:

```
purchaseTotals_additionalAmount0=7.95
purchaseTotals_additionalAmountType0=046
item_0_taxAmount=5.95
```

2. Cybersource processes the additional amount fields for the tax amount of 7.95. The item-level field for the tax amount is ignored.

Aggregator Support

This feature enables a third-party agent to act as a payment aggregator and process payment card transactions for sub-merchants. Independent sales organizations (ISOs) and member service providers (MSPs) are agents that can also leverage these aggregator features.

Contact customer support to have your account configured for this feature.

Aggregator Terminology

aggregator

Also known as *payment aggregator*. Organization that aggregates sub-merchants under a single account and settles funds directly to the sub-merchants. An aggregator is usually an ISO or MSP.

independent sales organization (ISO)

Organization that does one or more of the following:

- Works with acquirers to sponsor merchant accounts and usually assumes the risks associated with the merchants' processing.
- Procures new merchant relationships based on contracts with acquirers.
- Connects with a gateway to process online payment card transactions for small businesses, usually in exchange for a fee or percentage of sales.

member service provider (MSP)

Same as an ISO although an MSP has no financial responsibility to the merchant.

payment facilitator

Payment aggregator.

service provider

Third-party or outsource provider of payment processing services. A service provider typically provides a single service with no role in settling funds to a merchant.

sub-merchant

Merchant whose transactions are submitted by a payment aggregator.

third-party agent

Umbrella term for independent sales organizations, member service providers, payment aggregators, and payment facilitators.

Aggregating Transactions on American Express Direct

Services:

- Authorization
- Capture
- Credit

Card type: American Express

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
 - Credit: in the credit request, set the **ccCreditService_run** field to **true**. Include the fields that are required for the credit service.
- 2. Include the following required fields in the request:
 - ccAuthService_aggregatorID—required only for the authorization service
 - ccAuthService_aggregatorName—required only for the authorization service
 - ccCaptureService_aggregatorID—required only for the capture service
 - ccCaptureService_aggregatorName—required only for the capture service
 - ccCreditService_aggregatorID—required only for the credit service
 - ccCreditService_aggregatorName—required only for the credit service
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantCountry
 - invoiceHeader_submerchantEmail
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantName
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet

- invoiceHeader_submerchantTelephoneNumber
- merchantCategoryCode
- 3. Include any of the following optional fields in the request as desired:
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_merchantDescriptorCity
 - invoiceHeader_merchantDescriptorContact
 - invoiceHeader_merchantDescriptorCountry
 - invoiceHeader_merchantDescriptorPostalCode
 - invoiceHeader_merchantDescriptorState
 - invoiceHeader_merchantDescriptorStreet

Aggregating Transactions on Cielo 3.0

Service: Authorization

- American Express
- Aura
- Diners Club
- Discover
- Elo
- Hipercard
- JCB
- Maestro (International)
- Mastercard
- Visa
- Visa Electron
- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.

- 2. Include the following required fields in the request. If any required fields are missing, the transaction will be sent to the processor without any aggregator information.
 - billTo_merchantTaxID
 - ccAuthService_aggregatorID
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantCountry
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet
 - invoiceHeader_submerchantTelephoneNumber
 - merchantCategoryCode

Related information

Merchant Descriptors Using the Simple Order API

Aggregating Transactions on FDC Compass

Services:

- Authorization
- Capture
- Credit

- American Express
- Mastercard
- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to true. Include the fields that are required for the authorization service.

- Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- Credit: in the credit request, set the **ccCreditService_run** field to **true**. Include the fields that are required for the credit service.
- 2. Include the following required fields in the request:
 - ccAuthService_aggregatorID—required only for the authorization service
 - **ccAuthService_aggregatorName**—required only for the authorization service with Mastercard
 - ccCaptureService_aggregatorID—required only for the capture service
 - **ccCaptureService_aggregatorName**—required only for the capture service with Mastercard
 - ccCreditService_aggregatorID—required only for the credit service
 - **ccCreditService_aggregatorName**—required only for the credit service with Mastercard
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantName
 - invoiceHeader_submerchantTelephoneNumber
- 3. Include any of the following optional fields in the request as desired:
 - invoiceHeader_submerchantCountry
 - invoiceHeader_submerchantEmail
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet
 - merchantCategoryCode—supported only for the authorization service

Aggregating Transactions on FDC Nashville Global

Services:

Authorization

- Capture
- Credit

- American Express
- Mastercard
- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
 - Credit: in the credit request, set the **ccCreditService_run** field to **true**. Include the fields that are required for the credit service.
- 2. Include the following required fields in the request:
 - ccAuthService_aggregatorID—required only for the authorization service
 - ccAuthService_aggregatorName—required only for the authorization service
 - ccCaptureService_aggregatorID—required only for the capture service
 - ccCaptureService_aggregatorName—required only for the capture service
 - ccCreditService_aggregatorID—required only for the credit service
 - ccCreditService_aggregatorName—required only for the credit service
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantCountry
 - invoiceHeader_submerchantEmail
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantName
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet
 - invoiceHeader_submerchantTelephoneNumber

merchantCategoryCode

- 3. Include any of the following optional fields in the request as desired:
 - invoiceHeader_submerchantMerchantID—supported only for American Express
 - invoiceHeader_submerchantRegion

Aggregating Transactions on Getnet

Service: Authorization

- American Express
- Elo
- Hipercard
- Mastercard
- Visa
- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
- 2. Include the following required fields in the request. If any required fields are missing, the transaction will be sent to the processor without any aggregator information.
 - billTo_merchantTaxID
 - ccAuthService_aggregatorID
 - ccAuthService_aggregatorName
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet
 - merchantCategoryCode

Related information

Merchant Descriptors Using the Simple Order API

Aggregating Transactions on Rede

Service: Authorization

- American Express
- Diners Club
- Elo
- Hipercard
- JCB
- Mastercard
- Visa
- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to true. Include the fields that are required for the authorization service.
- 2. Include the following required fields in the request. If any required fields are missing, the transaction will be sent to the processor without any aggregator information.
 - billTo_merchantTaxID
 - ccAuthService_aggregatorID
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_salesOrganizationID
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantCountry
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet
 - merchantCategoryCode

Related information

Merchant Descriptors Using the Simple Order API

Aggregating Transactions on Software Express

Service: Authorization

Card types:

- Mastercard
- Visa
- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to true. Include the fields that are required for the authorization service.
- 2. Include the following required fields in the request. If any required fields are missing, the transaction will be sent to the processor without any aggregator information.
 - billTo_merchantTaxID
 - ccAuthService_aggregatorID
 - ccAuthService_aggregatorName
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_salesOrganizationID
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantCountry
 - invoiceHeader_submerchantID
 - invoiceHeader_submerchantPostalCode
 - invoiceHeader_submerchantState
 - invoiceHeader_submerchantStreet
 - invoiceHeader_submerchantTelephoneNumber
 - merchantCategoryCode

Related information

Merchant Descriptors Using the Simple Order API

Aggregating Transactions on Visa Platform Connect

Services:

- Authorization
- Capture
- Credit

Card types:

- American Express
- Diners Club
- Discover
- JCB
- Mastercard
- Visa

Aggregating Authorizations on Visa Platform Connect with American Express

Typically, the merchant descriptor field is used to display your business name on the customer's statement. However, when you are a payment aggregator, you can use other values to provide the sub-merchant's business name for capture and credit requests. When you do not provide a value in the merchant descriptor fields, the values in your account are used. To add or update the values in your account, contact customer support.

- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
- 2. Include the following required fields in the request:
 - ccAuthService_aggregatorID
 - ccAuthService_aggregatorName
 - invoiceHeader_submerchantCity
 - invoiceHeader_submerchantName
 - invoiceHeader_submerchantStreet
- 3. Include any of the following optional fields in the request as desired:
 - invoiceHeader_submerchantCountry

- invoiceHeader_submerchantEmail
- invoiceHeader_submerchantID
- invoiceHeader_submerchantPostalCode
- invoiceHeader_submerchantState
- invoiceHeader_submerchantTelephoneNumber

Aggregating Captures and Credits on Visa Platform Connect with American Express

There are no required fields for aggregating captures and credits on Visa Platform Connect with American Express.

Typically, the merchant descriptor field is used to display your business name on the customer's statement. However, when you are a payment aggregator, you can use other values to provide the sub-merchant's business name for capture and credit requests. When you do not provide a value in the merchant descriptor fields, the values in your account are used. To add or update the values in your account, contact customer support.

- 1. Request the service:
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
 - Credit: in the credit request, set the **ccCreditService_run** field to **true**. Include the fields that are required for the credit service.
- 2. Include any of the following optional fields in the request as desired:
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_merchantDescriptorCity
 - invoiceHeader_merchantDescriptorContact
 - invoiceHeader_merchantDescriptorCountry
 - invoiceHeader_merchantDescriptorPostalCode
 - invoiceHeader_merchantDescriptorState
 - invoiceHeader_merchantDescriptorStreet
 - invoiceHeader_submerchantEmail

- invoiceHeader_submerchantID
- invoiceHeader_submerchantTelephoneNumber
- merchantCategoryCode

Aggregating Transactions on Visa Platform Connect with Mastercard or Visa

There are no required fields for aggregating captures and credits on Visa Platform Connect with Mastercard or Visa.

Typically, the merchant descriptor field is used to display your business name on the customer's statement. However, when you are a payment aggregator, you can use other values to provide the sub-merchant's business name for capture and credit requests. When you do not provide a value in the merchant descriptor fields, the values in your account are used. To add or update the values in your account, contact customer support.

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
 - Credit: in the credit request, set the **ccCreditService_run** field to **true**. Include the fields that are required for the credit service.
- 2. For an authorization, include the following required fields in the request:
 - ccAuthService_aggregatorID
 - invoiceHeader_salesOrganizationID—required only with Mastercard
 - invoiceHeader_submerchantID
- 3. Include any of the following optional fields in the authorization, capture, or credit request as desired:
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_merchantDescriptorCity
 - invoiceHeader_merchantDescriptorContact
 - invoiceHeader_merchantDescriptorCountry
 - invoiceHeader_merchantDescriptorPostalCode
 - invoiceHeader_merchantDescriptorState

- invoiceHeader_merchantDescriptorStreet
- merchantCategoryCode

Aggregating Transactions on Visa Platform Connect with Any Other Card Type

There are no required fields for aggregating authorizations, captures, or credits on Visa Platform Connect with card types other than American Express, Mastercard, or Visa.

Typically, the merchant descriptor field is used to display your business name on the customer's statement. However, when you are a payment aggregator, you can use other values to provide the sub-merchant's business name for capture and credit requests. When you do not provide a value in the merchant descriptor fields, the values in your account are used. To add or update the values in your account, contact customer support.

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
 - Credit: in the credit request, set the **ccCreditService_run** field to **true**. Include the fields that are required for the credit service.
- 2. Include any of the following optional fields in the request as desired:
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_merchantDescriptorCity
 - invoiceHeader_merchantDescriptorContact
 - invoiceHeader_merchantDescriptorCountry
 - invoiceHeader_merchantDescriptorPostalCode
 - invoiceHeader_merchantDescriptorState
 - invoiceHeader_merchantDescriptorStreet
 - merchantCategoryCode

Airline Data

See Airline Processing Using the Simple Order API.

American Express SafeKey

Service: Authorization

Processors:

- American Express Direct: mandatory for transactions that originate in Singapore.
- Chase Paymentech Solutions
- Elavon Americas
- FDC Nashville Global
- JCN Gateway
- Visa Platform Connect

Card type: American Express

Before you implement payer authentication for American Express SafeKey (AESK), you must contact customer support to have your account configured for this feature.

When you request an authorization using a supported card type and a supported processor, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

AESK authenticates the customer during an online purchase and protects payment information as it is transmitted over the Internet.

Authorizing an AESK Transaction

1. Include the following fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other.

- ccAuthService_cavv—required
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_xid—optional

See the field descriptions for important information.

2. Examine the response codes.

The authorization service returns a raw response code and a mapped response code:

- The *raw response code* is the value returned by the processor. This value is returned in the **ccAuthReply_cavvResponseCodeRaw** field.
- The *mapped response code* is the predefined value that corresponds to the raw response code. This value is returned in the **ccAuthReply_cavvResponseCode** field.

Related information

Payer Authentication Using the Simple Order API

Android Pay

The name of Android Pay changed to *Google Pay*. See Google Pay Using the Simple Order API.

Apple Pay

See Apple Pay Using the Simple Order API.

Authorization Only

Service: Authorization

Processors:

- American Express Direct
- Elavon Americas

The authorization response message includes point-of-sale (POS) and transaction ID (TID) values. When you perform authorizations through Cybersource and perform captures and credits through other financial institutions, you can include these values in capture requests and follow-on credit requests:

• POS data: Get this value from ccAuthReply_posData.

• TID: Get this value from ccAuthReply_transactionID.

Including these values in capture requests and follow-on credit requests enables you to comply with the CAPN requirements, thus avoiding noncompliance fees.

When you use the Simple Order API in XML format, you must use version 1.63 or later of the XML schema to implement the authorization only feature.

Authorization Refresh

On Visa Platform Connect and GPN, authorization refresh is performed as part of interchange optimization.

Related information Interchange Optimization (on page 74)

Authorizations with Payment Network Tokens

See Authorizations with Payment Tokens Using the Simple Order API.

Automated Address Verification Plus

Processor: American Express Direct

You must contact customer support and American Express to register for Automated Address Verification Plus (AAV+).

Card type: American Express

AAV+ consists of the Enhanced AVS functionality plus verification of some additional fields. This service is intended for merchants who deliver physical goods to a different address than the billing address. AAV+ verifies the additional fields only when the standard and Enhanced AVS tests pass first.

The additional fields that are verified for AAV+ are:

shipTo_firstName

- shipTo_lastName
- shipTo_street1
- shipTo_country
- shipTo_postalCode
- shipTo_phoneNumber
- billTo_phoneNumber (American Express Direct only)

For American Express Direct, when your account is enabled for AAV+ and when you include the first name, last name, and phone number in a request message, the response message includes EV response codes for those fields.

Related information

Enhanced AVS (on page 45)

Auto Rental

For information about auto rental, contact customer support.

AVS Only

See Zero Amount Authorizations (on page 158).

Balance Inquiries

Service: Authorization

Processors:

- Visa Platform Connect
- Elavon Americas

Balance inquiries and balance responses are two different features:

- Balance responses are supported for prepaid cards and are a partial authorization feature.
- Balance inquiries are not associated with partial authorizations.

This feature enables you to request balance information for an account.

To use this feature, include the **balanceInquiry** field in an authorization request. The amount in the request must be zero.

The following fields are returned:

- ccAuthReply_accountBalance
- ccAuthReply_accountBalanceCurrency
- ccAuthReply_accountBalanceSign
- ccAuthReply_accountType
- ccAuthReply_amountType

Bill Payments with Mastercard

See Mastercard Bill Payments (on page 83).

Bill Payments with Visa

See Visa Bill Payments (on page 152).

BNDES

Services:

- Authorization
- Credit

Card types:

Mastercard

• Visa

Processor: Visa Platform Connect

BNDES is card product the same way Visa Platinum, Visa Corporate, and Mastercard Corporate are products. BNDES is also a bank named Brazilian Development Bank. The BNDES bank issues the BNDES card products.

Indicate that a Transaction on Visa Platform Connect is a BNDES Mastercard Transaction

You must include the following fields in an authorization or credit request:

- billTo_companyTaxID
- billTo_merchantTaxID
- card_productName

Related information

API Fields

Indicate that a Transaction on Visa Platform Connect is a BNDES Visa Transaction

You must include the following fields in an authorization or credit request:

- billTo_personalID or billTo_companyTaxID
- card_productName
- loan_assetType
- loan_type

Related information

API Fields

Capture after Void

If your processor supports multiple captures, you can capture an authorization after you void previous captures associated with the authorization. For example, you can follow these steps:

- 1. Authorize a payment.
- 2. Capture the authorization.
- 3. Void the capture.
- 4. Capture the authorization again.

If your processor does not support multiple captures, when you void a transaction the transaction is at the end of its life and cannot be the source of another follow-on capture or follow-on credit. For example, if you authorize and capture a transaction, and then you void the capture, you cannot submit another capture request that uses the authorization code or request ID from the original authorization. If you still want to capture that transaction, you must re-authorize the transaction and capture the new authorization.

Card-on-File Transactions

See Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93).

Card-Present Data

See Card-Present Processing Using the Simple Order API.

Card Type Indicators

Service: Authorization

Processors:

- Chase Paymentech Solutions
- Worldpay VAP

Prerequisites:

- Contact your processor to have your account configured for this feature.
- Contact customer support to have your account configured for this feature.

This feature enables you to receive card type indicator (CTI) information in authorization response messages. The processor can provide CTI information for approved or declined transactions, not for rejected transactions.

The CTI information is returned in the following fields:

- ccAuthReply_affluenceIndicator
- ccAuthReply_cardCommercial
- ccAuthReply_cardHealthcare
- ccAuthReply_cardIssuerCountry
- ccAuthReply_cardLevel3Eligible
- ccAuthReply_cardPayroll
- ccAuthReply_cardPrepaid
- ccAuthReply_cardRegulated
- ccAuthReply_cardSignatureDebit

For Worldpay VAP, CTI information is also returned in the following fields:

- card_prepaidReloadable
- card_prepaidType
- card_virtual

Related information

API Fields

Receive CTI Information on Chase Paymentech Solutions

The authorization request message must comply with the CTI acceptance criteria as follows:

- American Express—CTI is not supported.
- Carte Blanche—CTI is not supported.
- Diners Club—Currency is USD or CAD.

- Discover—Currency is USD or CAD.
- JCB—Currency is USD.
- Mastercard—Any currency.
- Visa—Amount is not 0 (zero). Any currency.

Receive CTI Information on Worldpay VAP

CTI information is returned in the authorization response message.

Cash Advances

Services:

- Authorization
- Capture

Processors:

- Barclays
- LloydsTSB Cardnet

A cash advance enables a customer to use a payment card to purchase foreign currency or travelers checks. The currency the customer uses to fund the transactions must be British pounds.

Before processing cash advances, you must:

- Contact the processor to obtain an agreement to process cash advance transactions.
- Contact customer support to have your account configured for this feature. You must have a separate merchant ID that you use only for cash advance transactions.

Process a cash advance transaction the same way you process a regular credit card transaction: with an authorization and a capture.

(] Important: You cannot process a cash advance and airline data in the same transaction.

Chase Pay

See Chase Pay Using the Simple Order API.

Credentials-on-File Transactions

See Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Credit Authorizations

Service: Credit

Processors and card types:

- Chase Paymentech Solutions:
 - Diners Club
 - Discover
 - JCB
 - Mastercard
 - Visa
- Elavon Americas:
 - American Express
 - China UnionPay
 - Diners Club
 - Discover
 - JCB
 - Mastercard
 - Visa

- FDC Compass:
 - Diners Club
 - Discover
 - JCB
 - \circ Mastercard
 - Visa
- FDC Nashville Global:
 - American Express
 - China UnionPay
 - Diners Club
 - Discover
 - JCB
 - \circ Mastercard
 - Visa
- FDMS Nashville:
 - Diners Club
 - Discover
 - JCB
 - Mastercard
 - Visa
- GPN:
 - \circ American Express
 - \circ Diners Club
 - Discover
 - JCB
 - Mastercard
 - Visa

• JCN Gateway:

- Mastercard
- Visa
- Moneris—Moneris automatically authorizes credits for you. It is not possible to provide you with transaction information about credit authorizations.:
 - American Express
 - China UnionPay
 - Discover
 - Mastercard
 - Visa
- Visa Platform Connect—this feature is supported only for Sumitomo Mitsui Card Co.:
 - Mastercard
 - Visa

A credit authorization authenticates the card and customer. If you are located in the U.S., Canada, or Latin America, every credit request is automatically authorized. If you are not located in the U.S., Canada, or Latin America, contact customer support to enable credit authorizations for your account.

When you use the Simple Order API in XML format, you must use version 1.151 or later of the XML schema to receive the following response fields.

The following fields are included in the credit response message when the credit request is authorized:

- ccCreditReply_authorizationCode
- **ccCreditReply_paymentNetworkTransactionID**—returned only when the issuer sends this value to the processor
- ccCreditReply_processorResponse

When you request a void for the credit, the credit is voided and the credit authorization is reversed. When the credit authorization reversal is not successful, the **voidReply_creditAuthReversalResponse** field is included in the void response message.

Customer Profiles

See Token Management Service (on page 148).

Discretionary Data

This section provides examples of the formats for discretionary data for specific acquirers. In request messages, you can include discretionary data in the **issuer_additionalData** field. In response messages, discretionary data can be sent to you in the same field.

It is recommended that you contact your acquirer for information about the formats to use.

Example for Visa Guatemala

This example is for issuer-funded installment payments. Additional formats exist; the issuers and acquirers work together to develop and reach consensus on the formats.

Example: Discretionary Data Format for Issuer-Funded Installment Payments with Visa Guatemala

VC1000000050000

| Position (Character or Digit #) | Number of Characters or Digits | Description |
|---------------------------------------|--------------------------------------|-------------------------------|
| 1-2 | 2 | Prefix. Set this value to VC. |
| 3-4 | 2 | Total number of installments. |
| 5-16 | 12 | Total amount. |

Discretionary Data Format for Issuer-Funded Installment Payments with Visa Guatemala

Example for VisaNet Uruguay

This example is for issuer-funded installment payments. Additional formats exist; the issuers and acquirers work together to develop and reach consensus on the formats.

Example: Discretionary Data Format for Issuer-Funded Installment Payments with VisaNet Uruguay

```
0061201234567891000000008160003359
```

| Position (Character or Digit #) | Number of Characters or Digits | Description |
|---------------------------------------|--------------------------------------|--|
| 1-2 | 2 | Plan type.Set this value to 00.Specifies that the transaction is an e-commerce transaction. |
| 3 | 1 | Grace period. Number of months that the issuer waits before charging customers. |
| 4-5 | 2 | Total number of installments. Possible values: 00 through 99. |
| 6 | 1 | POS entry mode.Set this value to Ø.Specifies that the transaction is an e-commerce transaction. |
| 7-15 | 9 | Identity document number.Set this value to the number on the customer's identity document or leave it blank.Format: right justified with 0 (zero) padding on the left. |
| 16 | 1 | Financial inclusion law indicator. Possible values: 1: Law 17934 2: Law 18099 3: Asignaciones familiares (AFAM) (family allowance program) 4: Real state law 5: Law 19210 |
| 17-28 | 12 | Financial inclusion amount. This value is the amount the bank returns to the customer. |
| 29-35 | 7 | Merchant-generated invoice number. |

Discretionary Data Format for Issuer-Funded Installment Payments with VisaNet Uruguay

Dynamic Currency Conversion with a Third Party Provider

This section describes how to include Dynamic Currency Conversion (DCC) data from a third party DCC provider in requests for credit card services. This section covers transaction processing after DCC. For information about DCC, contact your DCC provider.

In addition to the post-conversion processing that is described in this section, Cybersource provides a DCC service for a limited number of processors. For information about the DCC service, contact customer support.

Services:

- Authorization
- Authorization reversal
- Capture
- Credit

Processors:

- FDC Nashville Global—only for card-present transactions
- SIX—only for card-present transactions
- Visa Platform Connect

Card types:

- Visa
- Mastercard

DCC converts a foreign customer's purchase from your local pricing currency to the customer's billing currency. This functionality can help you improve or create business relationships with customers who prefer to make purchases in their own currency.

Related information

DCC Examples in Card-Present Processing Using the Simple Order API Dynamic Currency Conversion for First Data Using the Simple Order API

Requirements and Limitations

To include DCC data from a third party provider:

- Contact your acquirer to register for this feature.
- Contact customer support to have your account configured for this feature.
- You must meet the payment card company rules for DCC. Contact your acquirer for details. For example, you might need to:
 - Provide the customer with a receipt that shows the amount in the local pricing currency, the amount in the billing currency, the rate of exchange used to convert the order amount, and the DCC markup.
 - Have the customer sign an acknowledgment that the customer had a choice to pay in the local pricing currency and that the choice of currency is final.

When you use DCC for an order, you cannot split the order into multiple shipments.

DCC Terminology

Billing currency or converted currency

Currency in which the card is denominated and in which transactions are posted to the customer's account.

Converted amount

Amount of the transaction, denominated in the customer's billing currency.

Exchange rate

Factor used to convert an amount in one currency to an amount in another currency.

Local pricing currency

Selling currency that you use for pricing your goods and in which you usually submit transactions for processing.

Original amount

Amount of the transaction, denominated in your local pricing currency.

Authorize a Payment

🕕 Important:

The value for the **purchaseTotals_originalAmount** field must always be in your local pricing currency.

Except for the original amount, all amounts for the order must be in the converted currency. This requirement includes the total payment amount and any tax amounts or surcharge amounts that you send to Cybersource. Use the exchange rate from your DCC provider to convert these amounts from your local pricing currency to the customer's billing currency.

Include the following DCC fields in an authorization request:

- dcc_dccIndicator: set this field to 1. When you include DCC data in an authorization request and do not set this field to 1, the request is rejected.
- dcc_referenceNumber: unique identifier generated by the DCC provider.
- item_#_unitPrice or purchaseTotals_grandTotalAmount: converted amount in the customer's billing currency.
- purchaseTotals_currency: currency code for the customer's billing currency.
- purchaseTotals_exchangeRate: exchange rate.
- purchaseTotals_exchangeRateTimeStamp: exchange rate timestamp in GMT in this format: YYYYMMDDhhmmss
- purchaseTotals_foreignAmount: converted amount in the customer's billing currency.
- purchaseTotals_foreignCurrency: currency code for the customer's billing currency.
- purchaseTotals_originalAmount: original amount in your local pricing currency.
- purchaseTotals_originalCurrency: currency code for your local pricing currency.

Related information

API Fields Create an Authorization Request

Reverse an Authorization

Do not include any DCC fields in a full authorization reversal request. When you include DCC fields in the request, they are ignored. For full authorization reversals, the data from the original authorization is used.

🕕 Important:

The value for the **purchaseTotals_originalAmount** field must always be in your local pricing currency.

Except for the original amount, all amounts for the order must be in the converted currency. This requirement includes the total payment amount and any tax amounts or surcharge amounts that you send to Cybersource. Use the exchange rate from your DCC provider to convert these amounts from your local pricing currency to the customer's billing currency.

Related information

Create a Full Authorization Reversal Request

Capture an Authorization

Do not include any DCC fields in a capture request.

When you include DCC fields in the request, they are ignored. For captures, the data from the original authorization is used.

(] Important:

The value for the **purchaseTotals_originalAmount** field must always be in your local pricing currency.

Except for the original amount, all amounts for the order must be in the converted currency. This requirement includes the total payment amount and any tax amounts or surcharge amounts that you send to Cybersource. Use the exchange rate from your DCC provider to convert these amounts from your local pricing currency to the customer's billing currency.

Related information

Create a Capture Request

Credit the Payment

1. Do not include any DCC fields in a credit request.

When you include DCC fields in the request, they are ignored. For credits, the data from the original authorization is used.

(] Important:

The value for the **purchaseTotals_originalAmount** field must always be in your local pricing currency.

Except for the original amount, all amounts for the order must be in the converted currency. This requirement includes the total payment amount and any tax amounts or surcharge amounts that you send to Cybersource. Use the exchange rate from your DCC provider to convert these amounts from your local pricing currency to the customer's billing currency.

2. To credit a payment for a transaction that uses DCC, request a follow-on credit. DCC is not supported for stand-alone credits. When you include DCC fields in a request for a stand-alone credit, they are ignored.

Related information

Create a Credit Request

Electronic Verification

Processors:

- American Express Direct
- FDC Nashville Global
- TSYS Acquiring Solutions
- 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, contact your account manager at Worldpay VAP.

For EV, Worldpay VAP verifies only the email address, first name, last name, and phone number.

If Worldpay VAP is your processor, you must contact Worldpay VAP to register for EV.

Card types:

- American Express
- Discover—only on TSYS Acquiring Solutions. Only the first name and last name are checked.

EV confirms the customer's billing information. When a customer provides incorrect information, the transaction might be fraudulent.

As part of EV for TSYS Acquiring Solutions and Worldpay VAP, you can provide the IP address in the **billTo_ipAddress** field. When you provide the IP address, American Express does not send a response for it. Instead, American Express uses the IP address to run a check in their internal

database to ensure that the IP address does not match previously fraudulent transactions with the same IP address and is not from countries that American Express has determined to be a high risk for fraud. If, based on the IP address, American Express determines that the transaction is fraudulent or is a high risk for fraud, American Express declines the transaction.

Related reference

Electronic Verification Request Fields (on page 43) Electronic Verification Response Fields (on page 44)

Electronic Verification Request Fields

To receive an electronic verification (EV) response code for a particular value, you must include that value in an authorization request. The following table lists the request fields for each value that EV can verify. In the table, the R/O column indicates whether the field is required or optional for the authorization service.

Some merchants use placeholder data for some required fields, such as addresses and phone numbers, because their customers do not provide them with the required information. The benefit of using certain specific placeholder values is that Decision Manager ignores the values instead of attempting to process them. However, when you use placeholder data in any of the fields that are used for EV, the corresponding EV results are invalid.

Important Notes for EV Request Fields:

- 1. On American Express Direct, to receive EV response codes for the first name, last name, and phone number, your account must be enabled for AAV+.
- 2. Required when the billing country is the U.S. or Canada; otherwise, optional.

| Value That is Being Verified | R/O for Autho rizations | Request Field |
|---------------------------------|----------------------------|--------------------|
| Email | R | billTo_email |
| First name ¹ | R | billTo_firstName |
| Last name ¹ | R | billTo_lastName |
| Phone number ¹ | 0 | billTo_phoneNumber |
| Postal code | R/0 ² | billTo_postalCode |
| Street address | R | billTo_street1 |

Related reference

Electronic Verification Response Fields (on page 44)

Related information

Automated Address Verification Plus (on page 26) Electronic Verification (on page 42)

Electronic Verification Response Fields

For each verified value, electronic verification (EV) returns a raw response code and a mapped response code:

- The *raw response code* is the value returned by the processor.
- The *mapped response code* is the pre-defined value that corresponds to the raw response code.

The following table lists the response fields for each value that EV can verify.

| Value That is Being Verified | API Field for Mapped Responses | API Field for Raw Response |
|------------------------------|-----------------------------------|----------------------------------|
| Email | ccAuthReply_evEmail | ccAuthReply_evEmailRaw |
| First name and last name | ccAuthReply_evName | ccAuthReply_evNameRaw |
| Phone number | ccAuthReply_evPhoneNumbe r | ccAuthReply_evPhoneNumber Raw |
| Postal code | ccAuthReply_evPostalCode | ccAuthReply_evPostalCodeRa w |
| Street address | ccAuthReply_evStreet | ccAuthReply_evStreetRaw |

Related reference

Electronic Verification Response Codes (on page 165) Electronic Verification Request Fields (on page 43)

Related information

Electronic Verification (on page 42)

Encoded Account Numbers

Services:

- Authorization
- Credit

Processor: Chase Paymentech Solution's Credit Card Encryption program

Depending on your type of business, you might be eligible to acquire from an issuing bank a list of the customers who have payment cards issued by that bank. The list does not include the customers' payment card numbers, but instead includes encoded account numbers. Some processors refer to this type of program as issuer encryption and to the numbers as encrypted account numbers. This type of program is designed to protect customer information according to the provisions of the Gramm-Leach-Bliley Act.

You must contact your processor to obtain the information required for the Credit Card Encryption program and you must have a relationship with the bank in order to acquire their list of customers.

When processing a payment or credit for one of these customers, you use the encoded account number instead of the customer's payment card number. The issuing bank then matches the encoded account number to the customer's payment card number when processing the payment.

In an authorization request, the **account_encoder_id** field is required. Also include the fields that are required for an authorization request.

In a follow-on credit request, the **account_encoder_id** field is optional. Also include the fields that are required for a credit request.

In a stand-alone credit request, the **account_encoder_id** field is required. Also include the fields that are required for a credit request.

Enhanced AVS

Processor: American Express Direct

You must contact customer support and American Express to register for Enhanced AVS.

Card type: American Express

Enhanced AVS consists of the standard AVS functionality plus verification of some additional fields. The additional fields that are verified for Enhanced AVS are:

billTo_firstName

billTo_lastName

Related information

Automated Address Verification Plus (on page 26)

Final Authorization Indicator

Services:

- Authorization
- Incremental authorization

Processors:

- Barclays
- Chase Paymentech Solutions—Mastercard and Maestro (International) only. Chase Paymentech Solutions does not support this feature for Maestro (UK Domestic).
- Visa Platform Connect
- Elavon
- Elavon Americas—Mastercard only.
- FDC Compass
- FDC Nashville Global
- FDI Australia
- FDMS Nashville
- GPN
- HBoS
- HSBC
- Lloyds-OmniPay
- LloydsTSB Cardnet
- OmniPay Direct. The supported acquirers are:

- Bank of America Merchant Services
- Cardnet International
- First Data Merchant Solutions (Europe)
- Global Payments International Acquiring
- OmniPay-Ireland—Mastercard only. OmniPay-Ireland does not support Maestro (International) or Maestro (UK Domestic).
- SIX
- Streamline
- TSYS Acquiring Solutions
- Worldpay VAP

No action is taken to support this feature on Worldpay VAP. The processor sets the indicator.

Card types:

• Co-badged Mastercard and mada. You must identify the card type as Mastercard.

Supported only on Visa Platform Connect.

- Maestro (International)
- Maestro (UK Domestic)
- Mastercard

This feature supports a mandate from Mastercard. The purpose of the mandate is to ensure that a customer's funds are available when the order might not be fulfilled.

For an authorization with an amount greater than zero, Mastercard recommends that you indicate whether the authorization is a final authorization, a preauthorization, or an undefined authorization.

Final Authorizations

For a final authorization:

- Authorization amount is greater than zero.
- Authorization amount is the final amount that the customer agrees to pay.
- Authorization should not be cancelled after it is approved except when a system failure occurs.

- Authorization must be submitted for capture within seven calendar days of its request.
- Capture amount and currency must be the same as the authorization amount and currency.
- Chargeback protection is in effect for seven days after the authorization.

Preauthorizations

For a preauthorization:

- Authorization amount is greater than zero.
- Authorization amount can be an estimate when the final amount is unknown, which is typical for hotel, auto rental, e-commerce, and restaurant transactions.
- Authorization must be submitted for capture within 30 calendar days of its request.
- When you do not capture the authorization, you must reverse it.

In the U.S., Canada, Latin America, and Asia Pacific, Mastercard charges an additional fee for a preauthorization that is not captured and not reversed.

In Europe, Russia, Middle East, and Africa, Mastercard charges fees for all preauthorizations.

• Chargeback protection is in effect for 30 days after the authorization.

Undefined Authorizations

An authorization is undefined when you set the default authorization type in your account to undefined and do not include the **authIndicator** field in the authorization request. To set the default authorization type in your account, contact customer support.

Undefined authorizations are supported only in the U.S., Canada, Latin America, and Asia Pacific. They are not supported in Europe, Russia, Middle East, and Africa.

Undefined authorizations are not supported on the following processors:

- Chase Paymentech Solutions
- Elavon Americas
- FDC Compass
- FDC Nashville Global
- FDI Australia
- FDMS Nashville

For an undefined authorization:

- Authorization amount is greater than zero.
- Authorization amount can be different from the final transaction amount.
- Authorization should not be cancelled after it is approved except when a system failure occurs.
- Authorization must be submitted for capture within seven calendar days of its request.
- When you do not capture the authorization, you must reverse it; otherwise, Mastercard charges an additional fee for the transaction.
- Chargeback protection is in effect for seven days after the authorization.

Unmarked Authorizations

An authorization is unmarked when the default authorization type is not set in your account and you do not include the **authIndicator** field in the authorization request. To set the default authorization type in your account, contact customer support.

Unmarked authorizations are supported only on the following processors:

- Chase Paymentech Solutions
- Visa Platform Connect
- Elavon Americas
- FDC Compass
- FDC Nashville Global
- FDI Australia
- FDMS Nashville
- HBoS
- Lloyds-OmniPay
- LloydsTSB Cardnet
- Streamline
- SIX

For an unmarked authorization:

- Cybersource does not set a mark or indicator for the type of authorization in the request that is sent to the processor.
- Authorization amount is greater than zero.
- Authorization amount can be different from the final transaction amount.
- Your acquirer processes an unmarked authorization as a final authorization, a preauthorization, or an undefined authorization. Contact your acquirer to learn how they process unmarked authorizations.

Indicate Whether an Authorization is a Final Authorization or a Preauthorization

- 1. Include the **authIndicator** field in the authorization request.
- 2. For a final authorization on a processor that supports merchant-initiated transactions, the authorization request must include subsequent authorization fields.

The **authIndicator** field is included in the response message for the following processors:

- Chase Paymentech Solutions
- Visa Platform Connect
- FDC Compass
- FDC Nashville Global
- FDI Australia
- FDMS Nashville

Related information

API Fields

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Forced Captures

Service: Authorization

Processors:

• AIBMS

- American Express Direct
- Asia, Middle East, and Africa Gateway
- Chase Paymentech Solutions
- Visa Platform Connect. The supported acquirers are:
 - Banco Safra
 - Bank Sinarmas (Omise Ltd.)
 - BC Card Co., Ltd.
 - Citibank Malaysia
 - CTBC Bank Ltd.
 - Sumitomo Mitsui Card Co.
 - Vietnam Technological and Commercial Joint-stock Bank
- Elavon Americas
- FDC Nashville Global
- FDMS Nashville
- FDMS South
- GPN
- JCN Gateway
- OmniPay Direct. The supported acquirers are:
 - Bank of America Merchant Services
 - Cardnet International
 - First Data Merchant Solutions (Europe)
 - Global Payments International Acquiring
- TSYS Acquiring Solutions

Forced captures are not supported for Comercio Latino and Cybersource Latin American Processing.

A forced capture occurs when you process an authorization outside the Cybersource system but then capture the order through Cybersource.

Perform a Forced Capture

After you process the authorization outside the Cybersource system, request the Cybersource authorization and capture services at the same time:

- 1. Include the request fields that are required for the authorization.
- 2. Include these required fields in the bundled authorization and capture request:
 - ccAuthService_authType=verbal
 - ccAuthService_verbalAuthCode=the authorization code you received in the response for the authorization that was processed outside the Cybersource system
 - For the American Express card type on American Express Direct or FDMS South, the **ccCaptureService_posData** and **ccCaptureService_transactionID** fields are required to comply with CAPN requirements.

Related information

Create an Authorization Request Create a Capture Request

Full-Financial Transactions

See Least-Cost Routing (on page 79).

See Single-Message Processing (on page 134).

Google Pay

See Google Pay Using the Simple Order API.

Guaranteed Exchange Rates

See Multi-Currency Service (on page 110).

Installment Payments

Services:

- Authorization
- Capture

Processors and card types: See the following table:

| Processors | That | Support | Installment | Payments |
|------------|------|---------|-------------|----------|
| | | | | |

| Processors | Payment Card Types |
|--|---|
| American Express Direct | American Express |
| | See Installment Payments on American Express Direct (on page 55). |
| Chase Paymentech Solutions | Visa |
| | See Installment Payments on Chase Paymentech Solutions and FDC Compass (on page 57). |
| Cielo | Visa, Mastercard, American Express, Diners Club, JCB, Elo, Aura |
| | On Cielo, installment payments are not supported for debit transactions. |
| | See Installment Payments on Processors in Latin America (on page 71). |
| Comercio Latino | Visa, Mastercard, American Express, Discover, Diners Club, JCB, Elo, Aura, Hipercard |
| | To enable installment payments, contact customer support to have your account configured for this feature. On Comercio Latino, the acquirer Banorte requires installment payments be submitted as an automatic capture. |
| | See Installment Payments on Processors in Latin America (on page 71). |
| Cybersource Latin American Processing | Visa |
| | See Installment Payments on Processors in Latin America (on page 71). |

| Processors | Payment Card Types |
|----------------------|---|
| | <i>Cybersource Latin American Processing</i> is the name of a specific processing connection. <i>Cybersource Latin</i> <i>American Processing</i> does not refer to the general topic of processing in Latin America. The information in this field description, or in this section of the field description, is for the specific processing connection called <i>Cybersource Latin American Processing</i> . It is not for any other Latin American processors. |
| FDC Compass | Visa |
| | See Installment Payments on Chase Paymentech Solutions and FDC Compass (on page 57). |
| FDC Nashville Global | Visa, Discover, Diners Club, JCB (US Domestic) |
| | For JCB cards, <i>US Domestic</i> means that the currency is USD and your location is the U.S., Puerto Rico, Guam, U.S. Virgin Islands, or Northern Mariana Islands. |
| | See Installment Payments on FDC Nashville Global (on page 70). |
| FDI Australia | Visa, Mastercard |
| | See Installment Payments on FDI Australia (on page 71). |
| FDMS Nashville | Visa |
| | See Installment Payments on Other Processors (on page 74). |
| FDMS South | Visa |
| | See Installment Payments on Other Processors (on page 74). |
| Getnet | Visa, Mastercard, American Express, Elo, Hipercard |
| | On Getnet, installment payments are not supported for debit transactions. |
| | See Installment Payments on Processors in Latin America (on page 71). |
| OmniPay-Ireland | Visa |

Processors That Support Installment Payments (continued)

| Processors | Payment Card Types |
|--|---|
| OmniPay-Ireland is the Cybersource name for HSBC International. | See Installment Payments on Other Processors (on page 74). |
| Prosa | Visa, Mastercard, American Express, Discover, Diners Club, Carnet, Carte Blanche |
| | See Installment Payments on Prosa (on page 73). |
| Rede | Visa, Mastercard, American Express, Diners Club, JCB, Elo, Hipercard |
| | On Rede, installment payments are not supported for debit transactions. |
| | See Installment Payments on Processors in Latin America (on page 71). |
| Software Express | Supported acquirer: Getnet |
| | Support card types: Visa, Mastercard |
| | See Installment Payments on Processors in Latin America (on page 71). |
| TSYS Acquiring Solutions | Visa |
| | See Installment Payments on Other Processors (on page 74). |
| Visa Platform Connect | Visa, Mastercard, American Express |
| | Not all card types are supported for all acquirers. |
| | See Installment Payments on Visa Platform Connect (on page 57). |
| Worldpay VAP | Visa |
| | See Installment Payments on Other Processors (on page 74). |

Processors That Support Installment Payments (continued)

Installment Payments on American Express Direct

The customer pays for goods or services using an installment plan agreed upon by the customer and you. This section provides information about the types of installment payments supported by American Express Direct.

Issuer Installments: American Express calls this arrangement a *deferred payment plan*.

- 1. You send one transaction to American Express.
- 2. American Express charges the amount to the customer in installments.
- 3. You receive one payment from American Express.

Merchant Installments: American Express calls this arrangement *Plan N*.

- 1. You send one transaction to American Express.
- 2. American Express charges the amount to the customer in installments.
- 3. You receive payment from American Express in installments.

Installment payments on American Express Direct are supported in the following countries and regions:

- **Argentina**—issuer installments and merchant installments are supported. The currency for installment transactions must be ARS.
- Asia Pacific—only issuer installments are supported. Merchant installments are not supported.
- Australia—only issuer installments are supported. Merchant installments are not supported.
- **Mexico**—issuer installments and merchant installments are supported. The currency for installment transactions must be MXN. The purchase amount must be 250 MXN or more.

() Important: When you submit an installment transaction that does not meet the American Express Direct requirements for installment payments, American Express Direct processes the transaction as a regular, non-installment transaction.

Before submitting installment transactions:

- Contact American Express Direct to have your account configured for this feature.
- Contact customer support to have your account configured for this feature.

Requesting an Installment Payment on American Express Direct

- 1. You must include the **installment_totalCount** field in the authorization request.
- 2. You can include the optional **ccAuthService_commerceIndicator** field in the authorization request. Set it to any valid value except recurring or recurring_internet.

3. You must include the **installment_planType** field in the authorization request if the corresponding value is not set in your account. If this value is set in your account, you can include the field in the authorization request to override the value in your account.

Related information

API Fields

Installment Payments on Chase Paymentech Solutions and FDC Compass

The customer pays for goods or services using an installment plan agreed upon by the customer and you.

Requesting an Installment Payment on Chase Paymentech Solutions or FDC Compass

1. Set ccAuthService_commerceIndicator to install.

- 2. Include the following required fields in the authorization request:
 - invoiceHeader_merchantDescriptor
 - invoiceHeader_merchantDescriptorContact
- 3. Include subsequent authorization fields for a merchant-initiated transaction.
- 4. You can include the following optional fields in the authorization request:
 - installment_sequence
 - installment_totalCount

Related information

API Fields

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93) Merchant Descriptors Using the Simple Order API

Installment Payments on Visa Platform Connect

Installment payments, which are called *parcelados* and *parcelas* in Brazil, are a common way to pay for purchases made with payment cards. When a customer pays in installments, the entire payment amount is authorized and captured at the time of the purchase, but the payment is settled

in increments over a period of time. Each incremental settlement is an installment payment. For customers, installment payments provide greater purchasing power and lower impact on their monthly budget. For you, offering installment payments at checkout typically increases the number of successfully completed purchases by 50%.

Before you can accept installment payments, you and your acquirer must agree on the maximum number of installments you can accept, which can be different for each card type. Visa Platform Connect only enables the processing of installment payments. It has no role in setting the terms for the installments.

Visa Platform Connect supports the following types of funding.

Issuer-Funded Installment Payments

The customer pays for goods or services using an installment plan agreed upon by the customer and their issuing bank. The issuer controls how the customer's account is debited. Your account is credited for the entire amount in a single transaction. The issuer assumes the risk and establishes credit rates and fees that are charged to the customer. The customer pays the funding cost, which is a fee for paying in installments. In Brazil, a *Crediario* is a special type of issuer-funded installment payment plan that enables the customer to request information about the terms of the installment plan before approving the installment payments.

Merchant-Funded Installment Payments

The customer pays for goods or services using an installment plan agreed upon by you and the customer. The issuer controls how the customer's account is debited. Your account is credited periodically for partial amounts as the customer's account is debited. You assume the risk and establish the credit rate and fees that are charged to the customer.

Co-Branded Merchant Financed Installment Payments—Brazil Only

You and the issuer determine the terms for this kind of installment plan. The funding varies depending on the agreement between you, the issuer, and the customer. This funding method is available only for Mastercard installment payments in Brazil.

Issuer Merchant Co-Financed Installment Payments—Brazil Only

The issuer creates the installment plan. You and the issuer determine the service fees that the customer pays to you and the issuer. The acquirer is paid in full while the issuer is paid in installments by the customer. You or the customer pay the funding cost, which is a fee for paying in installments. This funding method is available only for Mastercard installment payments in Brazil.

Supported Acquirers

The following acquirers are supported for installment payments on Visa Platform Connect. Not all countries and card types are supported for all acquirers.

- Arab African International Bank (AAIB)
- Asia Commercial Bank (ACB)

- Auckland Savings Bank (ASB)
- Australia and New Zealand Banking Group Limited (ANZ)
- Axis Bank Ltd. of India
- Banco Nacional de México (Banamex)
- Banco Safra
- Bangkok Bank Ltd.
- Bank of Ayudhya (BAY)
- Bank of China (BOC)
- Bank Sinarmas (Omise Ltd.)
- Banque Pour Le Commerce Exterieur Lao (BCEL)
- BC Card Co., Ltd.
- Cathay United Bank (CUB)
- Citibank Malaysia
- Citibank Hongkong and Macau
- Commercial Bank of Qatar
- CrediMax (Bahrain)
- CTBC Bank Ltd.
- First Data Merchant Solutions in Brunei
- First Data Merchant Solutions in Hong Kong
- First Data Merchant Solutions in Malaysia
- First Data Merchant Solutions in Singapore
- Habib Bank Ltd. (HBL)
- HDFC Bank Ltd. of India
- Mashreq
- National Bank of Abu Dhabi (NBAD)
- Overseas Chinese Banking Corp (OCBC)
- Promerica in Honduras and Nicaragua

- Taishin Bank Ltd.
- United Overseas Bank (UOB) in Singapore and Vietnam
- United Overseas Bank (UOB) in Thailand
- Vantiv
- Vietcombank
- VietinBank
- Vietnam Technological and Commercial Joint-stock Bank
- Wing Hang Bank
- Wing Lung Bank

Requesting an Installment Payment on Visa Platform Connect in Argentina

Card types:

- Mastercard
- Visa
- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:
 - **ccAuthService_commerceIndicator**—required only when the request includes payer authentication data
 - installment_planType
 - installment_totalCount
- 3. Include the following optional fields in the request as needed:
 - airlineData_agentCode—supported only with Visa
 - installment_amount
 - installment_firstInstallmentDate—supported only with Visa
 - installment_sequence

Airline Processing Using the Simple Order API

Requesting an Installment Payment on Visa Platform Connect with Mastercard in Brazil

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:
 - billTo_companyTaxID or billTo_personalID
 - billTo_phoneNumber
 - installment_planType
 - installment_totalCount
 - loan_type

3. Include the following optional fields in the request as needed:

- installment_amount
- **installment_gracePeriodDuration** and **installment_gracePeriodDurationType**—if one of these fields is included, both fields must be included.
- installment_invoiceData
- installment_paymentType
- installment_sequence
- merchantDefinedData_mddField_1
- merchantDefinedData_mddField_2
- 4. In an authorization request, include the subsequent authorization fields that are required for installment payment merchant-initiated transactions (MITs).

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Requesting a Crediario Installment Payment on Visa Platform Connect with Visa in Brazil

First, request the authorization service to inquire about Crediario eligibility. When the eligibility request is successful, request the authorization and capture services for the installment payment.

- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
- 2. Include the following required fields in the request:
 - eligibilityInquiry—set to Crediario
 - installment_amount
 - installment_firstInstallmentDate
 - installment_frequency
 - installment_sequence
 - installment_totalAmount
 - installment_totalCount
 - purchaseTotals_grandTotalAmount—set to 0
- 3. The issuer determines whether the customer is eligible for Crediario installment payments. When the customer is eligible, the authorization response includes the following fields:
 - installment_additionalCosts
 - installment_additionalCostsPercentage
 - installment_amountFunded
 - installment_amountRequestedPercentage
 - installment_annualFinancingCost
 - installment_annualInterestRate
 - installment_expenses
 - installment_expensesPercentage

- installment_fees
- installment_feesPercentage
- installment_insurance
- installment_insurancePercentage
- installment_monthlyInterestRate
- installment_taxes
- installment_taxesPercentage
- 4. Use the values in the authorization response to display the installment payment terms to the customer. The customer decides whether to accept the terms.
- 5. If the customer accepts the terms, request an installment payment as described in the following steps. If the customer does not accept the terms, do not perform the remaining steps in this procedure.
- 6. Request the service: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
- 7. Include the following required fields in the request:
 - installment_planType
 - installment_totalAmount
 - installment_totalCount
- 8. Include the subsequent authorization fields that are required for installment payment merchant-initiated transactions (MITs).
- 9. Include any of the following optional fields in the request as desired:
 - installment_amount
 - installment_firstInstallmentDate
 - installment_frequency
 - installment_paymentType
 - installment_sequence
- 10. Request the service: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 11. Include the following required fields in the request:

- installment_additionalCosts
- installment_additionalCostsPercentage
- installment_amountFunded
- installment_amountRequestedPercentage
- installment_annualFinancingCost
- installment_annualInterestRate
- installment_expenses
- installment_expensesPercentage
- installment_fees
- installment_feesPercentage
- installment_insurance
- installment_insurancePercentage
- installment_monthlyInterestRate
- installment_planType
- installment_taxes
- installment_taxesPercentage
- installment_totalAmount
- installment_totalCount
- 12. Include any of the following optional fields in the request as desired:
 - installment_amount
 - installment_firstInstallmentDate
 - installment_frequency
 - installment_sequence

Requesting a Non-Crediario Installment Payment on Visa Platform Connect with Visa in Brazil

1. Request the service:

- Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
- Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:
 - installment_planType
 - installment_totalCount
- 3. In an authorization request, include the subsequent authorization fields that are required for installment payment merchant-initiated transactions (MITs).
- 4. Include the following optional fields in the request as needed:
 - installment_amount
 - installment_paymentType
 - installment_sequence

Related information

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Requesting an Installment Payment on Visa Platform Connect in Chile

Card types:

- Mastercard
- Visa
- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to true. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:

- **ccAuthService_commerceIndicator**—required only when the request includes payer authentication data
- installment_planType
- installment_totalCount—optional when installment_planType is 2
- 3. Include any of the following optional fields in the request as desired:
 - installment_amount
 - installment_annualInterestRate
 - installment_planID
 - installment_sequence

Related information

Requesting an Installment Payment on Visa Platform Connect in Croatia

Card type: Mastercard

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:
 - billTo_merchantTaxID
 - installment_planType
- 3. In an authorization request, include the subsequent authorization fields that are required for installment payment merchant-initiated transactions (MITs).
- 4. Include the following optional fields in the request as needed:
 - installment_amount
 - installment_sequence

installment_totalCount

Related information

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Requesting an Installment Payment on Visa Platform Connect in Georgia

Card type: Mastercard

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.

2. Include the following required fields in the request:

- installment_amount
- installment_firstInstallmentAmount
- installment_monthlyInterestRate
- installment_planType
- installment_totalCount
- 3. In an authorization request, include the subsequent authorization fields that are required for installment payment merchant-initiated transactions (MITs).
- 4. Include the following optional field in the request as needed:
 - installment_sequence

Related information

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Requesting an Installment Payment on Visa Platform Connect in Greece

Card type: Mastercard

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to true. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:
 - installment_gracePeriodDuration
 - installment_gracePeriodDurationType
 - installment_planType
 - installment_totalCount
- 3. In an authorization request, include the subsequent authorization fields that are required for installment payment merchant-initiated transactions (MITs).
- 4. Include the following optional fields in the request as needed:
 - installment_amount
 - installment_sequence

Related information

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Requesting an Installment Payment on Visa Platform Connect with American Express in Any Other Country

This procedure is for all countries except Argentina, Brazil, Chile, Croatia, Georgia, and Greece.

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.

- Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the **installment_planType** or **installment_totalCount** field in the request.
- 3. Include the following optional field in the request as needed:
 - installment_amount
 - installment_sequence

Related information

Requesting an Installment Payment on Visa Platform Connect with Mastercard in Any Other Country

This procedure is for all countries except Argentina, Brazil, Chile, Croatia, Georgia, and Greece.

- 1. Request the service:
 - Authorization: in the authorization request, set the **ccAuthService_run** field to **true**. Include the fields that are required for the authorization service.
 - Capture: in the capture request, set the **ccCaptureService_run** field to **true**. Include the fields that are required for the capture service.
- 2. Include the following required fields in the request:
 - installment_paymentType
 - installment_planType
- 3. Include the following optional fields in the request as needed:
 - ccAuthService_verificationType—supported only in Poland
 - installment_amount
 - installment_sequence
 - installment_totalCount

Requesting an Installment Payment on Visa Platform Connect with Visa in Any Other Country

This procedure is for all countries except Argentina, Brazil, Chile, Croatia, Georgia, and Greece.

- 1. Request the service: in the authorization request, set the **ccAuthService_run** field to true. Include the fields that are required for the authorization service.
- 2. Include the **ccAuthService_commerceIndicator** field in the request. Set the field to one of these values:
 - install—U.S. transaction or non-U.S. mail order / telephone order (MOTO) transaction
 - install_internet—non-U.S. e-commerce (Internet) transaction
- 3. Include the required **installment_planType** field in the request.
- 4. The authorization request must include subsequent authorization fields.
- 5. Include the following optional fields in the request as needed:
 - installment_amount
 - installment_frequency
 - installment_sequence
 - installment_totalAmount
 - installment_totalCount

Related information

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Installment Payments on FDC Nashville Global

The customer pays for goods or services using an installment plan agreed upon by the customer and you.

Requesting an Installment Payment on FDC Nashville Global

- 1. When you request the authorization service, set **ccAuthService_commerceIndicator** to install.
- 2. When you request the capture service, include the following required fields in the request:
 - installment_sequence
 - installment_totalCount

Related information

API Fields

Installment Payments on FDI Australia

The customer pays for goods or services using an installment plan agreed upon by the customer and you.

Requesting an Installment Payment on FDI Australia

- 1. In the authorization request for the first installment payment, set **ccAuthService_commerceIndicator** to install.
- 2. In the authorization requests for the subsequent installment payments, include these fields:
 - ccAuthService_commerceIndicator—set to install.
 - subsequentAuthTransactionID—set to the value returned in the ccAuthReply_paymentNetworkTransactionID field for the previous authorization in the series.

Related information

API Fields

Installment Payments on Processors in Latin America

The customer pays for goods or services using an installment plan agreed upon by the customer and you.

Before submitting installment transactions, contact customer support to have your account configured for this feature.

Requesting an Installment Payment on Cielo or Comercio Latino

- 1. You must include the **installment_totalCount** field in the authorization request.
- 2. You can include the optional **ccAuthService_commerceIndicator** field in the authorization request. Set it to one of the following values:
 - install—U.S. transaction or non-U.S. mail order / telephone order (MOTO) transaction
 - internet—e-commerce transaction. This is the default value that is used when you do not include the commerce indicator field in the request.
 - spa—Mastercard Identity Check transaction.
 - vbv—Visa Secure transaction.
- 3. You must include the **installment_planType** field in the authorization request if the corresponding value is not set in your account. If this value is set in your account, you can include the field in the authorization request to override the value in your account.

Related information

API Fields

Requesting an Installment Payment on Cybersource Latin American Processing

- 1. Set ccAuthService_commerceIndicator to install.
- 2. For a transaction in Brazil, you can include the following optional fields in the authorization request:
 - installment_planType
 - installment_totalCount
- 3. For a transaction in Mexico, installment payments are supported, but conditions vary, so contact customer support or your account manager.

Related information

API Fields

Requesting an Installment Payment on Getnet or Software Express

- 1. Include the following required fields in the authorization request:
 - installment_planType
 - installment_totalCount
- 2. Include the following optional fields in the request as needed:
 - installment_downPayment—supported only for airline transactions on Getnet

Related information

API Fields

Requesting an Installment Payment on Rede

You must include the **installment_totalCount** field in the authorization request.

Related information

API Fields

Installment Payments on Prosa

The customer pays for goods or services using an installment plan agreed upon by the customer and you.

Requesting an Installment Payment on Prosa

- 1. Include the required **installment_planType** field in the authorization request.
- 2. You can include the following optional fields in the authorization request:
 - installment_gracePeriodDuration—when the value for the installment plan type field is 07, the installment grace period duration must be greater than 00.
 - installment_totalCount—when the value for the installment plan type field is 07, the installment total count is set to 00.

API Fields

Installment Payments on Other Processors

The customer pays for goods or services using an installment plan agreed upon by the customer and you.

Requesting an Installment Payment on Any Other Supported Processor

- 1. Set ccAuthService_commerceIndicator to install.
- 2. If your processor supports merchant-initiated transactions, the authorization request must include subsequent authorization fields.
- 3. Include the following required fields in the authorization request:
 - installment_sequence
 - installment_totalCount

Related information

API Fields Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Interchange Optimization

Processors:

• Visa Platform Connect: Visa, Mastercard

(] Important: Interchange optimization is not available for Mastercard transactions in the IDR currency on Visa Platform Connect.

• GPN acquiring merchants: Visa, Mastercard

Interchange optimization helps you reduce your interchange fees. Interchange optimization consists of:

• Automatic authorization refresh: When the capture request occurs more than six days after the date of the original authorization, a fresh authorization is automatically obtained for the capture amount.

On GPN, the fresh authorization uses the same authorization indicator as the original authorization.

• Automatic partial authorization reversal: If the capture does not need a fresh authorization but the capture amount is less than the authorization amount, a partial authorization reversal is automatically performed which releases the hold on unused credit card funds and ensures that the settlement amount matches the authorization amount.

Interchange optimization does not work for card-present transactions.

To enable interchange optimization, contact customer support to have your account configured for this feature.

Related information

Final Authorization Indicator (on page 46)

Japanese Payment Options

Services

- Authorization
- Capture—supported only on JCN Gateway
- Credit—supported only on JCN Gateway

Processors:

- Visa Platform Connect—the only supported acquirer is Sumitomo Mitsui Card Co.
- JCN Gateway

Card types:

- Visa
- Mastercard—supported only on JCN Gateway
- American Express—supported only on JCN Gateway
- Diners Club—supported only on JCN Gateway

• JCB—supported only on JCN Gateway

In addition to standard single payments, Japanese acquirers support the payment options that are supported only in Japan.

Before using one of these payment options, you must sign a contract with your acquirer. Additionally, the funding cycle could differ when using these options. Contact your account provider for details about contracts and funding cycles.

Some acquirers might not support all of these payment options. Additionally, a card holder must sign a contract with an issuing bank before using one of these payment options. Therefore, not all card holders take advantage of these payment options. Confirm payment option availability with your account provider and the card holder before implementing one of these payment options.

() **Important:** Requests with these payment options are accepted independently of your agreements with acquirers. When you submit a request with one of these payment options but do not have the necessary contracts and agreements in place, an error might not occur until the acquirer processes the settlement file.

The following list of Japanese payment options includes the API fields that are required for each option:

- Option 1 (default)—Single payment:
 - No Japanese payment option fields are required. When you omit **jpo_paymentMethod** from a request, the request is processed as a single payment.
- Option 2—Bonus payment:
 - jpo_paymentMethod
- Option 4—Installment payment:
 - jpo_installments
 - o jpo_paymentMethod
- Option 5—Revolving payment:
 - jpo_paymentMethod
- Option 6—Combination of bonus payment and installment payment:
 - jpo_installments
 - o jpo_paymentMethod

In addition to the fields listed in the preceding list, the following fields are supported for transactions in Japan:

- jpo_businessNameAlphanumeric
- jpo_businessNameJapanese
- jpo_businessNameKatakana
- jpo_firstBillingMonth—supported only for JPO payment methods 4 and 6

The following fields are also supported for card-present transactions in Japan:

- jpo_jccaTerminalID
- jpo_jis2TrackData

Verbal Authorizations

When you submit a capture request with a verbal authorization, if the initial authorization included Japanese payment option fields, the capture request must include the same Japanese payment option fields.

Stand-Alone Credits

When you perform a stand-alone credit for a transaction that included Japanese payment option fields, the request for the stand-alone credit must include the same Japanese payment option fields.

Stand-alone credits are supported only for JPO payment method 1 on Visa Platform Connect.

When a request for a stand-alone credit is made with JCN Gateway, most acquirers make inquiries about the purpose of such a request. Follow-on credits are recommended instead of stand-alone credits whenever possible.

Additional Information

For more information about the Japanese payment options, contact Customer Support of Cybersource KK (Japan).

Related information

API Fields Card-Present Processing Using the Simple Order API

JCB J/Secure

Service: Authorization

Processors:

- Visa Platform Connect
- Elavon Americas
- Ingenico ePayments
- JCN Gateway
- SIX

Card type: JCB

Before you implement payer authentication for JCB J/Secure, you must contact customer support to have your account configured for this feature.

When you request an authorization using a supported card type and a supported processor, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

JCB J/Secure authenticates a customer by adding a password identification step to the online shopping process.

For details about signing up for and using J/Secure, contact your acquiring bank or go to the JCB website.

Authorizing a JCB J/Secure Transaction

1. Include the following required fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other.

Ingenico ePayments:

- ccAuthService_cavv—required when payer authentication is successful
- **ccAuthService_cavvAlgorithm**—required when the CAVV is included in the request and a third-party provider authenticates the transaction; you must not include this field when a CAVV is not included in the request

- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_xid—required when payer authentication is successful

All other processors:

- ccAuthService_cavv—required when payer authentication is successful
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_xid—required when payer authentication is successful

See the field descriptions for important information.

2. Examine the response codes.

The authorization service returns a raw response code and a mapped response code:

- The *raw response code* is the value returned by the processor. This value is returned in the **ccAuthReply_cavvResponseCodeRaw** field.
- The *mapped response code* is the predefined value that corresponds to the raw response code. This value is returned in the **ccAuthReply_cavvResponseCode** field.

Related information

www.jcb-global.com Payer Authentication Using the Simple Order API

Least-Cost Routing

Processors:

- FDI Australia—supported only for AUD
- Worldpay VAP

Least-cost routing (LCR) offers the lowest routing costs available. When you request LCR, the processor first determines whether LCR is possible for the transaction, and, if it is possible, the processor uses single-message processing to accomplish LCR.

() Important:

Pay attention to these important differences between single-message processing and dualmessage processing:

- With single-message processing, an authorization+capture request results in a full-financial transaction, which moves funds immediately.
- With single-message processing, the capture amount and authorization amount are the same.
- Several services and features are not supported for single-message processing because they are not applicable or could create reconciliation problems.

Request Least-Cost Routing for All Authorization+Capture Transactions

- 1. Contact customer support to enable LCR for your account.
- 2. For each authorization+capture request:
 - a. Request the authorization and capture services at the same time: include the request fields that are required for an authorization; if the transaction does not include any optional capture features, such as Level II data, no additional fields are required for the capture; if the transaction includes and optional capture feature, include the fields that are needed for the feature.
 - b. The response message includes authorization and capture results. The authorization amount and capture amount are the same.
 - c. To find out whether the processor used LCR for the transaction, see the daily processor report.
- 3. To turn off LCR for an authorization+capture transaction, set **ccAuthService_leastCostRouting** to false in the authorization+capture request.

Request Least-Cost Routing for One Transaction

- 1. Request the authorization and capture services at the same time:
 - Include the request fields that are required for an authorization.

- If the transaction does not include any optional capture features, such as Level II data, no additional fields are required for the capture.
- If the transaction includes an optional capture feature, include the fields that are needed for the feature.
- Set ccAuthService_leastCostRouting to true.

The response message includes authorization and capture results. The authorization amount and capture amount are the same.

2. To find out whether the processor used LCR for the transaction, see the daily processor report.

Partial Authorizations

If the transaction is enabled for partial authorization, the processor can process a partial amount instead of the entire requested amount.

Supported Features

The following features are supported for least-cost routing and single-message processing on Worldpay VAP:

- AVS
- Balance responses
- Card type indicators
- Credits
- CVN
- Debit cards
- Merchant descriptors
- Payer authentication
- Prepaid cards

Unsupported Features

The following features are not supported for least-cost routing and single-message processing:

Authorization reversal after void

- Full authorization reversals To process an aborted transaction or a return, request the credit service.
- Multiple partial captures
- Stand-alone authorizations
- Stand-alone captures
- Verbal authorizations
- Voids

Address Verification System API Fields Balance Responses Card Type Indicators (on page 30) Card Verification Numbers Crediting a Payment Debit and Prepaid Card Features Merchant Descriptors Using the Simple Order API Payer Authentication (on page 114)

Level II Data

See Level II and Level III Processing Using the Simple Order API.

Level III Data

See Level II and Level III Processing Using the Simple Order API.

Mass Transit Transactions

See Card-Present Processing Using the Simple Order API.

Mastercard Bill Payments

Service: Authorization

Processor: Visa Platform Connect

This feature is supported only in Brazil.

Mastercard provides a Bill Payment program that enables customers to use their Mastercard cards to pay their bills. When you participate in this program, Mastercard requests that you flag the bill payments so they can be easily identified. To flag these transactions, include the **billPaymentType** field in requests. Do not use this indicator if you have not signed up with Mastercard to participate in the program.

Mastercard Expert Monitoring Solutions

Service: Authorization

Processor: Visa Platform Connect

Mastercard Expert Monitoring Solutions (EMS) provides a predictive, behavior-based fraud score in real time during authorizations for card-not-present (CNP) transactions on cards issued in the U.S. EMS compares a customer's transaction data to their transaction behavior history and a regional CNP fraud detection model. The resulting score indicates the likelihood that the transaction is fraudulent.

To use EMS, call customer support to have your account enabled for this feature. After your account is enabled, Mastercard performs EMS on all your CNP authorization requests for U.S.-issued Mastercard cards. For these requests, the fraud score is returned in the **ccAuthReply_emsTransactionRiskScore** field.

Related information API Fields

Mastercard Identity Check

Service: Authorization

Processors That Support Mastercard Identity Check 1.0:

• AIBMS

- Asia, Middle East, and Africa Gateway
- Atos
- Barclays
- Chase Paymentech Solutions
- Cielo
- Comercio Latino
- Credit Mutuel-CIC
- Cybersource Latin American Processing: Mastercard Identity Check is an emerging feature in the Latin American region. It is not fully supported in all countries. Contact customer support for details. *Cybersource Latin American Processing* is the name of a specific processing connection that is supported. In the API documentation, Cybersource Latin American Processing does not refer to the general topic of processing in Latin America.
- Elavon
- Elavon Americas
- FDC Compass
- FDC Germany
- FDI Australia
- FDC Nashville Global
- FDMS Nashville
- FDMS South
- Getnet
- GPN
- HBoS
- HSBC: HSBC is the Cybersource name for HSBC U.K.
- Ingenico ePayments
- JCN Gateway
- LloydsTSB Cardnet
- Moneris
- OmniPay Direct. The supported acquirers are:

- Bank of America Merchant Services
- Cardnet International
- First Data Merchant Solutions (Europe)
- Global Payments International Acquiring
- OmniPay-Ireland: OmniPay-Ireland is the Cybersource name for HSBC International. On OmniPay-Ireland, Mastercard Identity Check attempts are not considered Identity Check transactions and are downgraded to non-Identity Check transactions. It is recommended that you migrate to the OmniPay Direct processor to use the latest version of the Identity Check feature.
- Prosa
- RBS WorldPay Atlanta
- Rede
- SIX
- Streamline
- TSYS Acquiring Solutions
- Visa Platform Connect
- Worldpay VAP

Processors That Support Mastercard Identity Check 2.0:

- AIBMS
- Barclays
- Chase Paymentech Solutions
- Credit Mutuel-CIC
- Elavon
- FDC Compass
- FDC Nashville Global
- HBoS
- HSBC: HSBC is the Cybersource name for HSBC U.K.
- Ingenico ePayments

- Lloyds-OmniPay
- LloydsTSB-Cardnet
- OmniPay Direct. The supported acquirers are:
 - Bank of America Merchant Services
 - Cardnet International
 - First Data Merchant Solutions (Europe)
 - Global Payments International Acquiring
- SIX
- Streamline
- Visa Platform Connect

Card types:

- Co-badged Mastercard and Cartes Bancaires. You must identify the card type as Mastercard. Supported only on Credit Mutuel-CIC. You can use secure transactions for Credit Mutuel-CIC instead of Mastercard Identity Check.
- Co-badged Mastercard and mada. You must identify the card type as Mastercard. Supported only on Visa Platform Connect.
- Maestro (International)
- Maestro (UK Domestic)
- Mastercard

Before you implement payer authentication for Mastercard Identity Check, you must contact customer support to have your account configured for this feature.

When you request an authorization using a supported card type and a supported processor, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

Mastercard Identity Check adds security to online transactions by authenticating Identity Check account holders for specific transactions. Identity Check generates a unique, 32-character transaction token, called the account authentication value (AAV), each time an Identity Check-enabled account holder makes an online purchase. The AAV binds the account holder to a specific transaction. Identity Check transactions use the universal cardholder authentication field (UCAF) as a standard to collect and pass AAV data. For details about signing up for and using Identity Check or UCAF, contact your acquiring bank or go to the Mastercard website.

Mastercard website Payer Authentication Using the Simple Order API Authorizing a Mastercard Identity Check Transaction (on page 87) Secure Transactions for Credit Mutuel-CIC (on page 131)

Authorizing a Mastercard Identity Check Transaction

1. Include the following fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other.

Asia, Middle East, and Africa Gateway:

- ccAuthService_commerceIndicator—required
- ccAuthService_directoryServerTransactionID—required only for Mastercard Identity Check 2.0
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_paresStatus—required unless all of the following are true:
 - You are requesting payer authentication and authorization in separate requests.
 - Mastercard Identity Check authentication was successful.
 - Verification response enrollment status is not Y.

When all the preceding conditions are true, do not include the PARes status in the authorization request. If you do, Cybersource sends the value to the processor without modification. Cybersource does not decline the transaction; declines are generated by the processor.

- ccAuthService_paSpecificationVersion—required
- ccAuthService_veresEnrolled—required
- ucaf_authenticationData—required when the UCAF collection indicator is 1, 2, or 5
- ucaf_collectionIndicator—required

Atos:

- **ccAuthService_cavvAlgorithm**—required when UCAF authentication data is included in the request; you must not include this field when UCAF authentication data is not included in the request
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- **ccAuthService_paresStatus**—required for a successful Mastercard Identity Check transaction
- ccAuthService_paSpecificationVersion—required
- ucaf_authenticationData—required when the UCAF collection indicator is 1, 2, or 5
- ucaf_collectionIndicator—required

Credit Mutuel-CIC:

- ccAuthService_commerceIndicator—required
- ccAuthService_directoryServerTransactionID—required only for Mastercard Identity Check 2.0
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- **ccAuthService_paresStatus**—required for a successful Mastercard Identity Check transaction
- ccAuthService_paSpecificationVersion—required
- ucaf_authenticationData—required when the UCAF collection indicator is 1, 2, or 5
- ucaf_collectionIndicator—required

HSBC:

- ccAuthService_commerceIndicator—required
- ccAuthService_directoryServerTransactionID—required for Mastercard Identity Check 1.0 and 2.0
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_paSpecificationVersion—required
- ucaf_authenticationData—required when the UCAF collection indicator is 1, 2, or 5

• ucaf_collectionIndicator—required

Ingenico ePayments:

- **ccAuthService_cavvAlgorithm**—required when UCAF authentication data is included in the request and a third-party provider authenticates the transaction; you must not include this field when UCAF authentication data is not included in the request
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- **ccAuthService_paresStatus**—required for a successful Mastercard Identity Check transaction when a third-party provider authenticates the transaction
- ccAuthService_paSpecificationVersion—required
- ucaf_authenticationData—required when the UCAF collection indicator is 1, 2, or 5
- ucaf_collectionIndicator—required

All other processors:

- ccAuthService_commerceIndicator—required
- ccAuthService_directoryServerTransactionID—required only for Mastercard Identity Check 2.0
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_paSpecificationVersion—required
- ucaf_authenticationData—required when the UCAF collection indicator is 1, 2, or 5
- ucaf_collectionIndicator—required

See the field descriptions for important information.

2. Examine the UCAF collection indicator response field.

() Important: A value of ø for the UCAF collection indicator response field for a Mastercard transaction indicates that Mastercard downgraded the transaction. When Mastercard approves an authorization and downgrades it, you are responsible for the transaction. To confirm the downgrade, look at the e-commerce indicator for the transaction in the Business Center. You can proceed with the transaction if you want to accept responsibility. If you do not want to accept responsibility, reverse the authorization, attempt to authenticate the customer again, and request another authorization.

www.mastercard.com Payer Authentication Using the Simple Order API Payer Authentication Using the SCMP API Secure Transactions for Credit Mutuel-CIC (on page 131)

Mastercard Send

Mastercard Send is one of the networks supported by Cybersource Payouts. See Payouts Using the Simple Order API.

Merchant Descriptors

See Merchant Descriptors Using the Simple Order API.

Merchant-Initiated Reversals and Voids

Services:

- Authorization
- Capture
- Credit

Processors:

- Chase Paymentech Solutions
- Visa Platform Connect
- Elavon Americas
- FDC Nashville Global
- OmniPay Direct—merchant-initiated voids are not supported.
- Rede

When you do not receive a response message after sending a request, this feature enables you to reverse or void the transaction that you requested.

Use Merchant-Initiated Reversals and Voids on Visa Platform Connect

- 1. Include the **merchantTransactionIdentifier** field in the original request for an authorization, capture, sale, follow-on credit, or stand-alone credit. The value of the merchant transaction ID must be unique for 60 days.
- 2. When you do not receive a response message for the original transaction request, reverse or void the original transaction:
 - To reverse an authorization, request the full authorization reversal service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the reversal request to the original request.
 - To void a capture or sale, request the void service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the void request to the original request.
 - To void a credit, request the void service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the void request to the original request.
- 3. When the original transaction fails, the response message for the reversal or void request includes these fields:
 - originalTransaction_amount
 - originalTransaction_reasonCode

Related information

API Fields Create a Full Authorization Reversal Request Create a Void Request

Use Merchant-Initiated Reversals on OmniPay Direct

1. Include the **merchantTransactionIdentifier** field in the original request for an authorization, capture, or sale.

The value of the merchant transaction ID must be unique for 60 days.

• SIX

- 2. When you do not receive a response message for the original transaction request, reverse the original transaction:
 - To reverse an authorization, request the full authorization reversal service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the reversal request to the original request.
 - To void a capture or sale:
 - a. Request the void service. Include the request ID in the request message.

b. Request the full authorization reversal service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the reversal request to the original request.

- To void a credit, request the void service. Include the request ID in the request message.
- 3. When the original transaction fails, the response message for the reversal request includes the following fields:
 - originalTransaction_amount
 - originalTransaction_reasonCode

Related information

API Fields Create a Full Authorization Reversal Request Create a Void Request

Use Merchant-Initiated Reversals and Voids on All Other Processors

- 1. Include the **merchantTransactionIdentifier** field in the original request for an authorization, capture, safe, follow-on credit, or stand-alone credit. The value of the merchant transaction ID must be unique for 60 days.
- 2. When you do not receive a response message for the original transaction request, reverse or void the original transaction:
 - To reverse an authorization, request the full authorization reversal service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the reversal request to the original request.
 - To void a capture or sale:

a. Request the void service. Include the request ID in the request message.

b. Request the full authorization reversal service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the void request to the original request.

- To void a credit, request the void service. Instead of including the request ID in the request message, include the **merchantTransactionIdentifier** field. The merchant transaction ID links the void request to the original request.
- 3. When the original transaction fails, the response message for the reversal or void request includes the following fields:
 - originalTransaction_amount
 - originalTransaction_reasonCode

Related information

API Fields Create a Full Authorization Reversal Request Create a Void Request

Merchant-Initiated Transactions and Credentials-on-File

Transactions

See https://support.cybersource.com/s/article/Support-for-Merchant-Initiated-Transactions-and-Credential-on-File-for-Visa-Mastercard-and-Discover for information about:

- Letting the Token Management Service (TMS) perform merchant-initiated transactions (MITs) for you.
- MITs and credentials-on-file (COF) transactions on Chase Paymentech Solutions, FDC Compass, and FDC Nashville Global.

For information about letting the Token Management Service (TMS) perform merchant-initiated transactions (MITs) for you, see https://support.cybersource.com/s/article/Support-for-Merchant-Initiated-Transactions-and-Credential-on-File-for-Visa-Mastercard-and-Discover.

Service: Authorization

Processors and card types: The following table lists the processors, card types, and scenarios that are supported for MITs and COF transactions.

| Processor | Card Types | Scenarios |
|----------------------------|------------------|---|
| AIBMS | Mastercard | Customer-initiated transaction (CIT) with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |
| American Express Direct | American Express | CIT with COF |
| | | Installment payment |
| | | Recurring payment |
| | | Unscheduled COF transaction |
| Barclays | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | • Incremental authorization |
| | | • Installment payment |
| Chase Paymentech | American Express | CIT with COF |
| Solutions | Discover | All MIT scenarios except: |
| | Mastercard | • Delayed charge |
| | Visa | Incremental authorization |
| | | No-show charge |
| | | Resubmission |
| Elavon | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |

| Processor | Card Types | Scenarios |
|----------------------|------------|---------------------------|
| Elavon Americas | Discover | CIT with COF |
| | Mastercard | All MIT scenarios except: |
| | Visa | Incremental authorization |
| | | • Installment payment |
| FDC Compass | Discover | CIT with COF |
| | Mastercard | All MIT scenarios except: |
| | Visa | • Delayed charge |
| | | Incremental authorization |
| | | No-show charge |
| FDC Nashville Global | Discover | CIT with COF |
| | Mastercard | All MIT scenarios except: |
| | Visa | Delayed charge |
| | | Incremental authorization |
| | | No-show charge |
| FDMS Nashville | Discover | CIT with COF |
| | Mastercard | All MIT scenarios |
| | Visa | |
| HBoS | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |
| | | Resubmission |
| HSBC | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |
| | 1 | 1 |

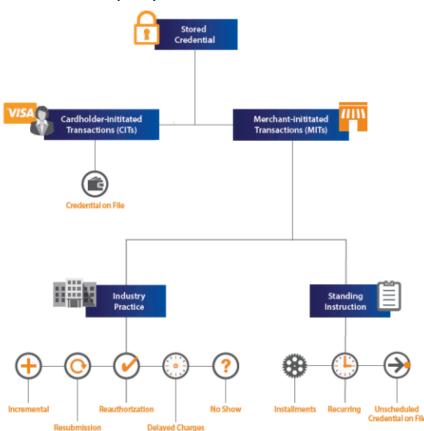
| Processor | Card Types | Scenarios |
|--------------------|--------------------------|--|
| Ingenico ePayments | American Express | CIT with COF |
| | Carta Si | All MIT scenarios except installment payment |
| | Cartes Bancaires | |
| | Dankort | |
| | Delta | |
| | Eurocard | |
| | JCB | |
| | Maestro (UK Domestic) | |
| | Mastercard | |
| | Visa | |
| | Visa Electron | |
| Lloyds-OmniPay | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | • Incremental authorization |
| | | • Installment payment |
| | | Resubmission |
| LloydsTSB Cardnet | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |
| | | Resubmission |

| Processor | Card Types | Scenarios |
|-------------------------------------|------------------|---------------------------|
| Moneris | American Express | CIT with COF |
| | Discover | Recurring payment |
| | Mastercard | |
| | Visa | |
| OmniPay Direct | Mastercard | CIT with COF |
| Supported for all OmniPay Direct | Visa | All MIT scenarios except: |
| acquirers. | | Incremental authorization |
| | | • Installment payment |
| Rede | Visa | CIT with COF |
| | | All MIT scenarios |
| SIX | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |
| Streamline | Mastercard | CIT with COF |
| | Visa | All MIT scenarios except: |
| | | Incremental authorization |
| | | • Installment payment |

| Processor | Card Types | Scenarios |
|-----------------------|------------------|---|
| Visa Platform Connect | American Express | CIT with COF |
| | Mastercard | All MIT scenarios |
| | Visa | American Express is supported only for these scenarios: |
| | | • CIT with COF |
| | | • Recurring payment |
| | | Unscheduled COF transaction |
| Worldpay VAP | Discover | CIT with COF |
| | Mastercard | Installment payment |
| | Visa | Recurring payment |
| | | Unscheduled COF transaction |

Overview

The following figure illustrates the relationships between types of stored-credential transactions.



Stored Credentials, CITs, and MITs

Obtaining Customer Credentials

(] Important: The customer must be present for the initial transaction.

When you obtain a customer's credentials for the first time, you must do the following:

- Obtain the customer's consent for storing the payment credentials, and disclose the reason for storing them.
- When an amount is due, submit a payment transaction, which can be an authorization or a full-financial transaction.
 - You must include the **subsequentAuthFirst** field in the request to identify this transaction as a COF transaction. Set the value for this field to true.
 - You must include the **ccAuthService_commerceIndicator** field in the request. Set the value for this field to **internet** or to a payer authentication value.

- When no amount is due, request a zero amount authorization.
 - You must include the **subsequentAuthFirst** field in the request to identify this transaction as a COF transaction. Set the value for this field to true.
 - You must include the **ccAuthService_commerceIndicator** field in the request. Set the value for this field to **internet** or to a payer authentication value.
- If the payment transaction or zero amount authorization fails, do not store the credentials, and do not use the credentials for subsequent COF transactions.
- Do not include the **subsequentAuthFirst** field in a request for a subsequent authorization when the customer is not present because it might cause the issuer to decline the request. For e-commerce and payer authentication transactions, the issuer expects authentication data that indicates that the customer is present.

Authorizing a Payment Least-Code Routing (on page 79) Payer Authentication (on page 114) Single-Message Processing (on page 134) Zero Amount Authorizations (on page 158)

Cardholder-Initiated Transactions with Credentials on File

Card types:

- American Express
- Discover
- Mastercard
- Visa

A *cardholder-initiated transaction* (CIT) is a transaction that uses payment information provided by the customer. A *credentials-on-file* CIT occurs when a customer orders an item online and instructs you to use the payment information that is saved in your system.

Creating an Authorization Request for a COF CIT

- 1. Include the **subsequentAuthStoredCredential** field in the authorization request. Set the value for this field to true.
- 2. Include the fields that are required for an authorization request.

3. On Visa Platform Connect with the American Express card type, when you include the optional **ccAuthService_commerceIndicator** field in the authorization request, set the value for the field to internet.

Related information

API Fields Create an Authorization Request

Merchant-Initiated Transactions

A *merchant-initiated transaction* is an authorization that you initiate when the customer is not present. An MIT uses payment information from a previous CIT but is conducted without the active participation of the customer.

You can use a PAN, network token, or Cybersource token in a request for an MIT.

There are two main types of MITs:

- 1. **Industry Practice MITs.** An *industry practice transaction* is a one-time follow-up to a CIT that could not be completed with one transaction. Not every industry practice MIT is performed with a stored credential. When you store the credential for a single transaction or a single purchase, it is not considered as a stored credential transaction.
- 2. **Standing Instruction MITs.** A *standing instruction* is one transaction in a series of repeated transactions or a one-time, unscheduled transaction that uses COF payment information.

Creating an Authorization Request for a Delayed Charge

Type of MIT: Industry practice transaction

Card types:

- American Express
- Visa

A *delayed charge* is associated with an agreement between you and the customer for services rendered. Delayed charges are typical for lodging transactions and auto rental transactions.

1. Include the following required fields in the authorization request:

- **billTo_customerID**—required only on Ingenico ePayments.
- **subsequentAuth**—set the value for this field to true.

- **subsequentAuthReason**—set the value for this field to 2.
- **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization.
- 2. If the payment information is COF information, you can include the following optional field in the authorization request:
 - subsequentAuthStoredCredential—set the value for this field to true.
- 3. Include the fields that are required for an authorization request.

API Fields Create an Authorization Request

Creating an Authorization Request for an Installment Payment

Type of MIT: Standing instruction

Card types:

- American Express
- Visa

An *installment payment* is a COF transaction in a series of payments that you bill to a customer over a period of time agreed to by you and the customer for a single purchase of goods or services. The agreement enables you to charge a specific amount at specified intervals.

- 1. Charge the first installment payment as a CIT. Include the following field in the authorization request:
 - **subsequentAuthFirst**—set the value for this field to true.
 - **subsequentAuthTransactionID**—required only on Chase Paymentech Solutions. Set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization. Use the value **EXISTING9999999** when you do not have a network transaction identifier.
- 2. For installment payments, include the following fields in each authorization request:
 - ccAuthService_commerceIndicator—set the value for this field to install.

- **subsequentAuth**—set the value for this field to true.
- subsequentAuthStoredCredential—set the value for this field to true.
- **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization.
- 3. Include the fields that are required for an authorization request.
- 4. Include the fields that are required for an installment payment for the processor and card type.

API Fields Create an Authorization Request Installment Payments (on page 53)

Creating an Authorization Request for a No-Show Charge

Type of MIT: Industry practice transaction

Card types:

- American Express
- Visa

A *no-show charge* occurs when you and a customer have an agreement for a purchase, but the customer does not meet the terms of the agreement. No-show charges are typically used in hotels and motels for a single-night stay.

- 1. Include the following required fields in the authorization request:
 - **billTo_customerID**—required only on Ingenico ePayments.
 - **subsequentAuth**—set the value for this field to true.
 - subsequentAuthReason—set the value for this field to 4.
 - **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization.
- 2. When the payment information is COF information, you can include the following optional field in the authorization request:

• subsequentAuthStoredCredential—set the value for this field to true.

3. Include the fields that are required for an authorization request.

Related information

API Fields Create an Authorization Request

Creating an Authorization Request for a Recurring Payment

Type of MIT: Standing instruction

Card types:

- American Express
- Discover
- Mastercard
- Visa

A *recurring payment* is a COF transaction in a series of payments that you bill to a customer at fixed, regular intervals not to exceed one year between transactions. The series of recurring payments is the result of an agreement between you and the customer for the purchase of goods or services that are provided at regular intervals.

- 1. Charge the first recurring payment as a CIT. Include the following field in the authorization request:
 - **billTo_customerID**—required only on Ingenico ePayments.
 - ccAuthService_commerceIndicator—set the value for this field to aesk or internet. This field is required only on Visa Platform Connect with the American Express card type. With other card types and on other processors, this field is optional.
 - subsequentAuthFirst—set the value for this field to true.
 - **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization. Optional for Mastercard. For Discover, this is the original network reference ID (NRID). On Chase Paymentech Solutions, use the value EXISTING9999999 when you do not have a network transaction identifier.
- 2. For recurring payments, include the following fields in each authorization request:

- **billTo_customerID**—required only on Ingenico ePayments.
- ccAuthService_commerceIndicator—set the value for this field to recurring.
- subsequentAuth—set the value for this field to true.
- **subsequentAuthOriginalAmount**—required only for Discover on FDC Compass; optional for Discover on Chase Paymentech Solutions and FDC Nashville Global. Not supported for other card types or processors.
- subsequentAuthStoredCredential—set the value for this field to true.
- **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization. Optional for Mastercard. For Discover, this is the original network reference ID (NRID).
- 3. Include the fields that are required for an authorization request.
- 4. Include the fields that are required for a recurring payment for the processor and card type.

API Fields Create an Authorization Request Recurring Payments (on page 119)

Creating an Authorization Request for a Resubmission

Type of MIT: Industry practice transaction

Card types:

- American Express
- Visa

A *resubmission* occurs when you cannot obtain an authorization for a customer-initiated purchase. A resubmission is valid only when the original authorization was declined for insufficient funds and only when the goods or services were already delivered to the customer.

1. Include the following required fields in the authorization request:

- **billTo_customerID**—required only on Ingenico ePayments.
- **subsequentAuth**—set the value for this field to true.

- **subsequentAuthOriginalAmount**—required only for Discover on FDC Compass; optional for Discover on Chase Paymentech Solutions and FDC Nashville Global. Not supported for other card types or processors.
- **subsequentAuthReason**—set the value for this field to **1**.
- **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization.
- 2. When the payment information is COF information, you can include the following optional field in the authorization request:
 - **subsequentAuthStoredCredential**—set the value for this field to true.
- 3. Include the fields that are required for an authorization request.

API Fields Create an Authorization Request

Creating an Authorization Request for an Unscheduled COF Transaction

Type of MIT: Standing instruction

Card types:

- American Express
- Discover
- Mastercard
- Visa

An *unscheduled COF transaction* uses stored payment information for a fixed or variable amount that does not occur regularly. An account top-up is one kind of unscheduled COF.

- 1. Charge the first payment. Include the following fields in the authorization request:
 - **billTo_customerID**—required only on Ingenico ePayments.
 - ccAuthService_commerceIndicator—set the value for this field to internet.
 - **subsequentAuthFirst**—set the value for this field to true.

- **subsequentAuthTransactionID**—required only on Chase Paymentech Solutions. Set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization. Use the value **EXISTING9999999** when you do not have a network transaction identifier.
- 2. Charge subsequent payments. Include the following fields in each authorization request:
 - billTo_customerID—required only on Ingenico ePayments.
 - **ccAuthService_commerceIndicator**—on Visa Platform Connect with the American Express card type, set the value for this optional field to internet.
 - subsequentAuth—set the value for this field to true.
 - subsequentAuthStoredCredential—set the value for this field to true.
 - **subsequentAuthOriginalAmount**—required only for Discover on FDC Compass; optional for Discover on Chase Paymentech Solutions and FDC Nashville Global. Not supported for other card types or processors.
 - **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization. Optional for Mastercard. For Discover, this value is the original network reference ID (NRID).
- 3. Include the fields that are required for an authorization request.

API Fields Create an Authorization Request

Creating a Request for an Incremental Authorization

Type of MIT: Industry practice transaction

Card types:

- American Express
- Visa

The kind of incremental authorization described in this section is not the same as the incremental authorization service.

An *incremental authorization* is a continuation of a purchase when the originally approved amount is modified to accommodate additional services. Incremental authorizations are typical for lodging transactions and auto rental transactions.

- 1. Include the following required fields in the authorization request:
 - **billTo_customerID**—required only on Ingenico ePayments.
 - subsequentAuth—set the value for this field to true.
 - **subsequentAuthReason**—set the value for this field to **5**.
 - **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization.
- 2. If the payment information is COF information, you can include the following optional field in the authorization request:
 - subsequentAuthStoredCredential—set the value for this field to true.
- 3. Include the fields that are required for an authorization request.

Related information

API Fields Create an Authorization Request Incremental Authorization Service

Creating a Request for a Reauthorization

Type of MIT: Industry practice transaction

Card types:

- American Express
- Discover
- Visa

You can reauthorize a payment when the completion of the original order extends beyond the authorization validity time limit set by the payment card company. Two common reauthorization scenarios are:

- Split or delayed shipment. A *split* or *delayed shipment* occurs when some of the goods that were ordered are not available for shipment at the time of purchase. When you ship goods after the authorization validity time limit set by the payment card company, you must request a separate authorization to ensure that customer funds are available.
- Extended stay for hotels, car rentals, and cruise lines. When a hotel stay, car rental, or cruise extends beyond the authorization validity time limit set by the payment card company, you must request a separate authorization to ensure that customer funds are available.
- 1. Include the following required fields in the authorization request:
 - billTo_customerID—required only on Ingenico ePayments.
 - subsequentAuth—set the value for this field to true.
 - **subsequentAuthOriginalAmount**—required only for Discover on FDC Compass; optional for Discover on Chase Paymentech Solutions and FDC Nashville Global. Not supported for other card types or processors.
 - **subsequentAuthReason**—set the value for this field to 3.
 - **subsequentAuthTransactionID**—set the value for this field to the network transaction identifier that was returned in the **ccAuthReply_paymentNetworkTransactionID** field in the response message for the original authorization. On Chase Paymentech Solutions, use the value EXISTING99999999 when you do not have a network transaction identifier.
- 2. If the payment information is COF information, you can include the following optional field in the authorization request:
 - subsequentAuthStoredCredential—set the value for this field to true.
- 3. Include the fields that are required for an authorization request.
- 4. When the reauthorization is for a split shipment, make sure that you understand how a split shipment works.
- 5. When the reauthorization is for a partial authorization, make sure that you understand how a partial authorization works.

Related information

API Fields Create an Authorization Request Partial Authorizations

Split Shipments (on page 134)

Micropayments

Services:

- Authorization
- Capture
- Credit

Processors: Most of the card types and processors that are supported

Micropayments are payments for less than one unit in the transaction's currency.

Multi-Currency Service

Services:

- Authorization
- Capture
- Credit

Processor: Chase Paymentech Solutions

If you sell products in multiple countries, you might want to list the product prices in your customers' local currencies. The multi-currency service provides current, guaranteed exchange rates, which enables customers to pay using their local currencies while enabling you to do business and settle transactions in your desired currency.

Related information

Multicurrency Service for the Chase Paymentech Solutions Using the Simple Order API

Multiple Partial Captures

Processors:

• AIBMS

- American Express Direct
- Asia, Middle East, and Africa Gateway
- Barclays
- Chase Paymentech Solutions
- Visa Platform Connect—contact customer support to have your account enabled for this feature. Your account can be enabled for multiple partial captures or split shipments; it cannot be enabled for both features.
- Elavon
- Elavon Americas
- FDC Compass
- FDC Nashville Global—multiple partial captures are supported only for card-not-present transactions; they are not supported for card-present transactions.
- FDMS Nashville—multiple partial captures are supported only for card-not-present transactions; they are not supported for card-present transactions.
- HSBC—HSBC is the Cybersource name for HSBC U.K. To enable multiple partial captures on HSBC, contact customer support to have your account configured for this feature.
- JCN Gateway
- LloydsTSB Cardnet—to enable multiple partial captures on LloydsTSB Cardnet, contact customer support to have your account configured for this feature.
- Moneris—supported only with Mastercard and Visa. The amount of a follow-on credit cannot exceed the total amount of all partial captures. Contact Moneris to have your account enabled for this feature.
- OmniPay Direct—the supported acquirers are:
 - Bank of America Merchant Services
 - Cardnet International
 - First Data Merchant Solutions (Europe)
 - Global Payments International Acquiring
- OmniPay-Ireland—to enable multiple partial captures on OmniPay-Ireland, contact customer support to have your account configured for this feature.
- Streamline
- TSYS Acquiring Solutions

• 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, 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 shipment feature is provided by Cybersource. This feature supports three different scenarios: multiple authorizations, multiple captures, and multiple authorizations with multiple captures.

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.

Related information

Multiple Partial Captures on Streamline (on page 113) Split Shipments (on page 134)

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, it is strongly recommended that you include the special request fields.
- FDC Nashville Global. The special request fields are required for all card types:
 - $\circ\,$ For Visa and Mastercard, the values for the special request fields are sent to the processor.
 - For all card types, the values for the special request fields are used to determine whether to initiate an automatic partial authorization reversal.
- FDMS Nashville. The special request fields are required for Visa and Mastercard transactions. They are not supported for other card types.
- Moneris. The special request fields are required.
 - When the sequence number is the same as the total count, the capture is the final capture. No additional captures are allowed for the authorization.

- When the sequence number and total count are not included, the capture is the final capture. No additional captures are allowed for the authorization.
- OmniPay Direct. It is strongly recommended that you include the special request fields. The supported acquirers are:
 - Bank of America Merchant Services
 - Cardnet International
 - First Data Merchant Solutions (Europe)
 - Global Payments International Acquiring
- TSYS Acquiring Solutions. The special request fields are required.
- Visa Platform Connect. The special request fields are required if you are in the U.S.

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.

Related information

Automatic Partial Authorization Reversals Overview

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 is the same for a merchant ID. You must ensure that you do not submit duplicate transaction information when using multiple partial captures, otherwise Streamline may reject the transaction.

- card_accountNumber
- ccCaptureReply_requestDateTime
- merchantReferenceCode
- purchaseTotals_grandTotalAmount

Network Tokens

See Authorizations with Payment Network Tokens (on page 26).

Partial Shipments

See Multiple Partial Captures and Split Shipments (on page 134).

Payer Authentication

The following kinds of payer authentication are supported:

- American Express SafeKey (on page 24)
- JCB J/Secure (on page 78)
- Mastercard Identity Check (on page 83)
- ProtectBuy (on page 115)
- RuPay PaySecure (on page 130)
- Secure Transactions for Credit Mutuel-CIC (on page 131)
- Visa Secure (on page 154)

Payment Tokenization

See Token Management Service (on page 148).

Payouts

See Payouts Using the Simple Order API

POS Transactions

See Card-Present Processing Using the Simple Order API

ProtectBuy

Service: Authorization

Processors:

- Chase Paymentech Solutions
- SIX

Card types:

- Diners Club
- Discover

Before you implement payer authentication for ProtectBuy, you must contact customer support to have your account configured for this feature.

When you request an authorization using a supported card type and a supported processor, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

ProtectBuy authenticates the customer by adding a password identification step to the online shopping process. For details about signing up for and using ProtectBuy, contact your acquiring bank or go to the ProtectBuy website.

Authorizing a ProtectBuy Transaction

1. Include the following fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other.

- ccAuthService_cavv—required
- ccAuthService_commerceIndicator—required

- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_xid—required when payer authentication is successful

See the field descriptions for important information.

2. Examine the response codes.

The authorization service returns a raw response code and a mapped response code:

- The *raw response code* is the value returned by the processor. This value is returned in the **ccAuthReply_cavvResponseCodeRaw** field.
- The *mapped response code* is the predefined value that corresponds to the raw response code. This value is returned in the **ccAuthReply_cavvResponseCode** field.

Related information

Payer Authentication Using the Simple Order API http://protectbuy.nnja.co/

Purchase Return Authorizations

See Credit Authorizations.

Quasi-Cash

Services:

- Authorization
- Full authorization reversal—not supported for quasi-cash on all processors
- Capture
- Credit—not supported for quasi-cash on all processors
- Void

Processors:

- Atos: full authorization reversals and automatic partial authorization reversals are not supported for quasi-cash on Atos.
- GPN
- TSYS Acquiring Solutions
- Visa Platform Connect: credits are not supported for quasi-cash on Visa Platform Connect. The supported acquirers are:
 - Auckland Savings Bank (ASB)
 - Australia and New Zealand Banking Group Limited (ANZ)
 - Axis Bank Ltd. of India
 - Banco Safra
 - Bangkok Bank Ltd.
 - Bank Sinarmas (Omise Ltd.)
 - BC Card Co., Ltd.
 - Cathay United Bank (CUB)
 - Citibank Malaysia
 - First Data Merchant Solutions in Brunei
 - First Data Merchant Solutions in Hong Kong
 - First Data Merchant Solutions in Malaysia
 - First Data Merchant Solutions in Singapore
 - Habib Bank Ltd. (HBL)
 - HDFC Bank Ltd. of India
 - Promerica in Honduras and Nicaragua
 - Taishin Bank Ltd.
 - United Overseas Bank (UOB) in Singapore and Vietnam
 - Vantiv
 - \circ Vietnam Technological and Commercial Joint-stock Bank
 - Westpac

Before processing quasi-cash transactions, contact customer support to have your account configured for this feature. If you have questions about the supported card types, contact your processor.

A quasi-cash transaction is a cash-like transaction for the sale of items that are directly convertible to cash, such as:

- Casino gaming chips
- Money orders
- Wire transfers

Automatic partial authorization reversals are supported for quasi-cash transactions on all processors except Atos.

Related information

Automatic Partial Authorization Reversals

Recipients

Service: Authorization

Processors:

- Barclays
- Elavon
- HBoS
- LloydsTSB Cardnet
- Streamline

The United Kingdom has a regulation that permits customers to use a debit card to pay outstanding debt for another person. This person is referred to as the payment recipient. For example, a customer can pay the entire balance or part of the balance on a recipient's payment card or payday loan. To help reduce the high levels of fraud that occur for these kinds of transactions, you must include information about the recipient in the authorization request. The following fields are required in the United Kingdom for Visa debit transactions that are characterized under merchant category code 6012:

recipient_accountID

- recipient_dateOfBirth
- recipient_lastName
- recipient_postalCode

Related information

API Fields

Recurring Billing

When you use Recurring Billing, you can process an authorization, capture, or credit by using information that is stored in a subscription. The subscription ID is used to reference the subscription information in the database. Instead of providing all the information that is normally required for a transaction, you only need to provide the following values:

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

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

Related information

Recurring Billing Using the Simple Order API

Recurring Payments

Service: Authorization

Processors and card types:

- AIBMS—Visa, Mastercard, Maestro (International)
- American Express Brighton—American Express

- American Express Direct—American Express
- Asia, Middle East, and Africa Gateway—Visa, Mastercard, American Express, Diners Club, JCB
- Atos—Visa, Mastercard

Before processing recurring payments on Atos, you must:

- Contact your acquirer to ensure that you are permitted to accept recurring transactions.
- Contact Atos to have your account configured to accept recurring transactions.
- Barclays—Visa, Mastercard, JCB
- Chase Paymentech Solutions—Visa, Mastercard, American Express, Discover
- Cielo—Visa, Mastercard, American Express, Diners Club, Discover, JCB, Maestro (International), Elo, Aura

On Cielo, recurring payments are not supported for debit transactions.

• Comercio Latino—Visa, Mastercard, American Express, Discover, Diners Club, JCB, Elo, Aura, Hipercard

When processing transactions in Mexico, you must include the **billTo_customerID** field in the authorization. Before you request the authorization you must inform the issuer of the customer contract numbers in advance.

The supported acquirers are:

- Banorte—must be submitted as an automatic capture.
- Cielo
- Credit Mutuel-CIC—co-badged Cartes Bancaires and Mastercard, co-badged Cartes Bancaires and Visa
- Visa Platform Connect—Visa, Mastercard, American Express, Diners Club, JCB, Discover

Not all card types are supported for all acquirers. The supported acquirers are:

- Arab African International Bank (AAIB)
- Asia Commercial Bank (ACB)
- Auckland Savings Bank (ASB)
- Australia and New Zealand Banking Group Limited (ANZ)
- Axis Bank Ltd. of India
- Banco Nacional de México (Banamex)

- Banco Safra
- Bangkok Bank Ltd.
- Bank Muscat of Oman
- Bank of Ayudhya (BAY)
- Bank of China (BOC)
- Bank Sinarmas (Omise Ltd.)
- Banque Pour Le Commerce Exterieur Lao (BCEL)
- BC Card Co., Ltd.
- Cathay United Bank (CUB)
- Citibank Hongkong and Macau
- Citibank Malaysia
- Citibank Singapore Ltd.
- Commercial Bank of Qatar
- CrediMax (Bahrain)
- CTBC Bank Ltd.
- First Data Merchant Solutions in Brunei
- First Data Merchant Solutions in Hong Kong
- First Data Merchant Solutions in Malaysia
- First Data Merchant Solutions in Singapore
- Global Payments Asia Pacific
- Habib Bank Ltd. (HBL)
- HDFC Bank Ltd. of India
- I&M Bank
- ICICI of India
- Mashreq
- National Bank of Abu Dhabi (NBAD)
- National Bank of Kuwait (NBK)

- Overseas Chinese Banking Corp (OCBC)
- Promerica in Honduras and Nicaragua
- Qatar National Bank (QNB Group)
- Sumitomo Mitsui Card Co.
- Taishin Bank Ltd.
- United Overseas Bank (UOB) in Singapore and Vietnam
- Vantiv
- Vietcombank
- VietinBank
- Vietnam Technological and Commercial Joint-stock Bank
- Westpac
- Wing Hang Bank
- Elavon-Visa, Mastercard, Maestro (UK Domestic), Diners Club
- 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 comply with the Visa merchant-initiated transactions mandate by including additional data in the request. You must do one of the following:

- Include additional data that is required for a merchant-initiated transaction.
- $^\circ$ Make the request using the token management service, which meets the merchant-initiated transaction requirements.
- FDC Compass—Visa, Mastercard, American Express, Discover, Diners Club, JCB
- FDC Germany—Visa, Mastercard
- FDC Nashville Global—Visa, Mastercard, American Express, Discover, China UnionPay
- FDI Australia—Visa, Mastercard
- FDMS South—Visa, Mastercard, Discover

On FDMS South, recurring payments are not supported for the CAD currency with the Visa card type.

• FDMS Nashville—Visa, Mastercard, American Express, Discover

- GPN—Visa, Mastercard, American Express, Discover, Diners Club, JCB
- HBoS—Visa, Mastercard
- HSBC—HSBC is the Cybersource name for HSBC U.K.

To process recurring payments with HSBC, contact the Cybersource European office. For the European office's phone number, go to the Cybersource website and click the Contact Us link.

- Ingenico ePayments—Visa, Mastercard, American Express, Cartes Bancaires
- Lloyds-OmniPay—Visa, Mastercard
- LloydsTSB Cardnet—Visa, Mastercard
- Moneris—Visa, Mastercard, American Express, Discover, China UnionPay
- OmniPay Direct. The supported acquirers are:
 - Bank of America Merchant Services—Visa, Mastercard
 - Cardnet International—Visa, Mastercard, Maestro (UK Domestic), Maestro (International)
 - First Data Merchant Solutions (Europe)—Visa, Mastercard, Discover, Diners Club
 - Global Payments International Acquiring—Visa, Mastercard
- OmniPay-Ireland—Visa, Mastercard

OmniPay-Ireland is the Cybersource name for HSBC International.

To process recurring payments with OmniPay-Ireland, contact the Cybersource European office. For the European office's phone number, go to the Cybersource website and click the Contact Us link.

- Prosa—Visa, Mastercard, American Express, Discover, Diners Club, Carnet, Carte Blanche
- RBS WorldPay Atlanta—Visa, Mastercard, American Express, Discover, Diners Club, JCB
- Rede—Visa, Mastercard, American Express, Diners Club, JCB, Elo, Hipercard

On Rede, recurring payments are not supported for debit transactions.

- SIX—Visa, Mastercard, Discover, Diners Club, JCB, Maestro (International), Maestro (UK Domestic), China UnionPay, Visa Electron
- Streamline

To process recurring payments with Streamline, contact the Cybersource European office. For the European office's phone number, go to the Cybersource website and click the Contact Us link.

- TSYS Acquiring Solutions—Visa, Mastercard, American Express, Discover
- Worldpay VAP—Visa, Mastercard, American Express, Discover, Diners Club, JCB

American Express and Discover have programs that you must register for if you want to process recurring payments. Contact American Express and Discover for details about their programs.

Depending on the types of products and services you sell, you might want to process recurring payments for a customer. For example, you might want to charge a customer 19.95 USD each month to access a service that you offer.

A customer's recurring payment does not have to be the same amount each time.

You must disclose clearly to customers when they make a purchase what the amount will be for the recurring payments. If the amount varies based on usage, make it clear.

Create a Recurring Payment

- 1. For the first payment, the type of request you need to send depends on which processor and card type you are using.
 - For all card types on Atos, include the following fields and values in the request for the first payment:

card_cvNumber

ccAuthService_commerceIndicator=recurring

ccAuthService_firstRecurringPayment=Y

• For all card types on Credit Mutuel-CIC, include the following fields and values in the request for the first payment:

Set ccAuthService_commerceIndicator to internet, spa, vbv, or vbv_attempted.

Set ccAuthService_firstRecurringPayment to Y.

• For Mastercard and American Express transactions on FDC Nashville Global, include the following fields and values in the request for the first payment:

 $card_cvNumber$

ccAuthService_commerceIndicator=recurring

ccAuthService_firstRecurringPayment=TRUE

• For all card types on OmniPay Direct, request a non-recurring transaction and include the following field and value in the request for the first payment:

ccAuthService_firstRecurringPayment=Y

• For all card types on Prosa in Mexico, include the following fields and values in the request for the first payment:

billTo_customerID

card_cvNumber

ccAuthService_commerceIndicator=recurring

ccAuthService_firstRecurringPayment=Y

• For all other processors, card types, and countries, request a non-recurring transaction for a credit card authorization.

If the first authorization is successful, you can submit subsequent authorizations for recurring payments using that card. If the first authorization is not successful, do not submit subsequent authorizations using that card.

(] Important: You must perform Step 1 once per year to verify the account.

2. For each subsequent recurring payment, send an authorization request using the e-commerce indicator to indicate that the payment is a recurring payment:

ccAuthService_commerceIndicator=recurring

If your processor supports merchant-initiated transactions, your authorization request must include subsequent authorization fields for merchant-initiated transactions.

For all card types on Prosa in Mexico, include the **billTo_customerID** field in each request.

Services are available that enable you to create a subscription or customer profile for a customer in the system and then use that subscription or customer profile later to manually or automatically bill the customer. The system eliminates the need for you to handle or store the customer's sensitive payment card information or create your own system for billing the customer on a regular basis.

Related information

Automatic Captures

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Recurring Billing (on page 119)

Token Management Service Using the Simple Order API

AVS and Recurring Payments

FDMS Nashville and Prosa do not support AVS for recurring payments.

If AVS is supported for your processor and card type, AVS is run for every authorization request that you submit. For recurring payments, check the AVS result for the first payment to ensure that the payment information is accurate and to reduce the risk of fraud.

You must decide what to do with the AVS results for subsequent payments. You might want to ignore the AVS results for the these payments because you have already confirmed with the first payment that the payment card number is valid and not fraudulent.

When you need to change the payment card number for a series of recurring payments, follow Step 1 in the procedure for creating a recurring payment to verify the new account number. Closely evaluate the AVS results. If the first authorization is successful, you can submit subsequent authorizations for recurring payments using that card. If the first authorization is not successful, do not submit subsequent authorizations using that card. For subsequent payments, follow Step 2 in the procedure for creating a recurring payment. You can choose to ignore the AVS results.

Related information

Address Verification System Create a Recurring Payment (on page 124)

CVN and Recurring Payments

FDMS Nashville, Ingenico ePayments, and Prosa do not support CVN for recurring payments.

With Ingenico ePayments, you must not include the CVN in a recurring payment request. When you do, the request is rejected because of invalid data.

Related information

Card Verification Numbers Create a Recurring Payment (on page 124)

Replacement Expiration Dates for Recurring Payments

Service: Authorization

Processors and card types:

• AIBMS—Visa, Mastercard, Maestro (International)

American Express Brighton—American Express

You must contact American Express Brighton to get approval for using replacement expiration dates before using this feature.

- American Express Direct—American Express
- Barclays—Visa, Mastercard, JCB
- Chase Paymentech Solutions—Visa, Mastercard
- Visa Platform Connect—Visa, Mastercard, American Express, Diners Club, JCB, Discover

Not all card types are supported for all acquirers.

If an acquirer is supported for recurring payments, the acquirer is also supported for replacement expiration dates for recurring payments. For the list of supported acquirers, see the entry for Visa Platform Connect in Recurring Payments (on page 119).

- Elavon Americas—Visa, Mastercard, American Express, JCB, Diners Club, Discover, China UnionPay
- FDC Compass—Visa, Mastercard, American Express, Discover, Diners Club
- FDC Germany—Visa, Mastercard
- FDI Australia—Visa, Mastercard
- FDMS South—Visa, Mastercard
- HBoS—Visa, Mastercard
- HSBC—Visa, Mastercard, Maestro (International)

HSBC is the Cybersource name for HSBC U.K.

- Lloyds-OmniPay—Visa, Mastercard
- LloydsTSB Cardnet—Visa, Mastercard
- Streamline—To process recurring payments with Streamline, contact the Cybersource European office. For the European office's phone number, go to the Cybersource website and click the Contact Us link.

Normally when you request a credit card authorization, you must provide a valid expiration date for the payment card. If you are processing a recurring payment, and the payment card that you have on file for the customer has expired, you might still be able to request the authorization depending on which processor you use. Instead of sending the out-of-date expiration date, you can include a replacement expiration date in the request.



Do not use a replacement expiration date for cards that have not expired. Use a replacement expiration date only for cards that have expired and only for recurring payments.

Using a replacement expiration date for a recurring payment does not guarantee that the authorization will be successful. The issuing bank determines whether a card is authorized; some issuing banks do not accept an expiration date that does not match the expiration date in the bank's database.

The replacement expiration date that is supported is 12/2099. To use this date, include these fields and values in an authorization request:

```
card_expirationMonth=12
card_expirationYear=2099
```

Recurring Profiles

See Recurring Billing (on page 119).

Relaxed Requirements for Address Data and Expiration Date

To enable relaxed requirements for address data and expiration date, contact customer support to configure your account for this feature. For details about relaxed requirements, see Relaxed Requirements for Address Data and Expiration Date.

Report Groups

Services:

- Authorization
- Full authorization reversal
- Capture
- Credit

Processor:

To use multiple report groups for your transactions, you must contact Worldpay VAP to have your Worldpay VAP account configured for this feature. When using one report group for all transactions, you do not need to have your Worldpay VAP account configured for this feature.

Report group values enable you to define custom groups for processor reports. You can put transactions into groups and then request processor reports for each group. This value is case sensitive and space sensitive.

When you do not have a specific report group structure in mind, Worldpay VAP recommends that you use your merchant ID as the report group value.

The following table describes the logic that is used for each kind of request to determine which report group value to use.

| Kind of Request | Report Group Value |
|--|---|
| Authorization or Stand-Alone Credit | The following locations are checked, in the order given, for a report group value and uses the first value it finds |
| | reportGroup field in the authorization or stand-alone credit request |
| | • Report group value in your account: Your account can have a different report group value for each currency that you process. The report group value that corresponds to the currency is used for the transaction. To create a default report group value in your account, contact customer support. |
| | • Your Worldpay VAP merchant ID |
| Capture or Full Authorization Reversal | The following locations are checked, in the order given, for a report group value and uses the first value it finds: |
| | • reportGroup field in the capture or full authorization reversal request |
| | • Report group value that was used for the authorization request |
| Follow-on Credit | The following locations are checked, in the order given, for a report group value and uses the first value it finds: |
| | • reportGroup field in the follow-on credit request |
| | • Report group value that was used for the capture that is being credited |

Determining Which Report Group Value to Use

Kind of Request Report group value to use (continueu) • Report group value that was used for the authorization request

Determining Which Report Group Value to Use (continued)

Retail POS Data

See Card-Present Processing Using the Simple Order API

RuPay PaySecure

Service: Authorization

Processor: RuPay

Card type: RuPay

Before you implement payer authentication for RuPay PaySecure, you must contact customer support to have your account configured for this feature.

When you request an authorization using a supported card type and a supported processor, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

RuPay PaySecure authenticates the customer during an online purchase and protects payment information as it is transmitted over the Internet.

Authorizing a RuPay PaySecure Transaction

1. Include the following fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other.

- ccAuthService_cavv—required
- ccAuthService_commerceIndicator—required
- ccAuthService_xid—required

See the field descriptions for important information.

2. Examine the response codes.

The authorization service returns a raw response code and a mapped response code:

- The *raw response code* is the value returned by the processor. This value is returned in the **ccAuthReply_cavvResponseCodeRaw** field.
- The *mapped response code* is the predefined value that corresponds to the raw response code. This value is returned in the **ccAuthReply_cavvResponseCode** field.

Related information

Payer Authentication RuPay Integration Guide in the Business Center

Samsung Pay

See Samsung Pay Using the Simple Order API.

Secure Data

See Token Management Service (on page 148).

Secure Transactions for Credit Mutuel-CIC

Service: Authorization

Processor: Credit Mutuel-CIC

Card types:

- Co-badged Cartes Bancaires and Mastercard
- Co-badged Cartes Bancaires and Visa

Before you implement payer authentication for secure transactions for Credit Mutuel-CIC, you must contact customer support to have your account configured for this feature.

Secure transactions for Credit Mutuel-CIC add security to online transactions by authenticating account holders for specific transactions. When you request an authorization with a co-badged Cartes Bancaires card on Credit Mutuel-CIC, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

Related information

Cartes Bancaires website Payer Authentication Using the Simple Order API Payer Authentication Using the SCMP API Authorizing a Secure Transaction for Credit Mutuel-CIC (on page 132)

Authorizing a Secure Transaction for Credit Mutuel-CIC

For a co-badged Cartes Bancaires and Mastercard card, you can use Mastercard Identity Check instead of including data for secure transactions for Credit Mutuel-CIC.

For a co-badged Cartes Bancaires and Visa card, you can use Visa Secure instead of including data for secure transactions for Credit Mutuel-CIC.

Include the following fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other. It is recommended that you include as many of these fields as possible to increase the chances of a successful transaction.

Secure transactions for Credit Mutuel-CIC 1.0:

- ccAuthService_cavv—recommended for Visa; not supported for Mastercard
- ccAuthService_cavvAlgorithm—recommended when ccAuthService_cavv or ucaf_authenticationData is included in the request
- ccAuthService_commerceIndicator—required
- ccAuthService_directoryServerTransactionID—recommended
- ccAuthService_paresStatus—recommended
- ccAuthService_veresEnrolled—recommended
- ucaf_authenticationData—recommended for Mastercard; not supported for Visa
- ucaf_collectionIndicator—recommended for Mastercard; not supported for Visa

Secure transactions for Credit Mutuel-CIC 2.0:

- ccAuthService_acsServerTransactionID—recommended
- ccAuthService_cavv—recommended for Visa; not supported for Mastercard
- ccAuthService_cavvAlgorithm—recommended when ccAuthService_cavv or ucaf_authenticationData is included in the request
- ccAuthService_challengeCancelCode—recommended
- ccAuthService_commerceIndicator—required
- ccAuthService_directoryServerTransactionID—recommended
- ccAuthService_effectiveAuthenticationType—recommended
- ccAuthService_paChallengeCode—recommended
- ccAuthService_paNetworkScore—recommended
- ccAuthService_paresStatus—recommended
- ccAuthService_paresStatusReason—recommended
- ccAuthService_veresEnrolled—recommended
- ucaf_authenticationData—recommended for Mastercard; not supported for Visa
- ucaf_collectionIndicator—recommended for Mastercard; not supported for Visa

See the field descriptions for important information.

Related information

Cartes Bancaires website

Mastercard Identity Check (on page 83) Payer Authentication Using the Simple Order API Visa Secure (on page 154)

Service Fees

See Service Fee Processing Using the Simple Order API.

Single-Message Processing

See Least-Cost Routing (on page 79).

See Single-Message Processing (on page 134).

Soft Descriptors

See Merchant Descriptors Using the Simple Order API.

Split Dial/Route

See Forced Captures (on page 50).

Split Shipments

Services:

- Authorization
- Capture

Processors:

Visa Platform Connect

() Important: Split shipments are not available for Mastercard transactions in the IDR currency on Visa Platform Connect.

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.

• The split-shipment feature is provided by Cybersource. This feature supports three different scenarios: multiple authorizations, multiple captures, and multiple authorizations with multiple captures.

Benefits of Using Split Shipments

The benefits of using split shipments are:

- All the transactions for a split shipment are linked together in the Business Center and in reports.
- When you split an order into multiple shipments with multiple captures, you do not need to request additional authorizations; Cybersource takes care of the additional authorizations for you.

Requirements for Using Split Shipments

The requirements for using split shipments are:

- You must use Visa Platform Connect or GPN.
- You must contact customer support to have your account configured for this feature. On Visa Platform Connect, your account can be enabled for multiple partial captures or split shipments; it cannot be enabled for both features.

How Split Shipments Work

Additional Authorizations

When you need an additional authorization for an order, you can use the link-to-request field to link the additional authorization to the first authorization. For the additional authorization, you must submit an authorization request that includes the link-to-request field in addition to the basic fields required for every authorization request. The additional authorization is linked to the original authorization in the Business Center and in reports. The captures for these authorizations are also linked to the original authorization in the Business Center and in reports.

For an additional authorization on a processor that supports merchant-initiated transactions, the authorization request must include the subsequent authorization fields that are required for merchant-initiated transactions.

Additional Captures

When you need an additional capture for an order, Cybersource performs a system-generated authorization for the additional capture request, using the payment data from the original authorization. The system-generated authorization is linked to the original authorization in the Business Center and in reports. The captures are linked to the authorizations in the Business Center and in reports through the request IDs as with any capture.

On GPN, the system-generated authorization uses the same authorization indicator as the original authorization.

Related information

API Fields Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93)

Split-Shipment Scenarios

One Authorization and One Sale (on page 136)

One Authorization and Two Captures (on page 137)

Multiple Captures in a Batch File (on page 138)

Two Authorizations and One Capture (on page 139)

One Authorization and One Sale

In this scenario, the customer orders a product that is not available yet.

1. You request an authorization to ensure that funds are available.

The product is not available for immediate shipment, so you wait for the product to become available.

2. After the product becomes available, you ship the product and request a sale.

For the second authorization, you must submit an authorization request that includes the linkto-request field in addition to the basic fields required for every authorization request. Set the link-to-request field to the request ID from the first authorization's response:

First Authorization Response Message: requestID=SWVdPS5IM

Second Authorization Request: linkToRequest=SWVdPS5IM

Including the link-to-request field in an authorization request triggers the split-shipment functionality. Because you are requesting the second authorization and capture together, you do not need to include the request ID in the capture request.

- 3. Cybersource tries to link the second authorization request to the first authorization:
 - If the link-to-request value is valid, the second authorization is linked to the original authorization in the Business Center and in reports.
 - If the link-to-request value is not valid, the second authorization is not linked to the original authorization in the Business Center and in reports.
- 4. Cybersource links the capture request:
 - If the link-to-request value for the second authorization was valid, all three transactions (first authorization, second authorization, capture) are linked together in the Business Center and in reports.
 - If the link-to-request value for the second authorization was not valid, the second authorization and capture are linked to each other in the Business Center and in reports, but they are not linked to the first authorization.

Related information

API Fields Create an Authorization Request Performing a Sale Business Center Reporting User Guide

One Authorization and Two Captures

In this scenario, the customer orders multiple products, one of which is not available yet.

- 1. You request an authorization to ensure that funds are available.
- 2. You ship the available products and request a capture for the amount of the shipped products.

One of the products is not available for immediate shipment, so you ship the available products and wait for the remaining product to become available.

- 3. After the remaining product becomes available, you ship the product and request a capture for the amount of that product.
- 4. Cybersource performs a system-generated authorization for the second capture request.

Because your account is enabled for split shipment, instead of rejecting the capture request as a duplicate capture, Cybersource processes the capture request as a split-shipment request.

The system-generated authorization is linked to the original authorization in the Business Center and in reports.

5. Cybersource links the capture request.

The capture is linked to the authorizations in the Business Center and in reports through the request IDs as with any capture. All four transactions (first authorization, system-generated authorization, first capture, second capture) are linked together in the Business Center and in reports.

6. You get the status of the second capture request and its associated system-generated authorization.

Related information

API Fields Create an Authorization Request Create a Capture Request Obtaining the Status of a System-Generated Authorization (on page 140) Business Center Reporting User Guide

Multiple Captures in a Batch File

You can request authorizations in a batch file.

- 1. You create and upload a batch file using one of these methods:
 - Business Center transaction batch functionality
 - Offline transaction file submission system
- 2. Cybersource processes the batch file.
- 3. You get the status of your batch requests by generating a Transaction Request Report and selecting Batch File Upload as the connection method.
- 4. You get the status of your split-shipment transactions.

Related information

Business Center Reporting User Guide

Two Authorizations and One Capture

In this scenario, the customer orders a product that is not available yet.

1. You request an authorization to ensure that funds are available.

The product is not available for immediate shipment, so you wait for the product to become available.

- 2. After the product becomes available, you request a second authorization to ensure that funds are still available. The authorization request must include:
 - Basic fields required for every authorization request.
 - Link-to-request field. Set the value for this field to the request ID from the first authorization's response:

First Authorization Response Message: requestID=SWVdPS5IM

Second Authorization Request: linkToRequest=SWVdPS5IM

Including the link-to-request field in an authorization request triggers the split-shipment functionality.

- On a processor that supports merchant-initiated transactions: subsequent authorization fields
- 3. Cybersource tries to link the second authorization request to the first authorization:
 - If the link-to-request value is valid, the second authorization is linked to the original authorization in the Business Center and in reports.
 - If the link-to-request value is not valid, the second authorization is not linked to the original authorization in the Business Center and in reports.
- 4. You ship the product and request a capture.

Set the request ID in the capture request to the request ID from the second authorization's response:

Second Authorization Response Message: requestID=s139cmdS1kJ

Capture Request: ccCaptureService_authRequestID=s139cmdSlkJ

5. Cybersource links the capture request:

- If the link-to-request value for the second authorization was valid, all three transactions (first authorization, second authorization, capture) are linked together in the Business Center and in reports.
- If the link-to-request value for the second authorization was not valid, the second authorization and capture are linked to each other in the Business Center and in reports, but they are not linked to the first authorization.

Related information

API Fields Create an Authorization Request Create a Capture Request Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93) Business Center Reporting User Guide

Obtaining the Status of a System-Generated Authorization

A system-generated authorization is not performed in real time. The response message that you receive simply indicates that the request was received; it does not indicate whether the system-generated authorization was approved or declined. A system-generated authorization can be declined for the same reasons that a regular authorization can be declined.

It is recommended that you use one of following methods to obtain the status of the systemgenerated authorization request before shipping the product:

- Business Center—Use the capture request ID to search for the second capture. The details for all related transactions are displayed on the **Transaction Details** page. It can take a maximum of six hours for the status of the system-generated authorization request to be available.
- Transaction Detail API—You must use version 1.3 or later of the report and include the parameter **includeExtendedDetail** in your query. It can take a maximum of six hours for the status of the system-generated authorization request to be available.
- Transaction Exception Detail Report—It is recommended that you use this report on a daily basis to identify transactions that have been declined.

Related information

Business Center Reporting User Guide

Staged Digital Wallets

Services:

- Authorization
- Capture

Processor: FDC Compass

Terminology

Business application indicator (BAI)

Identifier for the type of transaction.

Digital wallet operator (DWO)

Entity that provides the pass-through digital wallet or staged digital wallet service to the customer.

Merchant verification value (MVV)

Setting in your account that is required for processing SDW transactions.

Pass-through wallet or pass-through digital wallet

Digital wallet that replaces the customer's payment information with a token. Examples: Apple Pay, Google Pay, Visa Click to Pay.

Staged digital wallet (SDW)

Digital wallet that replaces the customer's payment information with credentials provided by a SDWO. Examples: PayPal, AliPay.

Staged digital wallet operator (SDWO)

Entity that provides the staged digital wallet service to the customer and processes the payment between the customer and the merchant.

Requirements

You must:

- Contact customer support to set the merchant verification value in your account.
- Include the **invoiceHeader_businessApplicationID** field in the authorization request and set it to WT.

SDW Functionality

The SDW provides functionality that:

- Uses the card or bank account number supplied by the customer to the SDWO.
- Uses a separate account or accounts assigned by the SDWO to the customer.
- Completes a transaction through the SDWO in two stages, in any order:
 - Purchase transaction: customer pays you using the credentials assigned by the SDWO. For example, the typical credentials for PayPal are a username and a password.
 - Funding: uses the account number provided by the customer to fund or reimburse the staged digital wallet.

Strong Customer Authentication

Service: Authorization

Processors:

- Barclays
- Chase Paymentech Solutions—supported only for EUR and GBP currencies
- Credit Mutuel-CIC
- FDC Compass
- FDC Nashville Global
- OmniPay Direct. The supported acquirers are:
 - Bank of America Merchant Services
 - Cardnet International
 - First Data Merchant Solutions (Europe)
 - Global Payments International Acquiring
- Visa Platform Connect

Strong customer authentication (SCA) increases the security of online payments. SCA is required for an online payment when the issuer and acquirer are in the European Economic Area or U.K. or Gibraltar. To meet SCA requirements, perform payer authentication.

SCA Exemptions

An SCA exemption enables you to bypass SCA requirements. SCA exemptions enable you to balance fraud reduction with a convenient payment experience for the customer. For some transactions, you must obtain approval from your acquirer before using a particular SCA exemption, especially when the acquirer is involved in the calculation of risk. You can request only one SCA exemption for a transaction.

(] Important: If you send more than one exemption at a time, your request will be declined.

When you claim an exemption, and the request is declined with reason code 428 or 478, either abandon the authorization or retry the authorization using payer authentication without any exemptions.

Authentication Outage

When payer authentication is not available, SCA is not required. To request this exemption, set the **ccAuthService_authenticationOutageExemptionIndicator** field to **1**.

Supported processor and card types:

• Visa Platform Connect: Mastercard, Visa

Credentials on File

A credentials-on-file transaction is an authorization that you initiate using payment information from a previous customer-initiated transaction. When a transaction uses payment information from a previous transaction for which the customer was authenticated, SCA is not required. To request this exemption, include the **subsequentAuthStoredCredential** field in the request.

Supported processors and card types:

- Barclays: Mastercard, Visa
- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa

Delegated Authentication

An issuer can delegate authority for authenticating a customer to a third party such as an acquirer, wallet provider, or payment technology provider (PTP). When a customer is authenticated by a third party, SCA is not required. To request this exemption, set the **ccAuthService_delegatedAuthenticationExemptionIndicator** field to **1**.

Supported processors and card types:

- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- Credit Mutuel-CIC: co-badged Cartes Bancaires and Mastercard, co-badged Cartes Bancaires and Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa
- Visa Platform Connect: Mastercard, Visa

Installment Payment

Installment payments are billed at specified intervals. SCA is required for the first payment in a series of installment payments. When a transaction is part of a scheduled set of charges, SCA is not required after the first transaction in the series. To request this exemption, set the **ccAuthService_commerceIndicator** field to **install**.

Supported processors and card types:

- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa

Low Value

A transaction amount that is less than 30 EUR is low value. When a transaction has a low-value amount, SCA is not required. When you submit multiple low-value authorization requests for one customer, SCA is required for every five transactions. To request this exemption, set the **ccAuthService_lowValueExemptionIndicator** field to **1**.

Supported processors and card types:

• Barclays: Mastercard, Visa

- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- Credit Mutuel-CIC: co-badged Cartes Bancaires and Mastercard, co-badged Cartes Bancaires and Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa
- Visa Platform Connect: Mastercard, Visa

Merchant-Initiated Transaction

A merchant-initiated transaction is an authorization that you initiate using payment information from a previous customer-initiated transaction. When a transaction uses payment information from a previous transaction for which the customer was authenticated, SCA is not required. To request this exemption, include the **subsequentAuthReason** field in the request.

Supported processors and card types:

- Barclays: Mastercard, Visa
- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa

Recurring Payment

Recurring payments are fixed-amount payments billed on a recurring schedule. SCA is required for the first payment in a recurring series and whenever the payment amount changes. When a transaction is part of a scheduled, fixed-amount set of charges, SCA is not required after the first transaction in the series. To request this exemption, set the **ccAuthService_commerceIndicator** field to recurring.

Supported processors and card types:

- Barclays: Mastercard, Visa
- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa

• OmniPay Direct: Maestro (International), Mastercard, Visa

Risk Analysis

A transaction has a low risk of fraud when the average fraud level for the payment card is low. When a transaction has a low risk of fraud, SCA is not required. To request this exemption, set the **ccAuthService_riskAnalysisExemptionIndicator** field to **1**.

Supported processors and card types:

- Barclays: Mastercard, Visa
- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- Credit Mutuel-CIC: co-badged Cartes Bancaires and Mastercard, co-badged Cartes Bancaires and Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa
- Visa Platform Connect: Mastercard, Visa

Secure Corporate Payment

A secure corporate payment is a transaction that is initiated in a secure corporate environment using a corporate payment card. When a transaction is a secure corporate payment, SCA is not required. To request this exemption, set the **ccAuthService_secureCorporatePaymentIndicator** field to **1**.

Supported processors and card types:

- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- Credit Mutuel-CIC: co-badged Cartes Bancaires and Mastercard, co-badged Cartes Bancaires and Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa
- Visa Platform Connect: Mastercard, Visa

Trusted Merchant

A customer can provide the issuer with a list of trusted merchants through the Visa Trusted Listing program. When a trusted merchant requests a transaction, SCA is not required. To request this exemption, set the **ccAuthService_trustedMerchantExemptionIndicator** field to **1**.

On Visa Platform Connect, the response field **issuer_trustedMerchantExemptionResult** indicates whether the request was honored or denied, and the response field **issuer_riskAnalysisExemptionResult** provides a reason for the denied exemption.

Supported processors and card types:

- Chase Paymentech Solutions: American Express, Maestro (International), Mastercard, Visa
- Credit Mutuel-CIC: co-badged Cartes Bancaires and Mastercard, co-badged Cartes Bancaires and Visa
- FDC Compass: Maestro (International), Mastercard, Visa
- FDC Nashville Global: Mastercard, Visa
- OmniPay Direct: Maestro (International), Mastercard, Visa
- Visa Platform Connect: Mastercard, Visa

Related information

API Fields

Merchant-Initiated Transactions and Credentials-on-File Transactions (on page 93) Payer Authentication (on page 114) Recurring Payments (on page 119) Reason Codes

Subscriptions

See Recurring Billing (on page 119).

Tax Calculation

See Tax Calculation Service Using the Simple Order API

Token Management Service

Token Management Service (TMS) replaces Payment Tokenization. TMS enables you to:

- Tokenize customers' sensitive personal information.
- Eliminate payment data from your order management system to ensure that it is not compromised during a security breach.

When you use TMS, you can process an authorization, capture, or credit by using information that is associated with a customer token. The customer token is used to reference customer information in the database. Instead of providing all the information that is normally required for a transaction, you only need to provide the following values:

- Merchant ID
- Merchant reference code
- Amount of the payment or credit
- Subscription ID—set this field to the value of the customer token.

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

Related information

Token Management Service Using the Simple Order API

Tokens

See Authorizations with Payment Network Tokens (on page 26) and Token Management Service (on page 148).

Type II Cards

See Level II and Level III Processing Using the Simple Order API

Verbal Authorizations

Processors:

- AIBMS
- American Express Brighton
- American Express Direct
- Asia, Middle East, and Africa Gateway
- Barclays
- Chase Paymentech Solutions
- Visa Platform Connect
- Elavon
- Elavon Americas
- FDC Compass
- FDC Germany
- FDI Australia
- FDC Nashville Global
- FDMS Nashville
- FDMS South
- GPN
- HBoS
- HSBC: HSBC is the Cybersource name for HSBC U.K.
- JCN Gateway
- Lloyds-OmniPay
- LloydsTSB Cardnet
- Lynk
- Moneris
- OmniPay Direct. The supported acquirers are:

- Bank of America Merchant Services
- First Data Merchant Solutions (Europe)
- Global Payments International Acquiring
- OmniPay-Ireland: OmniPay-Ireland is the Cybersource name for HSBC International.
- RBS WorldPay Atlanta
- TSYS Acquiring Solutions
- UATP
- 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, contact your account manager at Worldpay VAP.

Verbal authorizations are not supported for Comercio Latino or Cybersource Latin American Processing.

Cybersource Latin American Processing is the name of a specific processing connection. *Cybersource Latin American Processing* does not refer to the general topic of processing in Latin America. The information in this field description, or in this section of the field description, is for the specific processing connection called *Cybersource Latin American Processing*. It is not for any other Latin American processors.

(] Important: Do not use Dynamic Currency Conversion with a verbal authorization.

When you request an authorization through Cybersource, the issuing bank might ask you to call the payment processor to answer questions about the transaction. When this happens, the processor gives you a verbal authorization code for the transaction. To capture a verbally authorized transaction, send the verbal authorization code in the capture request. Make sure your customer service and point-of-sale staff can enter verbal authorization codes into your system.

You can use a verbal authorization to capture an authorization that was declined for any of these reasons:

- Verbal authorization required
- Card expired
- Card refused
- Invalid card

(] Important:

Do not confuse verbal authorizations with forced captures:

- With a verbal authorization, you obtain the authorization code directly from the processor or issuing bank after requesting an authorization through Cybersource and receiving a Cybersource decline.
- With a forced capture, you obtain the authorization code by authorizing a payment outside of Cybersource.

In both cases, you must follow up with a capture that uses the Cybersource system.

A verbal authorization works as follows:

1. The authorization response includes a reason code value of 201, which indicates that the issuing bank is requiring a verbal authorization.

For the American Express card type on FDMS Nashville, the authorization response also includes a referral response number in **ccAuthReply_referralResponseNumber**. You will be asked for this number, which identifies the failed transaction, when you call American Express for the verbal authorization.

- 2. You call the processor to answer questions about the transaction.
- 3. When the processor verbally authorizes the transaction, the processor gives you a verbal authorization code.
- 4. You include the following required fields in a capture request:
 - Send the verbal authorization code in the **ccCaptureService_verbalAuthCode** field.
 - Set the value for the **ccCaptureService_authType** field to **verbal**. When you do not set this field to **verbal**, the **ccCaptureService_verbalAuthCode** field is ignored.
 - For the American Express card type on American Express Direct or FDMS South, Cybersource provides values for the **ccCaptureService_posData** and **ccCaptureService_transactionID** fields to comply with CAPN requirements.

American Express has indicated that capture requests submitted without a valid transaction ID, including transactions that originated as verbal authorizations, might incur additional transaction charges. Contact your American Express account representative to learn whether your processing is affected by these additional transaction charges.

Related information

Forced Captures (on page 50)

Visa Bill Payments

Services:

- Authorization
- Credit

Processors:

- Chase Paymentech Solutions
- FDC Compass
- FDC Nashville Global
- FDMS Nashville
- GPN
- OmniPay-Ireland: OmniPay-Ireland is the Cybersource name for HSBC International.
- TSYS Acquiring Solutions

Visa provides a Bill Payment program that enables customers to use their Visa cards to pay their bills. When you participate in this program, Visa requests that you flag the bill payments and credits so they can be easily identified. To flag these transactions, include the **ccAuthService_billPayment** field in your requests.

The bill payment indicator is accepted no matter which processor you are using, do not use this indicator if you have not signed up with Visa to participate in the program.

Visa Click to Pay

See:

- Getting Started with Visa Click to Pay on the Cybersource Platform
- Visa Click to Pay Using the Simple Order API

Visa Debt Repayments

Services:

- Authorization
- Credit

Processors:

- Visa Platform Connect—supported only in Australia and New Zealand
- FDC Nashville Global
- FDMS Nashville
- GPN

Visa provides a Debt Repayment program that enables customers to use their Visa debit cards to make a payment towards an existing contractual loan. The types of loans that can qualify for this program are:

- Auto loans
- Payment cards
- Mortgages
- Student loans

To participate in this program, contact your processor for details and requirements.

When you participate in this program, Visa requests that you flag the debt repayments and credits so they can be easily identified. To flag these transactions, include these fields in your requests:

- ccAuthService_billPayment—not required on Visa Platform Connect
- debtIndicator

When you use the Simple Order API in XML format, you must use version 1.37 or later of the XML schema to implement Visa debt repayments.

Visa Direct

Visa Direct is one of the networks supported by Cybersource Payouts.

See Payouts Using the Simple Order API

Visa Secure

Service: Authorization

Processors:

- AIBMS
- Asia, Middle East, and Africa Gateway
- Atos
- Barclays
- Chase Paymentech Solutions
- Cielo
- Comercio Latino
- Credit Mutuel-CIC
- Cybersource Latin American Processing: Visa Secure is an emerging feature in the Latin American region. It is not fully supported in all countries. Contact customer support for details. Cybersource Latin American Processing is the name of a specific processing connection that is supported. In the API documentation, Cybersource Latin American Processing does not refer to the general topic of processing in Latin America.
- Elavon
- Elavon Americas
- FDC Compass
- FDC Germany
- FDI Australia
- FDC Nashville Global
- FDMS Nashville
- FDMS South
- Getnet
- GPN
- HBoS
- HSBC: HSBC is the Cybersource name for HSBC U.K.

- Ingenico ePayments
- JCN Gateway
- LloydsTSB Cardnet
- Moneris
- OmniPay Direct. The supported acquirers are:
 - Bank of America Merchant Services
 - Cardnet International
 - First Data Merchant Solutions (Europe)
 - Global Payments International Acquiring
- OmniPay-Ireland: OmniPay-Ireland is the Cybersource name for HSBC International.
- Prosa
- RBS WorldPay Atlanta
- Rede
- SIX
- Streamline
- TSYS Acquiring Solutions
- Visa Platform Connect
- Worldpay VAP

Card types:

- Co-badged Visa and Cartes Bancaires. You must identify the card type as Visa. Supported only on Credit Mutuel-CIC. You can use secure transactions for Credit Mutuel-CIC instead of Visa Secure.
- Co-badged Visa and mada. You must identify the card type as Visa. Supported only on Visa Platform Connect.
- Visa

Before you implement payer authentication for Visa Secure, you must contact customer support to have your account configured for this feature.

When you request an authorization using a supported card type and a supported processor, you can include payer authentication data in the request. The payer authentication services enable you to add payer authentication support to your website without running additional software on your server.

Visa Secure reduces the risk of unauthorized use of a payment card account. Visa Secure enables you to verify a customer's identity through the use of a password and provides results to you in real time during the checkout process. For details about signing up for and using Visa Secure, contact your acquiring bank or go to the Visa website.

For Visa Secure transactions, use card type 001. Do not use card type 033.

For Visa Click to Pay transactions, do not map the Visa Secure data from the decrypt Visa Click to Pay data service response message to the payer authentication fields in the authorization request. The data is mapped for you. The transaction information that is sent to the processor includes the Visa Secure data.

Related information

Secure Transactions for Credit Mutuel-CIC (on page 131)

Authorizing a Visa Secure Transaction

1. Include the following fields in the authorization request.

The values for these fields are in the response from the payer authentication validate service. When you request the payer authentication validate and authorization services together, the data is automatically passed from one service to the other.

Asia, Middle East, and Africa Gateway:

- ccAuthService_cavv—required
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_paresStatus—required unless all of the following are true:
 - You are requesting payer authentication and authorization in separate requests.
 - Visa Secure authentication was successful.
 - Verification response enrollment status is not Y.

When all the preceding conditions are true, do not include the PARes status in the authorization request. If you do, Cybersource sends the value to the processor without modification. Cybersource does not decline the transaction; declines are generated by the processor.

- ccAuthService_veresEnrolled—required
- ccAuthService_xid—required when payer authentication is successful

Atos:

- ccAuthService_cavv—required
- **ccAuthService_cavvAlgorithm**—required when the CAVV is included in the request; you must not include this field when a CAVV is not included in the request
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- ccAuthService_paresStatus—required for a successful Visa Secure transaction
- ccAuthService_xid—required when payer authentication is successful

Ingenico ePayments:

- ccAuthService_cavv—required
- **ccAuthService_cavvAlgorithm**—required when the CAVV is included in the request and a third-party provider authenticates the transaction; you must not include this field when a CAVV is not included in the request
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value
- **ccAuthService_paresStatus**—required for a successful Visa Secure transaction when a third-party provider authenticates the transaction
- ccAuthService_xid—required when payer authentication is successful

All other processors:

- ccAuthService_cavv—required
- ccAuthService_commerceIndicator—required
- **ccAuthService_eciRaw**—required when the payer authentication validation service returns a raw ECI value

• ccAuthService_xid—required when payer authentication is successful

See the field descriptions for important information.

2. Examine the response codes.

The authorization service returns a raw response code and a mapped response code:

- The *raw response code* is the value returned by the processor. This value is returned in the **ccAuthReply_cavvResponseCodeRaw** field.
- The *mapped response code* is the predefined value that corresponds to the raw response code. This value is returned in the **ccAuthReply_cavvResponseCode** field.

() Important: A CAVV response code value of Ø for a Visa transaction indicates that Visa downgraded the transaction. When Visa approves an authorization and downgrades it, you are responsible for the transaction. To confirm the downgrade, look at the e-commerce indicator for the transaction in the Business Center. You can proceed with the transaction if you want to accept responsibility. If you do not want to accept responsibility, reverse the authorization, attempt to authenticate the customer again, and request another authorization.

Related information

Payer Authentication Using the Simple Order API Secure Transactions for Credit Mutuel-CIC (on page 131) usa.visa.com

Zero Amount Authorizations

Service: Authorization

Processors and card types: See the following table

Processors That Support Zero Amount Authorizations

| Processor | AVS | CVN | Card Types and Notes |
|-----------|-----|-----|----------------------|
| AIBMS | Yes | Yes | • Visa |
| | | | • Mastercard |

| Processor | AVS | CVN | Card Types and Notes |
|-------------------------------|-----|-----|---|
| | | | For zero amount authorizations on AIBMS, the commerce indicator must be internet or moto. |
| American Express Direct | Yes | No | American Express |
| | | | All currencies that are supported for standard authorizations for American Express Direct are also supported for zero amount authorizations. |
| Barclays | Yes | Yes | • Visa |
| | | | Mastercard |
| | | | All currencies that are supported for standard authorizations for Barclays are also supported for zero amount authorizations. |
| | | | The amount is rounded to the correct number of decimal places for the currency. |
| | | | For zero amount authorizations on Barclays, the commerce indicator must be internet or moto. |
| | | | Visa Electron cards are not supported for zero amount authorizations on Barclays. |
| Chase Paymentech Solutions | Yes | Yes | • Visa |
| Solutions | | | Mastercard |
| | | | American Express |
| | | | • Diners Club |
| Credit Mutuel-CIC | No | Yes | Co-badged Cartes Bancaires and Mastercard |
| | | | Co-badged Cartes Bancaires and Visa |
| Elavon | Yes | Yes | • Visa |
| | | | Mastercard |
| | | | • Maestro (UK Domestic) |

| Processor | AVS | CVN | Card Types and Notes |
|-----------------------|-----|-------------------------------------|---|
| | | | • Maestro (International) |
| | | | All currencies that are supported for standard authorizations for Elavon are also supported for zero amount |
| | | | authorizations. |
| Elavon Americas | Yes | Yes | • Visa |
| | | | Mastercard |
| | | | American Express |
| | | | • JCB |
| | | | • Diners Club |
| | | | • Discover |
| | | | • China UnionPay |
| FDC Compass | Yes | Yes | • Visa |
| | | | • Mastercard |
| | | | American Express |
| | | | • Diners Club |
| DC Nashville lobal | Yes | Yes for all card types except | • Visa |
| | | | • Mastercard |
| | | American Express | American Express |
| | | | • Discover |
| | | | • Diners Club |
| | | | For a zero amount authorization on FDC Nashville Global: |
| | | | Visa, Mastercard, American Express—all currencies that are supported for standard authorizations are also supported for zero amount authorizations. |

| Processor | AVS | CVN | Card Types and Notes |
|----------------|--|------------------------|--|
| | | | Discover, Diners Club—only USD is supported for zero amount authorizations. |
| FDI Australia | Yes | Yes | Visa—supported only for AUD. |
| | | | Mastercard—supported only for AUD. |
| FDMS Nashville | Yes | Yes | • Visa |
| FDMS South | Yes | Yes for all card types | • Visa |
| | | except American | Mastercard |
| | | Express | American Express |
| | | | AVS is required for zero amount authorizations with American Express. |
| | | | CVN is not supported for zero amount authorizations with American Express. |
| | | | • Discover |
| | | | • Diners Club |
| Getnet | No | No | • Visa |
| | | | • Mastercard |
| | | | • Hipercard |
| GPN | Yes Yes for all card types except American Express | | • Visa |
| | | except | • Mastercard |
| | | | American Express—CVN is not supported for zero amount authorizations with American |
| | | | Express. |
| | | | • Discover |
| | | | • JCB |
| HBoS | Yes | Yes | • Visa |
| | | | • Mastercard |

| Processor | AVS | CVN | Card Types and Notes |
|--|-----|-----|--|
| | | | For zero amount authorizations on HBoS, the commerce indicator must be internet or moto. |
| HSBC | Yes | Yes | • Visa |
| HSBC is the Cybersource name for HSBC U.K. | | | • Mastercard • Maestro (UK Domestic) |
| IOI HISDE O.K. | | | • Maestro (International) |
| | | | For zero amount authorizations on HSBC: |
| | | | • The commerce indicator must be internet or moto. |
| | | | • The authorization code is not returned. |
| JCN Gateway | No | Yes | • Visa |
| | | | • Mastercard |
| | | | American Express |
| | | | • Diners Club |
| | | | • JCB |
| Lloyds-OmniPay | Yes | Yes | • Visa |
| | | | Mastercard |
| | | | For zero amount authorizations on Lloyds-OmniPay, the commerce indicator must be internet or moto. |
| LloydsTSB Cardnet | Yes | Yes | • Visa |
| | | | • Mastercard |
| | | | For zero amount authorizations on LloydsTSB Cardnet, the commerce indicator must be internet or moto. |
| Moneris | Yes | Yes | • Visa |
| | | | • Mastercard |

| Processor | AVS | CVN | Card Types and Notes |
|--|-----|-----|---|
| | | | China UnionPay |
| OmniPay Direct | Yes | Yes | Bank of America Merchant Services—Visa, Mastercard, Maestro (UK Domestic), Maestro (International) |
| | | | Cardnet International—Visa, Mastercard, Maestro (UK Domestic), Maestro (International) |
| | | | First Data Merchant Solutions (Europe)—Visa, Mastercard, Discover, Diners Club, Maestro (UK Domestic), Maestro (International) |
| | | | Global Payments International Acquiring—Visa, Mastercard, Maestro (UK Domestic), Maestro (International) |
| OmniPay-Ireland | Yes | Yes | • Visa |
| OmniPay-Ireland is the Cybersource name for HSBC International. | | | • Mastercard |
| Prosa | Yes | Yes | • Visa |
| | | | • Mastercard |
| | | | American Express |
| | | | • Discover |
| | | | • Diners Club |
| | | | • Carnet |
| | | | • Carte Blanche |
| RBS WorldPay | Yes | Yes | • Visa |
| Atlanta | | | • Mastercard |
| | | | • Diners Club |
| Rede | No | No | • Visa |
| | | | • Mastercard |

| Processor | AVS | CVN | Card Types and Notes |
|--------------------------|-----|--|--|
| SIX | Yes | Yes | • Visa |
| | | | • Mastercard |
| | | | • Discover |
| | | | • Diners Club |
| | | | • JCB |
| | | | Maestro (International) |
| | | | • Maestro (UK Domestic) |
| | | | • China UnionPay |
| | | | • Visa Electron |
| Streamline | Yes | Yes | • Visa |
| | | | • Mastercard |
| | | | Maestro (International) |
| | | | • Maestro (UK Domestic) |
| | | | Cartes Bancaires |
| | | | • Dankort |
| | | | All currencies that are supported for standard authorizations for Streamline are also supported for zero amount authorizations. |
| TSYS Acquiring | Yes | Yes for | • Visa |
| olutions | | Visa and Mastercard. | • Mastercard |
| | | No for American Express and Discover. | American Express—CVN is not supported for zero amount authorizations with American Express. |
| | | | • Discover—CVN is not supported for zero amount authorizations with Discover. |
| Visa Platform Connect | Yes | Yes | • Visa |

| Processors That Support Zero Amount Authorizations (continued) | | | |
|--|-----|-----|--|
| Processor | AVS | CVN | Card Types and Notes |
| | | | • Mastercard For Visa Platform Connect, zero amount authorizations are supported for Internet, MOTO, and card-present transactions. Do not try to perform a zero amount authorization for a recurring payment, installment payment, or payer |
| Worldpay VAP | Yes | Yes | authorization transaction. Visa Mastercard American Express Discover |
| | | | • Discover |

Authorizing a payment for a zero amount shows whether a payment card account is valid and whether the card is lost or stolen. You cannot capture a zero amount authorization.

• Diners Club

• JCB

Reference Information

This section provides reference information.

Electronic Verification Response Codes

| Response Code | Description | |
|---------------|--|--|
| F | First name matches; last name does not match. | |
| L | Last name matches; first name does not match. | |
| М | First name and last name match. | |
| N | No, the data does not match. | |
| Р | The processor did not return verification information. | |
| R | The system is unavailable, so retry. | |
| S | The verification service is not available. | |

| Response Code | Description | |
|---------------|--|--|
| U | Verification information is not available. | |
| Y | Yes, the data matches. | |
| 1 | Electronic verification did not generate a response. | |
| 2 | The processor returned an unrecognized value | |