Level II and Level III Processing Using Secure Acceptance

Supplement to Secure Acceptance Hosted Checkout and Secure Acceptance Checkout API

October 2019



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Recent Revisions to This Document

Release	Changes			
October 2019	This revision contains only editorial changes and no technical updates.			
October 2018	CyberSource through VisaNet:			
	 Added Level III data. See Chapter 4, "CyberSource through VisaNet: Level II and Level III," on page 26. 			
	 Updated the description for the merchant_vat_registration_number and purchaser_vat_registration_number fields. See "Order-Level Fields," page 27. 			
September 2018	CyberSource through VisaNet: updated the list of supported acquirers. See "Supported Acquirers," page 26.			
July 2018	Changed the following product names:			
	Secure Acceptance Web/Mobile to Secure Acceptance Hosted Checkout.			
	 Secure Acceptance Silent Order POST to Secure Acceptance Checkout API. 			
June 2018	GPN: updated descriptions for the following fields, which are listed in Chapter 9, "GPN: Level II and Level III," on page 63:			
	 discount_amount 			
	■ item_#_commodity_code			
	■ item_#_discount_amount			
	summary_commodity_code			
	Litle: changed processor name to Worldpay VAP.			
February 2017	CyberSource through VisaNet: updated the section "Supported Acquirers," page 26.			

About This Guide

Audience and Purpose

This guide is written for application developers who want to integrate credit card processing with Level II or Level III data into Secure Acceptance Hosted Checkout or Secure Acceptance Checkout API.

Implementing Secure Acceptance Hosted Checkout or Secure Acceptance Checkout API requires minimal scripting skills. You must create a security script and modify your HTML form to invoke Secure Acceptance. You will also use the Business Center to review and manage orders.

Conventions

The following special statements are used in this document:



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



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

The following text conventions are used in this document:

Convention	Meaning
bold	 Field and service names in text; for example: Include the amount field.
screen text	 Text that you enter in an API environment; for example: Set the tax_indicator field to Y.

Related Documentation

- Secure Acceptance Checkout API Integration Guide (PDF | HTML)—describes how to create a Secure Acceptance profile for processing transactions.
- Secure Acceptance Hosted Checkout Integration Guide (PDF | HTML)—describes how to create a Secure Acceptance profile and integrate seamlessly with Secure Acceptance Hosted Checkout for processing transactions.
- Credit Card Services Using the Simple Order API (PDF | HTML)—describes how to integrate CyberSource payment processing services into your business using the Simple Order API.
- Credit Card Services Using the SCMP API (PDF | HTML)—describes how to integrate CyberSource payment processing services into your business using the SCMP API.
- Level II and Level III Processing Using the SCMP API (PDF | HTML)—describes how to integrate credit card processing with Level II or Level III data.
- Level II and Level III Processing Using the Simple Order API (PDF | HTML) describes how to integrate credit card processing with Level II or Level III data.

Refer to the Support Center for complete CyberSource technical documentation: http://www.cybersource.com/support center/support documentation

Customer Support

For support information about any CyberSource service, visit the Support Center: http://www.cybersource.com/support

Introduction to Level II and Level III Processing

This addendum to the Secure Acceptance Checkout API Integration Guide and the Secure Acceptance Hosted Checkout Integration Guide describes:

- Level II processing for American Express, Visa, and MasterCard
- Level III processing for Visa and MasterCard

After this introductory chapter, there is a chapter for each processor that supports Level II or Level III.



This CyberSource document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Prerequisites

Prerequisites for Level II Processing: to activate Level II processing for American Express, contact American Express and CyberSource Customer Support.

Prerequisites for Level III Processing: check with your processor to determine whether you need to add Level III processing to your contract or account setup.

When you are ready to go live with Level III processing, contact CyberSource Customer Support to have your account configured to process Level III data. If your account is not enabled, and you try to send live Level III transactions, you will receive an error for invalid data.

Supported Processors and Card Types

evel II Card ypes Supported merican Express asterCard merican Express isa asterCard merican Express isa asterCard merican Express isa	Level III Card Types Supported — Visa MasterCard Visa MasterCard Visa
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	Visa MasterCard
	lasterCard merican Express

Table 1 Supported Processors and Card Types

About Level II and Level III Data

Level II cards, which are also called *Type II cards*, provide customers with additional information on their credit card statements about their purchases. Level II cards enable customers to easily track the amount of sales tax they pay and to reconcile transactions with a unique customer code. There are two categories of Level II cards:

- Business/corporate cards are given by businesses to employees for business-related expenses such as travel and entertainment or for corporate supplies and services.
- Purchase/procurement cards are used by businesses for expenses such as supplies and services. These cards are often used as replacements for purchase orders.

Level III data can be provided for purchase cards, which are special credit cards that employees use to make purchases for their company. You provide additional detailed information—the Level III data—about the purchase card order during the settlement process. The Level III data is forwarded to the company that made the purchase, and it enables the company to manage its purchasing activities.



CyberSource recommends submitting level II data for only purchase/ procurement cards and level III data for only business/corporate cards. Submitting level II and level III data for all card types can result in errors from your processor.

CyberSource Level II and Level III Data Processing

CyberSource does not store the Level II and Level III data. Instead, it functions as a passthrough service for the data. If you request multiple partial captures for a particular order, you must supply the Level II and Level III data in each request. CyberSource enforces only the minimal level of field validation to avoid interfering with the business policies between you and any company that purchases your services.



CyberSource temporarily disables your account's Level III processing capability and contacts you if your Level III transactions produce batching errors when the information is sent to the processor. Your request is not rejected, but you receive a field in the reply indicating that the Level III information in the request has been ignored and not sent to the processor.

The reply field is **level_3_indicator**.

The possible values for the reply field are:

- Y: the Level III data was included in the request to the processor.
- N: the Level III data was not included in the request to the processor.

Requesting a Sale with Level II and Level III Data



If you omit required Level II fields from a request, the transaction does not result in an error. Instead, it is processed as a regular non-Level II transaction. However, your processor could charge you penalties or increase your fees. Contact your processor to ensure you understand your processor's specific requirements for Level II transactions.

Level II and Level III data is required only for a capture. The transaction type sale is a bundled authorization and capture.

To include Level II data in a sale request:

- Step 1 Depending on the transaction you are processing, set the transaction_type field to one of the following:
 - sale
 - sale,create_payment_token
 - sale,update_payment_token

Step 2 Include the following information in the sale request:

- Level II data: see the chapter in this document for the processor you are using. Also see "Using Decimals and Strings," page 13.
- Required API fields for a sale request. See the Secure Acceptance Checkout API Integration Guide or the Secure Acceptance Hosted Checkout Integration Guide.

Requesting a Credit with Level II and Level III Data

Requesting a credit with Level II and Level III data is not available with Secure Acceptance. To include Level II data in a credit request you must use the CyberSource API.

Include the following information in the credit request:

- Basic API fields required for every capture request. For more information see Credit Card Services Using the SCMP API or Credit Card Services Using the Simple Order API.
- Level II data: depending on which API you are using see Level II and Level III
 Processing Using the SCMP API or Level II and Level III Processing Using the Simple
 Order API for the processor you are using.

Using Decimals and Strings

CyberSource uses decimal points in all amount and tax rate fields; CyberSource does not use implied decimal points. For example, if the amount of the product being purchased is 29.95, set that field to 29.95.

For tax rates used with Level III transactions, you need to include a decimal point in the value. For example, if a tax rate is 1%, you should set that field to 0.01.

For many of the fields described in this document, Visa and MasterCard permit different lengths for alphanumeric (string) input. CyberSource accepts any length you provide. If the value you provide is longer than the card association permits, CyberSource truncates the value, keeping the left-most portion of the value. If the value you provide is shorter than the card association requires, CyberSource pads the field before sending it to the processor.

CHAPTER

American Express Direct: Level II



On American Express Direct, Level II data is supported only for merchants in the U.S. who are doing business in U.S. dollars.



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Order-Level Fields

Table 2 Order-Level Fields for American Express Direct

Secure Acceptance Field Name	American Express Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amex_data_taa1 amex_data_taa2 amex_data_taa3 amex_data_taa4	Charge Description 1 Charge Description 2 Charge Description 3 Charge Description 4	Four Transaction Advice Addendum fields. These fields are used to display descriptive information about a transaction on your customer's American Express card statement. If you are sending any TAA fields, start with amex_data_taa1 , then taa2 , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored. Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.	Level II American Express (O but recommended)	String (40)

Secure Acceptance Field Name	American Express Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
bill_to_forename	Requestor Name	Requestor's first name. Include this value when the card member is not the person who ordered or purchased the product or service.	Level II American Express (O)	String (See description)
		This field and bill_to_surname together should not exceed 37 characters.		
bill_to_surname	Requestor Name	Requestor's last name. Include this value when the card member is not the person who ordered or purchased the product or service.	Level II American Express (O)	String (See description)
		This field and bill_to_forename together should not exceed 37 characters.		
ship_from_ postal_code	Ship-to Postal Code	Postal code for the shipping address. The postal code must consist of 5 to 9 digits.	Level II American Express (See description)	String (10)
		The postal code is required. You can provide the postal code by including ship_from_postal_code in the request or by making sure the postal code is set for your CyberSource account.		
		If the shipping country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789		
		If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		
user_po	Card member Reference Number	Value used by your customer to identify the order. This value is typically a purchase order number, cost center, or project number.	Level II American Express (O)	String (17)

Table 2 Order-Level Fields for American Express Direct (Continued)

Item-Level Fields



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 3 Item-Level Fields for American Express Direct

Secure Acceptance Field Name	American Express Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_ number	No corresponding American Express Direct field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II American Express (O)	String (23)
item_#_quantity	Charge Item Quantity 1	Quantity of the product being purchased. The default value is 1.	Level II American Express (O but recommended)	Nonnegative integer (3)
item_#_tax_ amount	Total Tax Amount	Total tax to apply to the product. CyberSource adds all the item_#_tax_ amount values to calculate the Total Tax Amount that is sent to the processor.	Level II American Express (R)	Integer (12)
		The item_#_tax_amount value cannot be negative. This field is additive. For example, if you send one item with unit_ price of 10.00 and taxAmount of 0.80, and you send another item with unit_ price of 20.00 and tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price values must be in the same currency.		
item_#_unit_price	Charge Item Amount 1	Per-item price of the product. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount will be truncated at the request level to the correct number of decimal places.	Level II American Express (O but recommended)	Integer (12)

CHAPTER

Chase Paymentech Solutions: Level II and Level III



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Processor Specification Used

The specifications that CyberSource used to implement Level III processing for Chase Paymentech Solutions are:

- Paymentech's 120-Byte Technical Specification, Rev 2.0.0, December 8, 2003
- Paymentech's 96-Byte and 120-Byte Batch Technical Specification Addendum, Rev. 2.0.0, April 1, 2004

The records referenced are:

- Procurement Level 3—Visa: Order Level Record, Record #1, Record #2
- Procurement Level 3—MasterCard: Order Level Record, Record #1, Record #2

Order-Level Fields

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_	Alternate Tax	Total amount of alternate tax for the	Level III	String (10)
amount	Amount	order.	 MasterCard (O) 	
alternate_tax_id	Alternate Tax	Your tax ID number to use for the	Level III	String (15)
	ID	alternate tax amount. Required if you set Alternate Tax Amount to any value, including zero. You may send this field without sending Alternate Tax Amount.	 MasterCard (See description) 	
amex_data_taa1	TAA1	Four Transaction Advice Addendum	Level II	String (40)
amex_data_taa2	TAA2	fields. These fields are used to display descriptive information about a	 American 	
amex_data_taa3	TAA3	transaction on your customer's	Express (See description)	
amex_data_taa4	TAA4	American Express card statement. If you are sending any TAA fields, start with amex_data_taa1 , then taa2 , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.	,	
		Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.		
		The amex_data_taa1 field is required for Level II transactions for American Express cards for Chase Paymentech Solutions, but the other TAA fields are optional.		
amount	No	Grand total for the entire capture or	Level III	String (15)
	corresponding Chase	credit request.	■ Visa (R)	
	Paymentech Solutions field		 MasterCard (R) 	
discount_amount	Discount	Total discount applied to the order. For	Level III	String (13)
	Amount Applied to Order	example: a 20.00 discount off the order total.	 Visa (R for Level III interchange) 	

Table 4 Order-Level Fields for Chase Paymentech Solutions

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
duty_amount	Duty Amount	Total charges for any import or export	Level III	Visa: String
		duties included in the order.	 Visa (R for Level III interchange) 	(13) MasterCard
			 MasterCard (R for Level III interchange) 	: String (10)
freight_amount	Freight	Total freight or shipping and handling	Level III	Visa: String
	Amount	charges for the order. When you include this field in your request, you must also include the amount field.	 Visa (R for Level III interchange) 	(13) MasterCard
		include the amount field.	 MasterCard (R for Level III interchange) 	: String (10)
purchasing_level	el No corresponding Chase Paymentech Solutions field	Flag that indicates the sale request is for Level III processing. Set to 3.	Level III	String (1)
			 Visa (R for captures; not used for credits) 	
			 MasterCard (R for captures; not used for credits) 	
ship_from_postal_	Ship From ZIP/ Postal Code	Postal code for the address from which	Level III	0
code		the goods are shipped, which is used to determine nexus. The default is the	 Visa (O) 	
		cyberSource account. The postal code must consist of 5 to 9 digits.	 MasterCard (R for best rate. Do not use all zeros 	
		If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]	or nines.)	
		Example 12345-6789		
		If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		

Table 4 Order-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_	Destination	Country to ship the product to. Use the	Level III	String (2)
country	Country Code	two-character ISO Standard Country Codes.	 Visa (R for best rate) 	
			 MasterCard (O but recommended) 	
ship_to_address_	Destination	Postal code for the shipping address.	Level III	String (10)
postal_code	ZIP/Postal Code	This is the same as ship_from_postal_ code when your customer takes possession of the items at your location.	 Visa (R for best rate) 	
		The postal code must consist of 5 to 9 digits.	 MasterCard (R for best rate. Do not use all zeros or nines.) 	
		If the shipping country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789		
		If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		

Table 4 Order-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	Customer	Value used by your customer to identify the order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	Level II	String (25)
	Reference Number		 Visa (R for purchase/ procurement cards; otherwise O) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O) 	
			 American Express (R for purchase/ procurement cards; otherwise O) 	
			Level III	
			 Visa (R for purchase/ procurement cards; otherwise O) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O) 	
vat_tax_amount	VAT/Tax	Total amount of VAT or other tax	Level III	String (13)
	Amount	included in the order.	■ Visa (O)	
vat_tax_rate	VAT/Tax Rate	Rate of VAT or other tax for the order.	Level III	String (4)
		Example 0.040 (=4%)	■ Visa (O)	
		Valid range: 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated)		

Table 4 Order-Level Fields for Chase Paymentech Solutions (Continued)

Item-Level Fields

When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items you can have in a Level III Chase Paymentech Solutions transaction is 98. If the number of items exceeds 98, Chase Paymentech Solutions rejects the batch. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 5 Item-Level Fields for Chase Paymentech Solutions

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_	Item	Commodity code used to classify	Level III	String (12)
code	Commodity Code	the item.	 Visa (R for Level III interchange) 	
item_#_discount_	Visa: Discount	Discount applied to the item.	Level III	Visa: String
amount	Amount for Line Item		 Visa (R for Level III interchange) 	(13) MasterCard:
	MasterCard: Discount Amount		 MasterCard (R for Level III interchange) 	String (10)
item_#_discount_	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values:	Level III	String (1)
indicator			 MasterCard (R for Level III 	
		 Y: amount is discounted 	interchange)	
		 N: amount is not discounted 		
		If you do not provide a value but you set Discount Amount to a value greater than zero, then CyberSource sets this field to Y.		
item_#_gross_net_	Gross/Net	Flag that indicates whether the	Level III	String (1)
indicator	Indicator	tax amount is included in the Line Item Total. Possible values:	 MasterCard (R) 	
		 Y: item amount includes tax amount 		
		 N: item amount does not include tax amount 		

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No corresponding Chase Paymentech Solutions field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II Visa (O) MasterCard (O) American Express (O) Level III Visa (O) MasterCard (O)	String (23)
item_#_code	Product Code	Product code for the item. In the United States, this may be a UPC code, part number, or product number. If you do not provide this value, CyberSource sets it to default.	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange. Do not use all zeros or spaces.)	String (12)
item_#_name	Description	Text description of the item.	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange. Do not use all zeros or spaces.)	Visa: String (26) MasterCard: String (35)
item_#_quantity	Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource sets it to 1.	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange. Do not use all zeros or spaces.)	Visa: Integer (12) MasterCard: Integer (5)

Table 5 Item-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_amount	Tax Amount	Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with unit_price of 10.00 and tax_amount of 0.80, and you send another item with unit_price of 20.00 and tax_ amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency.	Level II Visa (R) MasterCard (R) American Express (R) Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange)	Visa: String (13) MasterCard: String (10)
item_#_tax_rate	Tax Rate	Tax rate applied to the item. Visa: Valid range is 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated). MasterCard: Valid range is 0.00001 to 0.99999 (0.001% to 99.999%).	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange)	Visa: String (4) MasterCard: String (7)
item_#_tax_type_ applied item_#_total_amount	Tax Type Applied Line Item Total	Type of tax being applied to the item. Total amount for the item. Normally calculated as the unit price x quantity.	Level III MasterCard (O) Level III Visa (R) MasterCard (R. Do not use all zeros or spaces.)	String (4) Visa: String (13) MasterCard: String (10)
item_#_unit_of_ measure	Unit of Measure	Unit of measure, or unit of measure code, for the item. See Appendix A, "Codes for Units of Measurement," on page 108.	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange. Must not be all zeros or spaces)	Visa: String (12) MasterCard: String (3)

Table 5 Item-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_price	Unit Cost	Unit cost of the item purchased.	Level II	String (13)
		Important For a Level III	■ Visa (R)	
		transaction, this value cannot be	 MasterCard (R) 	
		zero (0).	 MasterCard (R) American Express (R) 	
			Level III	
			 Visa (R) 	
			 MasterCard (R) 	

CHAPTER

CyberSource through VisaNet: Level II and Level III



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Supported Acquirers

The following CyberSource through VisaNet acquirers are supported for Level II and Level III processing:

- Absa Bank
- Asia Commercial Bank (ACB)
- Auckland Savings Bank (ASB)
- Australia and New Zealand Banking Group Limited (ANZ)
- Axis Bank Ltd. of India
- Bangkok Bank Ltd.
- Bank Muscat of Oman
- Bank of Ayudhya (BAY)
- Banque Pour Le Commerce Exterieur Lao (BCEL)
- Barclays Bank Botswana
- Barclays Bank Mauritius Limited
- Barclays Bank of Ghana Limited, Barclays Bank of Tanzania Limited, and Barclays Bank of Uganda Limited
- Barclays Bank of Kenya
- Barclays Bank of Zambia
- Barclays Bank Seychelles
- Citibank Malaysia
- Citibank Singapore Ltd.

- Commercial Bank of Qatar
- 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
- I&M Bank
- National Bank of Abu Dhabi (NBAD)
- Overseas Chinese Banking Corp (OCBC)
- Promerica in Honduras and Nicaragua
- United Overseas Bank (UOB) in Singapore and Vietnam
- Vantiv
- Vietcombank
- VietinBank
- Wing Lung Bank

Order-Level Fields

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amexdata_taa1	amexDataTAA1	Four transaction advice addendum	Level II	String (40)
amexdata_taa2	amexDataTAA2 amexDataTAA3	fields. These fields are used to display descriptive information about CPS	 American Express (O) 	
amexdata_taa3 amexdata_taa4	amexDataTAA4	item(s) on your customer's American Express card statement. If you are sending any TAA fields, start with amexdata_taa1 , then taa2 , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.		
		Note These fields may be required depending on the processing method you use and if the customer provides charge description data.		
		Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.		

Table 6 Order-Level Fields for CyberSource through VisaNet

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
discount_amount	discountAmount	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III Visa (O) Mastercard (O)	String (12)
duty_amount	dutyAmount	Total charges for any import or export duties included in the order.	Level III Visa (O) Mastercard (O)	String (12)
freight_amount	freightAmount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include the amount field.	Level III Visa (O) Mastercard (O)	String (12)
merchant_vat_ registration_number	merchantVAT Registration Number	Your government-assigned tax identification number. Note For Payouts, the maximum length of this field is different. See Payouts for CyberSource through VisaNet Using the Simple Order API or Payouts for CyberSource through VisaNet Using the SCMP API.	Level III Visa (O) Mastercard (O)	String (20)

 Table 6
 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
national_tax_indicator	cator nationalTax Included	Flag that indicates whether a national	Level II	String (1)
		tax is included in the order total. Possible values:	 Visa (Required if the sum of all national_tax 	
		 0: national tax not included 		
		 1: national tax included 	values = 0; otherwise,	
		This value must be 1 if the sum of all national_tax values > 0.	optional.)	
		If you do not include any national_tax values in your request, CyberSource does not include national_tax_ indicator in the data it sends to the processor.	 Mastercard (Required if the sum of all national_tax values = 0; otherwise, optional.) 	
			 American Express (Required if the sum of all national_tax values = 0; otherwise, optional.) 	
			Level III	
			 Visa (Required if the sum of all national_tax values = 0; otherwise, optional.) 	
			 Mastercard (Required if the sum of all national_tax values = 0; otherwise, optional.) 	
purchaser_order_date	ate purchaserOrder Date	Provide the order was processed. Format: YYMMDD	Level III	String (6)
			 Visa (O) 	
			 Mastercard (O) 	

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_vat_ registration_number	purchaserVAT Registration Number	Customer's government-assigned tax identification number. Note For Payouts, the maximum length of this field is different. See Payouts for CyberSource through VisaNet Using the Simple Order API or Payouts for CyberSource through VisaNet Using the SCMP API.	Level III Visa (O) Mastercard (O)	String (20)
purchasing_level	No corresponding CyberSource through VisaNet field	Flag that indicates the capture or credit request includes Level III data. Set the value for this field to 3. See "Requesting a Sale with Level II and Level III Data," page 12.	Level III Visa (R) Mastercard (R)	String (1)
	shipFrom Address	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.	Level III Visa (O) Mastercard (O)	String (10)
		If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789		
		If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		

Table 6	Order-Level Fields for CyberSource through VisaNet (Continued)
	order Eever rields for oyberoodree through visuater (continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_ postal_code	shipTo Address	Postal code for the shipping address. The postal code must consist of 5 to 9 digits. When the shipping country is the U.S., the 9-digit postal code must follow this	Level II Visa (O) Mastercard (O) American Express	String (20)
		format: [5 digits][dash][4 digits]	(O)	
		Example 12345-6789	Level III	
		When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric]	Visa (O)Mastercard (O)	
		Example A1B 2C3		
		This value is the same as the value for ship_from_zip when your customer takes possession of the items at your location.		
ship_to_address_state	state	State or province of the shipping address. Use the <i>State, Province, and</i>	Level III	String (3)
			 Visa (O) 	
		Territory Codes for the United States and Canada.	 Mastercard (O) 	
summary_commodity_	summary	International description code of the	Level III	String (4)
code	Commodity Code	overall order's goods or services. Contact your acquirer for a list of codes.	Visa (O)Mastercard (O)	

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length	
tax_indicator	localTax	Flag that indicates whether an order is	Level II	String (1)	
	Included	taxable. Possible values:Y: the order is taxable.	 Visa (Required if the sum of all tax_ 		
		 N: the order is not taxable. 	amount values		
		This value must be Y if the sum of all tax_amount values > 0.	= 0; otherwise, optional.)		
		If you do not include any tax_amount values in your request, CyberSource does not include tax_indicator in the data it sends to the processor.	 Mastercard (Required if the sum of all tax_ amount values = 0; otherwise, optional.) 		
				 American Express (Required if the sum of all tax_ amount values = 0; otherwise, optional.) 	
			Level III		
			 Visa (Required if the sum of all tax_ amount values = 0; otherwise, optional.) 		
			 Mastercard (Required if the sum of all tax_ amount values = 0; otherwise, optional.) 		

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)	Table 6	Order-Level Fields for CyberSource through VisaNet (Continued)
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Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	customer Code	Value that identifies your customer.	Level II	String with letters and numbers only (17)
			 Visa (R) 	
			 Mastercard (R) 	
			 American Express (R) 	
			Level III	
			 Visa (R) 	
			 Mastercard (R) 	
vat_invoice_ref_number	vatInvoice Reference Number	Invoice number associated with the transaction.	Level III	String (15)
			 Visa (O) 	
			 Mastercard (O) 	
vat_tax_rate	vatTaxRate	Tax rate or other tax for the order. A maximum of 2 decimal places is allowed. Example 60% is 60.00	Level III	String (4)
			 Visa (O) 	
			 Mastercard (O) 	

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Item-Level Fields



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 7 Item-Level Fields for CyberSource through VisaNet

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_ code	commodityCode	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III Visa (O) Mastercard (O)	String (12)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_discount_ amount	discountAmount	Discount applied to the item.	Level III	String (12)
			 Visa (O) 	
			 Mastercard (O) 	
item_#_discount_rate	discountRate	Rate the item is discounted. A maximum of 2 decimal places is allowed. Example 5.25 (=5.25%)	Level III	String (5)
			 Visa (O) 	
			 Mastercard (O) 	
item_#_invoice_number	invoiceNumber	Field to support an invoice	Level II	String (23)
		number for a transaction.You must specify the number of line	Visa (O)	
		items that will include an invoice	 MasterCard (O) 	
		number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	 American Express (O) 	
			Level III	
			 Visa (O) 	
			 MasterCard (O) 	
item_#_national_tax	nationalTax Amount	Amount of national tax.	Level II	String (12)
		This value cannot exceed 9999999999999 (twelve 9s). This value cannot be negative.	 Visa (O) 	
			 Mastercard (O) 	
			 American Express (O) 	
			Level III	
			 Visa (O) 	
			 Mastercard (O) 	
item_#_product_code	productCode	Product code for the item.	Level III	String (15)
			 Visa (O) 	
			 Mastercard (O) 	
item_#_product_name	productName	Product name for the item.	Level III	String (35)
			 Visa (O) 	
			 Mastercard (O) 	

Table 7 Item-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_quantity	quantity	Number of units of the item purchased. A maximum of 4 decimal places is allowed. For example 1.1234. If you do not provide this value, CyberSource sets it to 1.0.	Level II American Express (O)	String (12)
			Level III	
			 Visa (O) 	
			 Mastercard (O) 	
item_#_tax_amount	localTax	Total tax to apply to the product.	Level II	String (12)
	Amount	This value cannot exceed 999999999999 (twelve 9s). This value cannot be negative.	 Visa (O) 	
			 Mastercard (O) 	
		This value is the amount of state or provincial tax included in the transaction amount.	 American Express (O) 	
		If you do not include this field in your request, CyberSource sets this field to the default value of 0.	Level III ● Visa (O) ● Mastercard (O)	
item_#_tax_rate	taxRate	Tax rate applied to the item. A maximum of 2 decimal places is allowed. Valid range is 0.01 to 99.99. The value can also be zero.	Level III Visa (O) Mastercard (O)	String (4)
		For example:		
		 60% is offer0:tax_ rate=60.00 		
		25.5% is offer0:tax_ rate=25.5		
		 33.33% is offer0:tax_ rate=33.33 		
item_#_total_amount	totalAmount	Total purchase amount for the item. Normally calculated as the unit price x quantity.	Level III	String (12)
			 Visa (O) 	
			 Mastercard (O) 	
item_#_unit_of_	unitOfMeasure	Unit of measure for the item. See "Codes for Units of Measurement," page 108.	Level III	String (12)
measure			 Visa (O) 	
			 Mastercard (O) 	

 Table 7
 Item-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_price	unitPrice	Per-item price of the product. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. A maximum of 4 decimal places is allowed. CyberSource truncates the amount to the correct number of decimal places.	Level II American Express (O) Level III Visa (O) Mastercard (O)	String (12)
		Important For a Level III transaction, this value cannot be zero (0).		

 Table 7
 Item-Level Fields for CyberSource through VisaNet (Continued)

FDC Compass: Level II and Level III



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Processor Specification Used

The specification that CyberSource used to implement Level III processing for FDC Compass is the Compass 120-Byte Processing Technical Specification, Version 1.9, July 28, 2009.

Order-Level Fields

Table 8	Order-Level Fields for FDC Compass
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Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_	Alternate Tax	Total amount of alternate tax for the	Level III	String (10)
amount A	Amount	order.	 MasterCard (O) 	
alternate_tax_id	Alternate Tax	Your tax ID number to use for the	Level III	String (15)
	ID	alternate tax amount. Required if you set Alternate Tax Amount to any value, including zero. You may send this field without sending Alternate Tax Amount.	 MasterCard (See description) 	

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amex_data_taa1	TAA1	Four Transaction Advice Addendum fields. These fields are used to display descriptive information about a	Level II	String (40)
amex_data_taa2	TAA2		 American 	
amex_data_taa3	TAA3	transaction on your customer's	Express (See description)	
amex_data_taa4	ΤΑΑ4	American Express card statement. If you are sending any TAA fields, start with amex_data_taa1 , then taa2 , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.	decomption	
		Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.		
		The amex_data_taa1 field is required for Level II transactions for American Express cards for FDC Compass, but the other TAA fields are optional.		
amount	No corresponding FDC Compass field	Grand total for the entire capture or credit request.	Level III	String (15)
			 Visa (R) 	
			 MasterCard (R) 	
discount_amount	Discount Amount Applied to Order	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III	String (13)
			■ Visa (O)	
duty_amount	Duty Amount	Total charges for any import or export duties included in the order.	Level III	Visa: String (13)
			 Visa (O) 	
			 MasterCard (O) 	MasterCard : String (10)
freight_amount	Freight	Total freight or shipping and handling	Level III	Visa: String
	Amount	charges for the order. When you include this field in your request, you	 Visa (O) 	(13)
		must also include the amount field.	 MasterCard (O) 	MasterCard : String (10)
purchasing_level	No corresponding FDC Compass field		Level III	String (1)
			 Visa (R for captures; not used for credits) 	
			 MasterCard (R for captures; not used for credits) 	

Table 8 Order-Level Fields for FDC Compass
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From ZIP/ I Code	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits. If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example A1B 2C4	Level III Visa (O) MasterCard (R for best rate. Do not use all zeros or nines.)	String (10)
	determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits. If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]	 MasterCard (R for best rate. Do not use all zeros 	
	postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits. If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]	for best rate. Do not use all zeros	
	digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]	or nines.)	
	If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
	digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
	Example A1B 2C4		
nation try Code	Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i> .	Level III Visa (R for best rate) MasterCard (O but recommended)	String (2)
Destination ZIP/Postal Code	Postal code for the shipping address. This is the same as ship_from_ address_postal_code when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.	Level III	String (10)
		 Visa (R for best rate) 	
		 MasterCard (R for best rate. Do 	
	If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]	not use all zeros or nines.)	
	Example 12345-6789		
	If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
tı n	ry Code ation	ry Code two-character <i>ISO Standard Country</i> <i>Codes</i> . Postal code for the shipping address. This is the same as ship_from_ address_postal_code when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits. If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha]	ry Codetwo-character ISO Standard Country Codes.Visa (R for best rate)NasterCard (O but recommended)MasterCard (O but recommended)nation DostalPostal code for the shipping address. This is the same as ship_from_ address_postal_code when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits. If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]Level IIIExample 12345-6789MasterCard (R for best rate. Do not use all zeros or nines.)If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]

Table 8 Order-Level Fields for FDC Compass ((Continued)
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Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po Customer Reference Number	Customer	Value used by your customer to identify	Level II	String (25)
		51 5	 Visa (R for purchase/ procurement cards; otherwise O) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O) 	
		 American Express (R for purchase/ procurement cards; otherwise O) 		
			Level III	
			 Visa (R for purchase/ procurement cards; otherwise O) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O) 	
vat_tax_amount	VAT/Tax	Total amount of VAT or other tax	Level III	String (13)
	Amount	included in the order.	 Visa (O) 	
vat_tax_rate	VAT/Tax Rate	Rate of VAT or other tax for the order.	Level III	String (4)
		Example 0.040 (=4%)	■ Visa (O)	
		Valid range: 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated)		

Table 8 Order-Level Fields for FDC Compass (Continued)



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items you can have in a Level III FDC Compass transaction is 98. If the number of items exceeds 98, FDC Compass rejects the batch. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 9 Item-Level Fields for FDC Compass

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_ code	Item Commodity Code	Commodity code used to classify the item.	Level III • Visa (R)	String (12)
item_#_discount_ amount	Visa: Discount Amount for Line Item MasterCard: Discount Amount	Discount applied to the item.	Level III Visa (O) MasterCard (O)	Visa: String (13) MasterCard: String (10)
item_#_discount_ indicator	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values:	Level III MasterCard (O)	String (1)
		 Y: amount is discounted N: amount is not discounted If you do not provide a value but you set Discount Amount to a value greater than zero, then CyberSource sets this field to Y. 		
item_#_gross_net_ indicator	Gross/Net Indicator	 Flag that indicates whether the tax amount is included in the Line Item Total. Possible values: Y: item amount includes tax amount N: item amount does not include tax amount 	Level III MasterCard (R)	String (1)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No corresponding FDC Compass field	Field to support an invoice number for a transaction.You must specify the number of line	Level II	String (23)
			■ Visa (O)	
		items that will include an invoice	 MasterCard (O) 	
		number. By default, the first line item will include an invoice number field. The invoice number field can be included for	 American Express (O) 	
		up to 10 line items.	Level III	
			 Visa (O) 	
			 MasterCard (O) 	
item_#_code	Product Code	Product code for the item. In the	Level III	String (12)
		United States, this may be a UPC code, part number, or product number. If you do not provide this value, CyberSource sets it to default.	 Visa (R for Level III interchange) 	
			 MasterCard (R for Level III interchange. Do not use all zeros or spaces.) 	
item_#_name	Description Te	Text description of the item.	Level III	Visa: String (26) MasterCard: String (35)
			 Visa (R for Level III interchange) 	
			 MasterCard (R for Level III interchange. Do not use all zeros or spaces.) 	
item_#_quantity	Quantity	Number of units of the item	Level III	Visa: Integer (12) MasterCard: Integer (5)
		purchased. Must be a whole number. If you do not provide this value, CyberSource sets it to 1.	 Visa (R for Level III interchange) 	
			 MasterCard (R for Level III interchange. Do not use all zeros or spaces.) 	

Table 9	Item-Level Fields for FDC Compass (Continued)
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Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_amount	Tax Amount	Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with unit_price of 10.00 and tax_amount of 0.80, and you send another item with unit_price of 20.00 and tax_ amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency.	Level II Visa (R) MasterCard (R) American Express (R) Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange)	Visa: String (13) MasterCard: String (10)
item_#_tax_rate	Tax Rate	Tax rate applied to the item. Visa: Valid range is 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated). MasterCard: Valid range is 0.00001 to 0.99999 (0.001% to 99.999%).	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange)	Visa: String (4) MasterCard: String (7)
item_#_tax_type_ applied item_#_total_amount	Tax Type Applied Line Item Total	Type of tax being applied to the item. Total amount for the item. Normally calculated as the unit price x quantity.	Level III MasterCard (O) Level III Visa (R) MasterCard (R. Do not use all zeros or spaces.)	String (4) Visa: String (13) MasterCard: String (10)
item_#_unit_of_ measure	Unit of Measure	Unit of measure, or unit of measure code, for the item. See Appendix A, "Codes for Units of Measurement," on page 108.	Level III Visa (R for Level III interchange) MasterCard (R for Level III interchange. Must not be all zeros or spaces)	Visa: String (12) MasterCard: String (3)

Table 9 Item-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_price	Unit Cost	Unit cost of the item purchased.	Level II	String (13)
	Important For a Level III transaction, this value cannot be zero (0).	Important For a Level III	 Visa (R) 	
		 MasterCard (R) 		
		2010 (0).	 American Express (R) 	
			Level III	
			 Visa (R) 	
			 MasterCard (R) 	

Table 9	Item-Level Fields	for FDC Compass	(Continued)
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CHAPTER

FDC Nashville Global: Level II and Level III



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.



Starting May 1, 2012: Due to the limited functionality of the **supplier_order_ reference** field, CyberSource recommends that you use the item-level field **item_#_name** instead. Include only one of these fields in a request; including both fields could result in an error.

Processor Specification

The specification that CyberSource used to implement Level III processing for FDC Nashville Global is the *First Data PTS Specification, v2010-2,* October 30, 2010.

Order-Level Fields

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_	Other Tax	Amount of all taxes, excluding the local	Level II	String (11)
amount Amount	tax (item_#_tax_amount) and national tax (item_#_national_tax) included in the total tax.	 Visa (R for non- U.S. transactions; otherwise, not used) 		
		 MasterCard (R for non-U.S. transactions; otherwise, not used) 		
		 American Express (R for non-U.S. transactions; otherwise, not used) 		
			Level III	
			 Visa (O for non- U.S. transactions; otherwise, not used) 	
			 MasterCard (O for non-U.S. transactions; otherwise, not used) 	

Table 10 Order-Level Fields for FDC Nashville Global

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_	Other Tax	Flag that indicates whether the alternate	Level II	String (1)
indicator	Indicator	 tax amount (alternate_tax_amount) is included in the request. Possible values: 0: alternate tax amount is not included in the request. 	 MasterCard (R for non-U.S. MasterCard transactions; 	
		 1: alternate tax amount is included in the request. 	otherwise, not used)	
			Level III	
			 MasterCard (O for non-U.S. MasterCard transactions; otherwise, not used) 	
amount	No	Grand total for the entire capture or credit request.	Level III	String (15)
	corresponding FDC Nashville Global field		 Visa (R) 	
			 MasterCard (R) 	
discount_amount	Discount Amount	Total discount applied to the order. This value cannot be negative. For example: a 20.00 discount off the order total.	Level II	String (11)
			 Visa (R) 	
			 MasterCard (O) 	
			Level III	
			 Visa (O) 	
duty_amount	Duty Amount	Total charges for any import or export	Level II	String (11)
		duties included in the order. This value cannot be negative.	 Visa (R) 	
		carnet be negative.	 MasterCard (O) 	
			Level III	
			 Visa (O) 	
freight_amount	Freight	Total freight or shipping and handling	Level III	String (13)
	Amount	charges for the order. When you include this field in your request, you must also	 Visa (O) 	
		include the amount field.	 MasterCard (O) 	

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_vat_ registration_number	Customer VAT Registration Number	Identification number assigned to the purchasing company by the tax authorities.	Level II Visa (R for non- U.S. Visa transactions; otherwise, not used)	String (13)
purchasing_level	No corresponding FDC Nashville Global field	Flag that indicates the capture or credit request is for Level III processing. Set to 3.	 Level III Visa (R for captures; not used for credits) MasterCard (R for captures; not used for credits) 	String (1)
ship_from_postal_ code	Ship From Zip	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits. If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example A1B 2C4	Level II • Visa (O) • MasterCard (O) Level III • Visa (R) • MasterCard (R)	String (10)

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_	Destination	Country to ship the product to. Use the	Level II	String (2)
country	Country	two-character <i>ISO Standard Country</i> <i>Codes</i> . Note If you include the ship_to_ address_country field in a request and	 MasterCard (R) 	
			Level III	
		if the ship-to country is the U.S. or Canada, the request must also include the ship_to_address_state field.	 Visa (R if purchase Totals_freight Amount is included; otherwise, recommended for best rate) 	
			 MasterCard (O but recommended) 	
ship_to_address_	Destination Zip	Postal code for the shipping address. This is the same as ship_to_address_ postal_code when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.	Level II	String (10)
postal_code			 Visa (R) 	
			 MasterCard (R) 	
			 American Express (R) 	
		If the shipping country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]	Level III Visa (R) MasterCard (R)	
		Example 12345-6789		
		If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		
		If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.		

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_		State or province of the address to ship	Level II	String (2)
state		the product to. Use the <i>State, Province,</i> and <i>Territory Codes for the United</i> <i>States and Canada.</i>	 MasterCard (R) 	
		This field must be included in a request	Level III	
		if the ship_to_address_country field is included and the ship-to country is the	 Visa (See description) 	
	U.S. or Canada.	 MasterCard (See description) 		
supplier_order_	ltem	Text description of the item.	Level III	String (25)
reference	Description Part A	Important Starting May 1, 2012: Due	■ Visa (R)	
	to the limited functionality of the supplier_order_reference field, CyberSource recommends that you use the item-level field item_#_name instead. Include only one of these fields in a request; including both fields could result in an error.	 MasterCard (R for reduced interchange) 		
user_po	Customer Code	Value used by your customer to identify the order. This value is typically a purchase order number. You must provide a value in this field or in the reference_number field. CyberSource recommends that you do not populate this field with all zeros or nines.	Level II	String (25)
			 Visa (See description) 	
			 MasterCard (See description) 	
			 American Express (See description) 	
			Level III	
			 Visa (See description) 	
			 MasterCard (See description) 	
vat_invoice_	VAT Invoice	VAT invoice number associated with the	Level II	String (15)
reference_number	Reference Number	transaction.	 Visa (R for non- U.S. Visa transactions; otherwise, not used) 	

Table 10 Order-Level Fields for FDC Nashville Global (C	Continued)
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Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
vat_tax_amount	VAT/Tax	Total amount of VAT or other tax on	Level II	String (11)
Amount	Amount	freight or shipping only.	 Visa (O for non- U.S. Visa transactions; otherwise, not used) 	
			 MasterCard (O for non-U.S. Visa transactions; otherwise, not used) 	
			 American Express (O for non-U.S. Visa transactions; otherwise, not used) 	
vat_tax_rate	VAT/Tax Rate	Vat tax rate for freight or shipping.	Level II	String (5)
			 Visa (O for non- U.S.transactions; otherwise, not used) 	
			 MasterCard (O for non-U.S. transactions; otherwise, not used) 	
			 American Express (O for non-U.S. transactions; otherwise, not used) 	

Table 10 Order-Level Fields for FDC Nashville Global (Continued)



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 11 Item-Level Fields for FDC Nashville Global

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_	Item Other Tax	Visa: VAT or other tax amount	Level III	String (13)
amount	Amount	MasterCard: Tax amount collected for	■ Visa (O)	
		a special type of tax	 MasterCard (O) 	
		Important For MasterCard, do not set this field to 0 (zero).		
item_#_alternate_tax_	Item Tax Type	MasterCard: Flag that defines tax	Level III	String (4)
applied	Applied	categories for domestic processing in certain locations.	■ Visa (O)	
		Visa: VAT or other tax type.	 MasterCard (O) 	
item_#_alternate_tax_id	Tax Amount 1	Your tax ID number to use for the	Level III	String (15)
	Tax ID	alternate tax amount.	 MasterCard (R if item_#_ alternate_tax_ amount is included; otherwise O) 	
item_#_alternate_tax_	Item Tax Rate	MasterCard: Tax rate for a type of tax	Level III	String (5)
rate	Applied	collected.	■ Visa (O)	
		Visa: VAT or other tax rate.	 MasterCard (O) 	

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_	Тах Туре	Flag that indicates the type of tax	Level III	String (2)
type	Identifier	collected for item_#_alternate_tax_ amount. Possible values: ■ 00: unknown	 Visa (O) 	
			 MasterCard (O) 	
		 01: federal or national sales tax 		
		 02: states sales tax 		
		 03: city sales tax 		
		 04: local sales tax 		
		 05: municipal sales tax 		
		■ 06: other tax		
		 10: value-added tax (VAT) 		
		■ 11: goods and services tax (GST)		
		 12: provincial sales tax 		
		■ 20 :room tax		
		 21: occupancy tax 		
		■ 22: energy tax		
item_#_code	Item Product Code	Product code for the item. In the	Level III	String (12)
		United States, this may be a UPC code, part number, or product number.	■ Visa (R)	
			 MasterCard (R for reduced interchange) 	
item_#_commodity_	Item	International description code used to	Level III	String (12)
code	Commodity Code	classify the item. Contact your acquirer or FDC Nashville Global for a list of	 Visa (R) 	
	0000	codes.	 MasterCard (O) 	
item_#_discount_	Item Discount	Discount applied to the item.	Level III	String (13)
amount	Amount	Important For MasterCard, do not	 Visa (O) 	
		set this field to 0 (zero).	 MasterCard (O) 	

	Table 11	Item-Level Fields for	r FDC Nashville Global	(Continued)
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Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No	You must specify the number of line	Level II	String (23)
	corresponding FDC Nashville Global field	items that will include an invoice number. By default, the first line item will include an invoice number field.	 Visa (See description) 	
	Giobal lielu	The invoice number field can be included for up to 10 line items.	 MasterCard (See description) 	
			 American Express (See description) 	
			Level III	
			 Visa (See description) 	
			 MasterCard (See description) 	
item_#_local_tax	Item Local Tax	Sales tax applied to the item.	Level III	String (13)
	Amount	Important For MasterCard, do not set this field to 0 (zero).	 Visa (O) 	
			 MasterCard (O) 	
item_#_name	Description	Text description of the item.	Level III	Visa: String
	Decemption		 Visa (R for Level III interchange) 	(26) MasterCard:
			 MasterCard (R for Level III interchange. Do not use all zeros or spaces.) 	String (35)
item_#_national_tax	National Tax	Amount of national tax or value added	Level II	String (11)
	Amount	tax for countries in which more than one tax is applied. Provide this value if the national_tax value differs from the tax_amount value. If you do not provide this value, CyberSource assumes that national_tax is equal to tax_amount .	 Visa (R for non- U.S. Visa transactions; otherwise, not used) 	
		Important For MasterCard, do not set this field to 0 (zero).		
item_#_quantity	Item Quantity	Number of units of the item purchased.	Level III	Integer (12)
		Must be a whole number. If you do not provide this value, CyberSource uses	 Visa (R) 	
		1.	 MasterCard (RS for reduced interchange) 	

Table 11 Item-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_sku	Item Customer	Identification code for the product. This	Level III	String (30)
	Code	field is required when item_#_code is not default or one of the values related to shipping and/or handling.	 Visa (See description) 	
			 MasterCard (See description) 	
item_#_tax_amount	Local Tax Amount	Total tax to apply to the product. This value cannot be negative. The tax amount and the unit price must be in the same currency.	Level II Visa (R) MasterCard (R)	Visa & MasterCard: String (11) American
		The tax amount field is additive. The following example uses a two-exponent currency such as USD:	 American Express (R) 	Express: String (9)
		<pre>1 You include the following items in your request: item_0_unit_price=10.00 item_0_quantity=1 item_0_tax_amount=0.80 item_1_unit_price=20.00 item_1_quantity=1 item_1_tax_amount=1.60</pre>		
		2 The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.		
	Note This value is the sales tax. For Visa transactions, this value must be between 0.1% and 22% of the total sale.			
	Note For Visa and American Express, if this value is 0 (zero), the order is tax exempt.			
		Important For MasterCard, do not set this field to 0 (zero).		

Table 11 Item-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_of_ measure	Item Bulk/Unit of Measure	Unit of measure, or unit of measure code, for the item. See Appendix A,	Level III	String (12)
meddure		"Codes for Units of Measurement," on	■ Visa (R)	
		page 108.	 MasterCard (R for reduced interchange) 	
item_#_unit_price	Item Unit Cost	Unit cost of the item purchased.	Level II	String (13)
		Important For a Level III transaction,	 Visa (R) 	
		this value cannot be zero (0).	 MasterCard (R) 	
		Important For MasterCard, do not set this field to 0 (zero).	 American Express (R) 	
			Level III	
			 Visa (R) 	
			 MasterCard (R) 	

Table 11	Item-Level Fields for FDC Nashville G	lobal (Continued)
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FDMS Nashville: Level II



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Order-Level Fields

Table 12 Order-Level Fields for FDMS Nashville

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_ postal_code	Postal code for the shipping address. The postal code must consist of 5 to 9 digits.	Level II ■ Visa	String (10)
	If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]	 MasterCard 	
	Example 12345-6789		
	If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha][numeric]		
	Example A1B 2C4		
	If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.		

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_indicator	Flag that indicates whether an order is taxable. Possible values:	Level II ■ Visa	String (5)
	Y: the order is taxable.N: the order is not taxable.	 MasterCard 	
user_po	Value used by your customer to identify the order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	Level II Visa (R for purchase/ procurement cards; otherwise O)	String (25)
		 MasterCard (R for purchase/ procurement cards; otherwise O) 	

 Table 12
 Order-Level Fields for FDMS Nashville (Continued)

When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 13 Item-Level Fields for FDMS Nashville

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II Visa (O) MasterCard (O)	String (23)
item_#_unit_price	Unit cost of the item purchased.	Level II Visa (R) MasterCard (R)	String (15)

FDMS South: Level II

CHAPTER



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Order-Level Fields

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_code	Customer ID reference number that identifies the	Level II	String (17)
	customer for a Level II transaction.	 Visa (R for purchase/ procurement cards; otherwise O) 	
purchaser_vat_	Identification number assigned to the purchasing company by the tax authorities.	Level II	String (13)
registration_number		■ Visa	
summary_commodity_	Categorizes purchases for VAT reporting.	Level II	String (4)
code		■ Visa	
tax_indicator	Flag that indicates whether an order is taxable.	Level II	String (5)
	Possible values:	■ Visa	
	• Y: the order is taxable.	 MasterCard 	
	 N: the order is not taxable. 		

Table 14 Order-Level Fields for FDMS South

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	Value used by your customer to identify the	Level II	String (25)
	order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	 Visa (R for purchase/ procurement cards; otherwise O) 	
		 MasterCard (R for purchase/ procurement cards; otherwise O) 	
duty_amount	Total charges for any import or export duties	Level II	String (15)
	included in the order. This value cannot be negative.	 MasterCard 	
ship_from_postal_	Postal code for the address from which the	Level II	String (10)
code	goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.	 MasterCard 	
	If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]		
	Example 12345-6789		
	If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
	Example A1B 2C4		
ship_to_address_	Country to ship the product to. Use the two-	Level II	String (2)
country	character ISO Standard Country Codes.	 MasterCard 	

 Table 14
 Order-Level Fields for FDMS South (Continued)

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_ postal_code	Postal code for the shipping address. The postal code must consist of 5 to 9 digits.	Level II MasterCard (R for	String (10)
	If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] otherwise O)		
	Example 12345-6789		
	If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
	Example A1B 2C4		
	If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.		

Table 14 Order-Level Fields for FDMS South (Continued)



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 15 Item-Level Fields for FDMS South

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II Visa (O) MasterCard (O)	String (23)
item_#_national_tax	Amount of national tax or value added tax for countries in which more than one tax is applied. Provide this value if item_#_ national_tax differs from item_#_tax_ amount . If you do not provide this value, CyberSource assumes that item_#_ national_tax is equal to item_#_tax_ amount .	Level II Visa MasterCard	String (15)
item_#_tax_amount	Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_price of 10.00 and item_#_ tax_amount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_ #_tax_amount and the item_#_unit_price must be in the same currency.	Level II Visa (R) MasterCard (R)	String (15)
item_#_unit_price	Unit cost of the item purchased.	Level II Visa (R) MasterCard (R)	String (15)
item_#_vat_rate	Rate used to calculate VAT.	Level II Visa MasterCard	String (5)

GPN: Level II and Level III

CHAPTER



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Processor Specification

The specification that CyberSource used to implement Level II and Level III processing for GPN is the *Global Payments Big Batch Message Specification, Version 2006.001*, January 2006.

Order-Level Fields

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_	Other Tax	Total amount of alternate tax for the order.	Level III	String (12)
amount		Maximum amount is 99,999.99.	 Visa (O) 	
discount_amount	Discount 1	Amountexample: a 20.00 discount off the order total. Maximum amount is 99,999.99.	Level III	String (12)
	Amount		 Visa (O) 	
			 MasterCard (O) 	
		This field might be required for Level III processing depending on your merchant category code. Check with your processor.		

Table 16 Order-Level Fields for GPN

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
duty_amount	Duty Amount	Total charges for any import or export	Level III	String (12)
		duties included in the order. Maximum amount is 99,999.99.	 Visa (O) 	
		amount is 99,999.99.	 MasterCard (O) 	
freight_amount	Freight Amount	Total freight or shipping and handling	Level III	String (12)
		charges for the order. Maximum amount is 99,999.99. When you include this field in	 Visa (O) 	
		your request, you must also include amount.	 MasterCard (O) 	
merchant_vat_	Merchant VAT	Your government-assigned tax	Level III	String (20)
registration_number	Number	identification number.	 Visa (O) 	
			 MasterCard (O) 	
national_tax_amount	National Tax	National tax for the order. Maximum amount is 99,999.99.	Level III	String (12)
			 Visa (O) 	
purchaser_order_	Order Date	ate Date the order was processed. Format: YYMMDD.	Level III	String (6)
date			 Visa (O) 	
			 MasterCard (O) 	
purchaser_vat_	Customer VAT Number	Customer's government-assigned tax identification number.	Level III	Visa:
registration_number			 Visa (O) 	String (15)
			 MasterCard (O) 	MasterCard: String (20)
purchasing_level	No	Flag that indicates the capture or credit	Level III	String (1)
		g request is for Level III processing. Set to 3.	 Visa (R for captures; not used for credits) 	
			 MasterCard (R for captures; not used for credits) 	

Table 16 Order-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_from_postal_	Ship From	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.	Level III	String (10)
code	Postal/Zip		 Visa (O) 	
	Code		 MasterCard (O) 	
		If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789		
		If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		
ship_to_address_	Destination Country Code	Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i> .	Level III	String (2)
country			 Visa (O) 	
			 MasterCard (O) 	
ship_to_address_	Destination Postal/Zip Code	Postal code for the shipping address. This is the same as shipFrom_postalCode when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.	Level III	String (10)
postal_code			 Visa (O) 	
			 MasterCard (O) 	
		If the shipping country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789		
		If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		
ship_to_address_ state	Destination State/Province Code	State or province of the address to ship the product to. Use the <i>State, Province,</i> <i>and Territory Codes for the United States</i> <i>and Canada.</i>	Level III	String (2)
			 Visa (O) 	
			 MasterCard (O) 	

Table 16 Order-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
summary_	Summary	International description code of the overall order's goods or services. Contact your acquirer or GPN for a list of codes.	Level III	String (4)
commodity_code	Commodity Code and Commodity Code		 Visa (O) 	
		This field might be required for Level III processing depending on your merchant category code. Check with your processor.	 MasterCard (O) 	
supplier_order_	Item	Text description of the item.	Level III	String (25)
reference	Description		 Visa (O) 	
			 MasterCard (O) 	
user_po	Market Data - "m" Customer Code and Reference Number	Value used by your customer to identify the order. This value is typically a purchase order number.	Level II	Visa: String (17)
			 Visa (R) 	
			 MasterCard (R) 	MasterCard: String (25)
			Level III	
			 Visa (R) 	
			 MasterCard (R) 	
vat_tax_amount	VAT/Tax	Tax amount applied to freight / shipping	Level III	String (12)
	Amount (Freight/ Shipping)	costs.	 Visa (O) 	
vat_tax_rate	VAT/Tax Rate	Tax rate applied to freight / shipping costs.	Level III	String (4)
	(Freight/ Shipping)	Example 0.040 (=4%)	■ Visa (O)	

Table 16 Order-Level Fields for GPN (Continued)



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 17 Item-Level Fields for GPN

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_	Tax Rate N	Tax rate applied to the item.	Level III	String (5)
amount			 Visa (O) 	
			 MasterCard (O) 	
item_#_commodity_	Item	International description code	Level II	Visa:
code	Commodity Code	used to classify the item. Contact	 Visa (R for 	String (12)
	Code	your acquirer or GPN for a list of codes.	interchange rates)	MasterCard: String (4)
		This field might be required for Level III processing depending on your merchant category code. Check with your processor.	 MasterCard (O) 	
			Level III	
			■ Visa (O)	
			 MasterCard (O) 	
item_#_discount_	Item Discount	Discount applied to the item.	Level III	String (12)
amount		Maximum amount is 99,999.99.	 Visa (Required 	
		This field might be required for all Level III processing depending on your merchant category code. Check with your processor.	for Level III interchange)	
			 MasterCard (Required for Level III interchange) 	
item_#_discount_rate	Item Discount Rate	Rate the item is discounted.	Level III	String (5)
		Example 5.25 (=5.25%)	 MasterCard (Required for Level III interchange) 	

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number item_#_quantity	No corresponding GPN field Item Quantity	Field to support an invoice number for a transaction.You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items. Number of units of the item purchased. Must be a whole number. If you do not provide this	Level III Visa (O) MasterCard (O) Level III Visa (Required for Level III	String (23)
		value, CyberSource uses 1.	interchange) MasterCard (Required for Level III interchange) 	
item_#_tax_amount	Level II: Amount 2 Level III: Tax Amount N	Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_ price of 10.00 and item_#_tax_ amount of 0.80, and you send another item with item_#_unit_ price of 20.00 and item_#_tax_ amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. Maximum amount is 99,999.99. For Level II, if you do not include this field in your request, CyberSource sets this field to the default value of 0. For Level II, this value is the sales tax. For Visa Level II transactions, this value must be	Level II • Visa (O) • MasterCard (O) Level III • Visa (O) • MasterCard (O)	Level II: String (10) Level III: String (12)

Table 17 Item-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_of_	Unit of	Unit of measure for the item.	Level III	String (12)
measure	Measure		 Visa (Required for Level III interchange) 	
			 MasterCard (Required for Level III interchange) 	
item_#_unit_price	Unit PriceUnit cost of the item purchased. Maximum amount is 99,999.99.ImportantFor a Level III transaction, this value cannot be zero (0).NoteFor each item that you include in a request, you must include the amount field.	•	Level II	String (10)
		Maximum amount is 99,999.99.	■ Visa (O)	
		transaction, this value cannot be	 MasterCard (O) 	
		Note For each item that you	Level III	
		 Visa (Required for Level III interchange) 		
			 MasterCard (Required for Level III interchange) 	

Table 17 Item-Level Fields for GPN (Continued)

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OmniPay Direct: Level II and Level III



This document provides guidelines that indicate which fields are needed in order to obtain the best interchange rates. These guidelines are based on industry information. CyberSource recommends that you contact your acquirer for the most current information because the payment card companies can change their requirements at any time.



On OmniPay Direct, the only acquirer that support Level II and Level III data is First Data Merchant Solutions (Europe).

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Processor Specification

The specification that CyberSource used to implement Level II and Level III processing for OmniPay Direct is *OmniPay 80Byte Electronic File Specifications, version 4.9,* September 2015.

Order-Level Fields

Table 18 Order-Level Fields for OmniPay Direct

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amount	Line Item Total	Grand total for the entire request.	Level II	String (12)
			 Visa (R for interchange rates) 	
discount_amount	Discount	Total discount applied to the order.	Level III	String (12)
	Amount / Total Discount		 Visa (R for interchange rages) 	
			 MasterCard (R) 	
duty_amount	Duty Amount	Total charges for any import or export	Level II	String (12)
		duties included in the order.	 Visa (O) 	
			Level III	
			 Visa (O) 	
			 MasterCard (O) 	
freight_amount	Freight Amount / Shipping Amount	Total freight or shipping and handling charges for the order.	Level II	String (12)
			 Visa (O) 	
		For a Level II transaction with Visa, CyberSource sets the value for this field to zero (0) when you do not include it in the request.		
			Level III	
			 Visa (R for interchange rates) 	
			 MasterCard (O) 	
invoiceHeader_	Detail Tax	Flag that indicates whether tax is	Level III	String (5)
taxable	Amount Indicator	included in the total purchase amount. Possible values:	 MasterCard (O) 	
		 true: tax is included in total purchase amount and tax is sum of values for all item_#_taxAmount fields. 		
		 false: tax is not included in total purchase amount. 		

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
local_tax_indicator	Local Tax Included	Flag that indicates whether local sales tax is included in the order total. Possible values:	Level III ■ Visa (O)	String (1)
		• 0: local sales tax not included		
		 1: local sales tax included 		
		2: tax exempt order		
merchant_vat_ registration_number	Merchant VAT Registration / Single Business Reference	Your government-assigned tax identification number.	Level II Visa (R for interchange rates)	String (21)
	Number / Merchant Tax ID / Corporation VAT Number		 MasterCard (R for interchange rates) 	
			Level III	
			 Visa (R for interchange rates) 	
			 MasterCard (R for interchange rates) 	
national_tax_amount	National Tax	National tax for the order.	Level II	String (12)
		When you include this field in the request, you must also include the item_#_taxAmount field in the request.	 Visa (R for interchange rates) 	
			Level III	
			 Visa (R for interchange rates) 	
national_tax_indicator	National Tax	Flag that indicates whether a national	Level II	String (1)
	Included	tax is included in the order total. Possible values:	 Visa (R for interchange 	
		 0: national tax not included 	rates)	
		 1: national tax included 		
			Level III	
			 Visa (R for interchange rates) 	

Table 18	Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_order_date	Order Date	Date the order was processed. Format: YYMMDD.	Level II	String (6)
			■ Visa (O)	
			Level III	
			 Visa (O) 	
purchaser_vat_	Customer VAT	Customer's government-assigned tax	Level II	String (13)
registration_ number	Registration Number	identification number.	 Visa (O) 	
			Level III	
			 Visa (O) 	
purchasing_level	No	Flag that indicates the capture request	Level III	String (1)
	corresponding OmniPay Direct field	includes Level III data. Set the value for this field to 3. For more information, see "CyberSource Level II and Level III Data	 Visa (R for captures) 	
	Direct field	Processing," page 11.	 MasterCard (R for captures) 	
ship_from_postal_ code	Ship From Postal / ZIP Code	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits. When the goods ship from the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 When the goods ships from Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] Example A1B 2C3	Level III Visa (O) MasterCard (O)	String (10)
ship_to_country	Destination Country Code	Country to which the product is shipped. Use the two-character <i>ISO Standard</i> <i>Country Codes</i> .	Level III Visa (O) MasterCard (O)	String (3)

Table 18 Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_postal_code	Destination Postal / ZIP Code	Postal code for the shipping address. This value is the same as the value for the shipFrom_postalCode field when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.	Level II Visa (O) Level III	String (10)
		When the goods ship to the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]	Visa (O)MasterCard (O)	& Length
		Example 12345-6789		
		When the goods ship to Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric]		
		Example A1B 2C3		
summary_	Summary	International description code of the	Level II	String (4)
commodity_code	Commodity Code	overall order's goods or services. Contact your acquirer for a list of codes.	 Visa (R for interchange rates) 	
			Level III	
			 Visa (R for interchange rates) 	
supplier_order_	Purchase	Text description of the item.	Level II	
reference	Identifier / Merchant		 Visa (R for interchange rates) 	String (25)
	Related Data /			
	Merchant Reference Number		 MasterCard (R for interchange rates) 	
			Level III	
			 Visa (R for interchange rates) 	
			 MasterCard (R for interchange rates) 	

Table 18	Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_amount	Tax Amount /	Total tax amount for all the items in the order.	Level II	String (12)
	Total Tax Amount		 Visa (O) 	
	Amount		 MasterCard (R for interchange rates) 	
			Level III	
			 Visa (O) 	
			 MasterCard (R for interchange rates) 	
user_po	Customer	Value used by your customer to identify	Level II	String (25)
	Code / Customer	the order. This value is typically a purchase order number.	 Visa (R) 	
	Reference ID		 MasterCard (R) 	
			Level III	
			 Visa (R for interchange rates) 	
			 MasterCard (R for interchange rates) 	
vat_tax_amount	VAT (Amount)	Total amount of VAT or other tax	Level III	String (12)
		included in the order.	 Visa (O) 	
vat_tax_rate	VAT (Rate)	Rate of VAT or other tax for the order.	Level III	String (4)
		Example 0.04 (=4%)	 Visa (R for 	
		Valid range: 0.01 to 0.99 (1% to 99%)	interchange rages)	

Table 18 Order-Level Fields for OmniPay Direct (Continued)

Item-Level Fields



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3).

nt The maximum number of items you can include in a request is:

- American Express Level II: 4 items
- MasterCard Level III: 99 items
- Visa Level III: 99 items

You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 19 Item-Level Fields for OmniPay Direct

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_ amount	VAT / Tax Amount	Tax amount on shipping/freight.	Level II	String (12)
	(Freight or Shipping)		 Visa (O) 	
			Level III	
			 Visa (O) 	
item_#_alternate_tax_	VAT / Tax Rate	Rate used to generate the value	Level II	String (4)
rate	(Freight or Shipping)	for the item_#_ alternateTaxAmount field.	 Visa (R for interchange 	
		When you include the item_#_ alternateTaxAmount and otherTax_nationalTaxAmount	rates)	
		fields and do not include the	Level III	
		item_#_alternateTaxRate field, CyberSource calculates the rate as otherTax_ nationalTaxAmount x 100 / item_#_unitPrice.	 Visa (R for interchange rates) 	

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_ code	Item Commodity	International description code used to classify the item. Contact	Level II	Visa: String (12)
Code	Code	your acquirer for a list of codes.	 Visa (R for interchange rates) 	MasterCard: String (12)
			 MasterCard (O) 	
			Level III	
			 Visa (O) 	
			 MasterCard (O) 	
item_#_discount_	Discount Per	Discount applied to the item.	Level III	String (12)
amount	Line Item / Discount Amount		 Visa (R for interchange rates) 	
			 MasterCard (R for interchange rates) 	
item_#_discount_	Discount	Flag that indicates whether the	Level III	String (1)
indicator	Indicator	amount is discounted. Possible values:	 MasterCard (O) 	
		 Y: amount is discounted 		
		 N: amount is not discounted 		
item_#_discount_rate	Item Discount	Rate at which the item is	Level III	String (5)
	Rate	discounted.	 MasterCard (O) 	
		Example 0.050 (=5%)		
		Valid range: 0.010 to 0.999 (1% to 99.9%)		
item_#_product_code	Product Code	Type of product. This value is	Level II	String (12)
		used to determine the product category: electronic, handling,	 Visa (R) 	
		physical, service, or shipping. The default value is default.	 MasterCard (R) 	
			Level III	
			 Visa (R) 	
			 MasterCard (R) 	

Table 19 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_product_name	Item	Text description of the item.	Level III	String (26)
	Description		 Visa (R for interchange rates) 	
			 MasterCard (R for interchange rates) 	
item_#_quantity	Quantity / Item	Number of units of the item	Level III	Visa: Integer (4)
	Quantity	purchased. Must be a whole	 Visa (R for 	
		number. If you do not provide this value, CyberSource uses 1.	interchange rates)	MasterCard: Integer (12)
			 MasterCard (R for interchange rates) 	

Table 19 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
Tota	Tax Amount / Total Tax Amount	Total tax to apply to the product. This value cannot be negative. The tax amount and the unit price must be in the same currency.	Level II ■ Visa (R if otherTax_ nationalTax Amount is	String (12)
		The tax amount field is additive. The following example uses a two-exponent currency such as USD:	included) MasterCard (R for interchange 	
		<pre>1 You include the following items in your request: item_0_ unitPrice=10.00 item_0_quantity=1 item_0_ taxAmount=0.80 item_1_ unitPrice=20.00 item_1_quantity=1 item_1_ taxAmount=1.60 2 The total amount authorized is 32.40, not 30.00 with 2.40 of tax included.</pre>	rates) Level III • Visa (R if otherTax_ nationalTax Amount is included) • MasterCard (R for interchange rates)	
		If you want to include the tax amount and also request the taxService service, see <i>Tax</i> <i>Calculation Service Using the</i> <i>Simple Order API</i> .		
item_#_tax_rate	Tax Rate /	Tax rate applied to the item.	Level II	String (4)
	Detail Tax Rate	Example 0.08 (=8%)	 Visa (R for interchange 	
		Valid range: 0.01 to 0.99 (1% to 99%)	interchange rates)	
			Level III	
			 Visa (R for interchange rates) 	
			 MasterCard (R for interchange rates) 	

 Table 19
 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax-status_ indicator	Tax Collected Indicator	Flag that indicates whether sales tax is included in the value for the item_#_totalAmount field. Possible values:	Level III MasterCard (O)	String (1)
		 true: sales tax is included; item_#_totalAmount value must be greater than zero. 		
		 false: sales tax is not included; item_#_ totalAmount value must be zero. 		
item_#_total_amount	Line Item Total	Total purchase amount for the	Level II	String (12)
	/ Extended Item Amount	item. Normally calculated as the unit price * quantity.	 Visa (O) 	
	item Amount	unit price quantity.	 MasterCard (O) 	
			Level III	
			 Visa (R) 	
			 MasterCard (R) 	
item_#_unit_of_	Unit of	Unit of measure, or unit of	Level III	String (12)
measure	Measure Code / Item Unit of Measure	measure code, for the item. See Appendix A, "Codes for Units of Measurement," on page 108.	 Visa (R for interchange rates) 	
item_#_unit_price	Unit Cost / Unit Price	Per-item price of the product. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. CyberSource truncates the amount to the correct number of decimal places.	 Level III Visa (R for interchange rates) MasterCard (R for interchange rates) 	String (12)
		Important For a Level III transaction, this value cannot be zero (0).		

Table 19 Item-Level Fields for OmniPay Direct (Continued)

RBS WorldPay Atlanta: Level II and Level III

CHAPTER



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Processor Specification

The specification that CyberSource used to implement Level III processing for RBS WorldPay Atlanta is *RBS Worldpay API message specification, version 7.1.0*, June 2, 2009.

Order-Level Fields

Table 20	Order-Level Fields for RBS WorldPay Atlanta
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Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchasing_level	No	Flag that indicates the capture or credit	Level III	String (1)
RI	corresponding RBS WorldPay Atlanta field	VorldPay 3.	 Visa (R for captures; not used for credits) 	
			 MasterCard (R for captures; not used for credits) 	
merchant_vat_	Merchant VAT	Your government-assigned tax	Level III	String (20)
registration_ number	Number	identification number.	 Visa (O) 	

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_order_	Order Date	Date the order was processed.	Level III	Numeric (6)
date		Format: YYMMDD.	 Visa (O) 	
purchaser_vat_	Customer VAT	······································	Level III	String (13)
registration_ number	Number	identification number.	 Visa (O) 	
summary_ commodity_code	Commodity de Code		Level III	String (4)
		overall order's goods or services. Contact your acquirer for a list of codes.	 Visa (O) 	
tax_indicator	Tax Exempt	Flag that indicates whether an order is	Level II	String (1)
		taxable. Possible values:	 Visa (R) 	
		• Y: the order is taxable.	 MasterCard (R) 	
		 N: the order is not taxable. 		
			Level III	
			■ Visa (R)	
			 MasterCard (R) 	

Table 20	Order-Level Fields for RBS WorldP	ay Atlanta (Continued)
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Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
	PC2 Customer ID	Value used by your customer to identify the order. This value is typically a purchase order number.	Level II Visa (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.)	String (25)
			 MasterCard (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
			Level III	
			 Visa (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
vat_invoice_	VAT Invoice	VAT invoice number associated with the	Level III	String (15)
eference_number	Number	transaction.	 Visa (O) 	
alternate_tax_	VAT Tax	Total amount of alternate tax for the order.	Level III	String (8)
amount	Amount		 Visa (O) 	
			 MasterCard (O) 	
alternate_tax_ ndicator	Alternate Tax Indicator	Flag that indicates whether the alternate tax amount (alternate_tax_amount) is included in the request. Possible values:	Level III MasterCard (R)	String (1)
		 0: alternate tax amount is not included in the request. 		
		 1: alternate tax amount is included in the request. 		

Table 20 Order-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
vat_tax_amount	VAT Tax	Total amount of VAT or other tax included	Level III	
	Amount	in the order.	 Visa (O) 	
vat_tax_rate	Tax Rate	Rate of VAT or other tax for the order.	Level III	Numeric (4)
		Example 0.0400 (=4%)	 Visa (O) 	
		Valid range: 0.0001 to 0.9999 (0.01% to 99.99%)		& Length Numeric (8) Numeric (4) Numeric (8) Numeric (8) Numeric (8) String (15)
discount_amount	Discount	Total discount applied to the order. For	Level III	Numeric (8) Numeric (4) Numeric (8) Numeric (8) Numeric (8) String (15)
	Amount	example: a 20.00 discount off the order total.	 Visa (O) 	
duty_amount	Duty Amount	Total charges for any import or export	Level III	Numeric (8)
		duties included in the order.	 Visa (O) 	
			 MasterCard (O) 	
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include amount .	Level III	Numeric (8)
			 Visa (O) 	
			 MasterCard (O) 	
amount	Amount	Grand total for the entire capture or credit	Level III	String (15)
		request.	 Visa (R) 	
			 MasterCard (R) 	
ship_from_postal_	Origin Zip		Level III	String (10)
code		the goods are shipped, which is used to determine nexus. The default is the postal code associated with your	 Visa (Recommended) 	
		CyberSource account. The postal code must consist of 5 to 9 digits.	 MasterCard (Recommended) 	
		If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789		
		If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		Numeric (8) Numeric (8) Numeric (8) String (15)
		Example A1B 2C4		

Table 20 Order-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
'	Destination Country Code	Country to ship the product to. Use the two-character <i>ISO Standard Country</i> <i>Codes.</i> If you do not provide this value, CyberSource uses the billTo_country value. If you do not provide either of these values, CyberSource uses the	 Level III Visa (Recommended for best rate) MasterCard (Recommended for best rate) 	String (3)
ship_to_address_ postal_code	Destination Zip	default value of US. Postal code for the shipping address. The postal code must consist of 5 to 9 digits.	Level III	String (10)
	If the shipping country is the U.S., the 9- digit postal code must follow this format: for best rate)	(Recommended		
		Example 12345-6789	(Recommended for best rate)	
		If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
		Example A1B 2C4		
		If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.		

Table 20	Order-Level Fields	for RBS WorldPa	y Atlanta	(Continued)
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Item-Level Fields



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 21 Item-Level Fields for RBS WorldPay Atlanta

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_id	Alternate Tax ID	Your tax ID number to use for the alternate tax amount. You must provide this value if you include Alternate Tax Amount in the request. Providing this value is optional if you do not Alternate Tax Amount.	Level III MasterCard (See description)	String (15)
item_#_commodity_ code	Commodity Code	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III ■ Visa (R)	String (12)
item_#_discount_ amount	Discount Amount	Discount applied to the item.	Level III Visa (O) MasterCard (O)	Numeric (8)
item_#_discount_rate	Discount Rate	Rate the item is discounted. Example 5.25 (=5.25%)	Level III MasterCard (O)	Numeric (5)
item_#_gross_net_ indicator	Gross Net Indicator	Flag that indicates whether the tax amount is included in the Line Item Total. Possible values:	Level III MasterCard (R)	String (1)
		 Y: item amount includes tax amount N: item amount does not include tax amount 		
item_#_invoice_number	No corresponding RBS WorldPay Atlanta field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III Visa (O) MasterCard (O)	String (23)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_code	Product Code	Product code for the item. In the United States, this value is usually a UPC code, part number, or product number. If you do not provide this value, CyberSource uses default.	Level III Visa (R) MasterCard (R)	String (12)
item_#_name	Description	Text description of the item.	Level III Visa (R) MasterCard (R)	String (35)
item_#_quantity	Quantity	Number of units of the item purchased. This value must be a whole number. If you do not provide this value, CyberSource uses 1.	Level III Visa (R) MasterCard (R)	Visa: Numeric (10) MasterCard: Numeric (8)
item_#_tax_amount	Tax Amount	Total tax to apply to the product. This value cannot be negative. If no tax is present, you can send in a value of 0.	Level II Visa (R) MasterCard (R)	Numeric (8)
		The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_ price of 10.00 and item_#_tax_ amount of 0.80, and you send another item with item_#_unit_ price of 20.00 and item_#_tax_ amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency.	Level III • Visa (R) • MasterCard (R)	
item_#_tax_rate	Tax Rate	Tax rate applied to the item. Valid range is 0.0001 to 0.9999 (0.01% to 99.99%). The value can also be zero.	Level III MasterCard (O) 	Numeric (4)

Table 21 Item-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_type_ applied	Тах Туре	Type of tax being applied to the item. Possible values:	Level III MasterCard (R)	String (4)
		 0000: unknown tax type 		& Length String (4) Numeric (8) String (12) Visa:
		 0001: federal/national sales tax 		
		 0002: state sales tax 		
		 0003: city sales tax 		
		 0004: local sales tax 		
		 0005: municipal sales tax 		& Length String (4) Numeric (8) String (12)
		 0006: other tax 		
		 0010: value-added tax 		
		 0011: goods and services tax 		
		 0012: provincial sales tax 		
		 0013: harmonized sales tax 		
		 0014: Quebec sales tax (QST) 		
		 0020: room tax 		
		 0021: occupancy tax 		
		 0022: energy tax 		
		 Blank: tax not supported on line item. 		
item_#_total_amount	Line Total	Total purchase amount for the	Level III	Numeric (8)
		item. Normally calculated as the unit price x quantity.	 Visa (R) 	
			 MasterCard (R. Do not use all zeros or spaces.) 	
item_#_unit_of_	Unit Of	Unit of measure, or unit of	Level III	String (12)
measure	Measure	measure code, for the item. See Appendix A, "Codes for Units of	■ Visa (R)	
		Measurement," on page 108.	 MasterCard (R) 	
item_#_unit_price	Unit Cost	Unit cost of the item purchased.	Level III	Visa:
		Important For a Level III	 Visa (R) 	Numeric (10
		transaction, this value cannot be zero (0).	 MasterCard (R) 	MasterCard: Numeric (8)

Table 21 Item-Level Fields for RBS WorldPay Atlanta (Continued)

TSYS Acquiring Solutions: 12 Level II and Level III



CyberSource does not presently support Level II processing for the American Express card type on TSYS Acquiring Solutions.



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Processor Specification

The specification that CyberSource used to implement Level III processing for TSYS Acquiring Solutions (Vital) is *Vital's EIS 1081, Level III Line Item Processing, version 6.4*, April 2004.

The records referenced are:

- Transaction Detail Record Optional Data; Groups 25, 26, and 27
- Visa Card Non-T&E and Fleet (Non-fuel) Line Item Detail Record
- MasterCard Non-T&E and Fleet (Non-fuel) Line Item Detail Record

Order-Level Fields

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchasing_level	No	Flag that indicates the capture or credit	Level III	String (1)
	corresponding TSYS Acquiring Solutions field	request is for Level III processing. Set to 3.	 Visa (R for captures; not used for credits) 	
			 MasterCard (R for captures; not used for credits) 	String (1) String (20) String (6) String (13)
merchant_vat_	Merchant VAT	Your government-assigned tax	Level III	String (20)
registration_number	Registration Number	identification number.	 Visa (O) 	
purchaser_order_	Order Date	Date the order was processed.	Level III	String (6)
date		Format: YYMMDD.	 Visa (O) 	
purchaser_vat_	Customer VAT	Customer's government-assigned tax	Level III	String (13)
registration_number	Registration Number	identification number.	 Visa (O) 	
summary_	Summary	International description code of the	Level III	String (4)
commodity_code	Commodity Code	overall order's goods or services. Contact your acquirer for a list of codes.	 Visa (R) 	

Table 22 Order-Level Fields for TSYS Acquiring Solutions

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	No	Value used by your customer to identify	Level II	String (25)
	corresponding TSYS Acquiring Solutions field	the order. This value is typically a purchase order number.	 Visa (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
			Level III	
			 Visa (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
			 MasterCard (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) 	
vat_invoice_	Unique VAT	VAT invoice number associated with the	Level III	String (15)
reference_number	Invoice Reference Number	transaction.	■ Visa (O)	
alternate_tax_	Alternate Tax	Total amount of alternate tax for the	Level III	String (10)
amount	Amount	order.	 MasterCard (O) 	

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_	Alternate Tax	Flag that indicates whether the alternate	Level III	String (1)
indicator	Amount Indicator	tax amount (alternate_tax_amount) is included in the request. Possible values:	 MasterCard (O) 	
		 0: alternate tax amount is not included in the request. 		& Length
		 1: alternate tax amount is included in the request. 		
local_tax_amount	Local Tax	Sales tax for the order.	Level III	String (13)
			 Visa (O) 	
			 MasterCard (O) 	
local_tax_indicator		cal Tax Flag that indicates whether local sales cluded Flag tax is included in the order total. Possible values:	Level III	String (1)
	Included Flag		 Visa (O) 	
		 0: local sales tax not included 	 MasterCard (O) 	
		 1: local sales tax included 		
		 2: tax exempt order 		
		If you do not provide this value, CyberSource sets this field to one of the following values:		
		 0 if you set Local Tax = 0 or do not provide a Local Tax 		
		 1 if you set Local Tax > 0 		
		Important For GSA (General Services Administration) purchasing cards, tax is required in order to qualify for Level III when processing with TSYS Acquiring Solutions. Therefore, the only valid Level III value for this field for GSA cards is 1. If you have any questions or concerns, contact your acquirer.		
national_tax_	National Tax	National tax for the order.	Level III	String (13)
amount	Amount		 Visa (O) 	
			 MasterCard (O) 	

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
national_tax_	National Tax	Flag that indicates whether a national	Level III	String (1)
indicator	Included Flag	tax is included in the order total. Possible values:	 Visa (O) 	
		0: national tax not included	 MasterCard (O) 	
		 1: national tax included 		
		If you do not provide this value, CyberSource sets this field to 1 if you provide a National Tax Amount greater than 0.		
vat_tax_amount	VAT/Tax	Total amount of VAT or other tax	Level III	String (13)
	Amount	included in the order.	 Visa (O) 	
vat_tax_rate	VAT/Tax Rate	Rate of VAT or other tax for the order.	Level III	String (6)
		Example 0.0400 (=4%)	 Visa (O) 	
		Valid range: 0.0001 to 0.9999 (0.01% to 99.99%)		
discount_amount	Discount	Total discount applied to the order. For	Level III	String (13)
	Amount	example: a 20.00 discount off the order total.	 Visa (O) 	
duty_amount	Duty Amount	Total charges for any import or export	Level III	String (13)
		duties included in the order.	 Visa (O) 	
			 MasterCard (O) 	
freight_amount	Freight	Total freight or shipping and handling	Level III	String (13)
	Amount	charges for the order. When you include this field in your request, you must also	 Visa (O) 	
		include amount .	 MasterCard (O) 	
amount	No	Grand total for the entire capture or	Level III	String (15)
	corresponding TSYS	credit request.	 Visa (R) 	
	Acquiring Solutions field		 MasterCard (R) 	

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_from_postal_ code	Ship From Postal/ZIP Code	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits. If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example A1B 2C4	Level III Visa (O) MasterCard (Recommended for best rate. Do not use all zeros or nines.)	String (10)
ship_to_address_ country	Destination Country Code	Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i> .	Level III Visa (Recommended for best rate) MasterCard (O but recommended)	String (2)
ship_to_address_ postal_code	Destination Postal/ZIP Code	Postal code for the shipping address. This is the same as ship_from_postal_ code when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits. If the shipping country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits] Example 12345-6789 If the shipping country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example A1B 2C4	 Level III Visa (Recommended for best rate) MasterCard (Recommended for best rate. Do not use all zeros or nines.) 	String (10)

Table 22	Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_ state	No corresponding TSYS Acquiring Solutions field	State or province of the address to ship the product to. Use the <i>State, Province,</i> <i>and Territory Codes for the United</i> <i>States and Canada.</i>	If any shipping information is in the request, this field is required for CyberSource front-end processing.	String (2)

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued	Table 22	Order-Level Fields	for TSYS Acqu	uiring Solutions	(Continued)
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Item-Level Fields



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 23 Item-Level Fields for TSYS Acquiring Solutions

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_id	Alternate Tax	Your tax ID number to use for the	Level III	String (15)
	Identifier	alternate tax amount. You must provide this value if you include Alternate Tax Amount in the request. Providing this value is optional if you do not Alternate Tax Amount.	 MasterCard (See description) 	
item_#_commodity_	Item	International description code	Level III	String (12)
code	Commodity Code	used to classify the item. Contact your acquirer for a list of codes.	 Visa (R) 	
item_#_discount_	Visa: Discount	Discount applied to the item.	Level III	String (13)
amount	Per Line Item		■ Visa (O)	
	MasterCard: Discount Amount		 MasterCard (O) 	

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_discount_ indicator	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values:	Level III MasterCard (O)	String (1)
		 Y: amount is discounted 		
		 N: amount is not discounted 		
		If you do not provide a value but you set Discount Amount to a value greater than zero, CyberSource sets this field to Y.		
item_#_discount_rate	Item Discount	Rate the item is discounted.	Level III	String (6)
	Rate	Example 5.25 (=5.25%)	 MasterCard (O) 	
item_#_gross_net_	Net/Gross	Flag that indicates whether the	Level III	String (1)
indicator	Indicator	tax amount is included in the Line Item Total. Possible values:	 MasterCard (R) 	
		 Y: item amount includes tax amount 		
		 N: item amount does not include tax amount 		
item_#_invoice_number	No corresponding TSYS Acquiring Solutions field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III Visa (O) MasterCard (O)	String (23)
item_#_code	Product Code	Product code for the item. In the	Level III	String (12)
		United States, this may be a UPC code, part number, or product	 Visa (O) 	
		number. If you do not provide this value, CyberSource uses default.	 MasterCard (Recommended for best rate. Do not use all zeros or spaces.) 	
item_#_name	Visa: Item	Text description of the item.	Level III	String (35)
	Descriptor		■ Visa (O)	
	MasterCard: Item Description		 MasterCard (R. Do not use all zeros or spaces.) 	

Table 23	Item-Level Fields for	TSYS Acquiring	g Solutions	(Continued)
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Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_quantity	Visa: Quantity	Number of units of the item	Level III	Integer (12)
	MasterCard: Item Quantity	purchased. Must be a whole number. If you do not provide this value, CyberSource uses 1.	 Visa (Recommended for best rate) 	
			 MasterCard (Recommended for best rate. Do not use all zeros or spaces.) 	
item_#_tax_amount	Visa: VAT/Tax	Total tax to apply to the product.	Level II	String (13)
	Amount	This value cannot be negative.	 Visa (R) 	
	MasterCard: Tax Amount	The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_	 MasterCard (R) 	
		price of 10.00 and item_#_tax_	Level III	
		amount of 0.80, and you send another item with item_#_unit_	 Visa (R) 	
		price of 20.00 and item_#_tax_ amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency.	 MasterCard (R) 	
item_#_tax_rate	Visa: VAT/Tax	Tax rate applied to the item.	Level III	String (6)
	Rate	Valid range is 0.0001 to 0.9999	 Visa (O) 	
	MasterCard: Tax Rate Applied	(0.01% to 99.99%). The value can also be zero.	 MasterCard (R) 	
item_#_tax_type_	Тах Туре	Type of tax being applied to the	Level III	String (4)
applied	Applied	item.	 MasterCard (O) 	
item_#_total_amount	Visa: Line Item	Total purchase amount for the	Level III	Visa: String
	Total	item. Normally calculated as the unit price x quantity.	 Visa (R) 	(13)
	MasterCard: Extended Item Amount	anit prioe x quantity.	 MasterCard (R. Do not use all zeros or spaces.) 	MasterCard: String (10)

 Table 23
 Item-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_of_ measure	Visa: Unit of	Unit of measure, or unit of	Level III	String (12)
	Measure/Code	measure code, for the item. See	 Visa (O) 	
	MasterCard: Item Unit of Measure	Appendix A, "Codes for Units of Measurement," on page 108.	 MasterCard (R. Do not use all zeros or spaces.) 	
item_#_unit_price	Unit Cost	Unit cost of the item purchased.	Level III	String (11)
		Important For a Level III	 Visa (R) 	
		transaction, this value cannot be zero (0).	 MasterCard (R) 	String (11)

Table 23	Item-Level Fields for	TSYS Acquiring So	olutions (Continued)
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Worldpay VAP: Level II and Level III





Worldpay VAP was previously called Litle. Litle was purchased by Vantiv, which was then purchased by Worldpay VAP. If you have any questions about this situation, contact your account manager at Worldpay VAP.



This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

To qualify for Level III interchange rates for Visa and MasterCard, you need to include at least one item in your request.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

Order-Level Fields

Table 24	Order-Level Fields for Worldpay VAP
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Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchasing_level	No	Flag that indicates the capture or credit	Level III	String (1)
	corresponding Worldpay VAP field	request is for Level III processing. Set to 3.	 Visa (R for captures; not used for credits) 	
			 MasterCard (R for captures; not used for credits) 	
amex_data_taa1	item Four Transaction Advice Addendum Description fields. These fields are used to display descriptive information about a		Level II	String (26)
amex_data_taa2		 American 		
amex_data_taa3		transaction on your customer's American Express card statement. If you are sending any TAA fields, start with invoiceHeader_amexDataTAA1 , then TAA2 , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.	Express (R)	
amex_data_taa4				
		Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.		
		If you request a follow-on credit for an American Express Level II capture that included TAA data and if the TAA data is not included in the follow-on credit request, CyberSource uses the TAA data from the capture request.		
merchant_vat_	cardAcceptor	Your government-assigned tax	Level III	String (20)
registration_number	Taxld	identification number.	 Visa (Not used) 	
		For Visa, Worldpay VAP uses the value in your Worldpay VAP account.	 MasterCard (O) 	
purchaser_order_date	orderDate	Date the order was processed. If this	Level III	String (10)
		value is not included in the request, CyberSource uses today's date.	Visa (O)	
		Format: YYYY-MM-DD.	 MasterCard (O) 	

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_indicator	taxExempt	Flag that indicates whether the order is	Level II	String (5)
		taxable.	■ Visa (See	
		This value is:		
		 Required if the sum of all item_#_ taxAmount values = 0. 	(See	
		 Optional if the sum of all item_#_ 		
		taxAmount values > 0. Possible values:		
			Required (R) or Optional (O) Level II • Visa (See description) • MasterCard	
		 Y: the order is taxable. 		
		 N: the order is not taxable. 		
			•	
			(See	
user_po	customer	Value used by your customer to identify	Level II	String (17)
	Reference	the order. This value is typically a		
		purchase order number.	 MasterCard (R) 	
			Level III	
			 Visa (R) 	
			 MasterCard (O) 	
vat_invoice_	invoice	Invoice number associated with the	Level III	String (15)
reference_number	Reference Number	transaction.	 Visa (O) 	
	Number		•	
discount_amount	discount	Total discount applied to the order.	Level III	String (8)
	Amount		■ Visa (R)	
			 MasterCard (O) 	
duty_amount	dutyAmount	Total charges for any import or export	Level III	String (8)
		duties included in the order.	■ Visa (R)	
			 MasterCard (O) 	

Table 24 Order-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
freight_amount	shipping Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include purchaseTotals_ grandTotalAmount .	Level III Visa (R) MasterCard (O)	String (8)
ship_from_postal_ code	shipFrom PostalCode	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. CyberSource recommends that this value not exceed 10 characters.	Level III Visa (O) MasterCard (O)	String (20)
		If the billing country is the U.S., the 9- digit postal code must follow this format: [5 digits][dash][4 digits]		
		Example 12345-6789 If the billing country is Canada, the 6- digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]		
ship_to_address_ country	destination CountryCode	Example A1B 2C4 Country to ship the product to. Use the two-character <i>ISO Standard Country</i> <i>Codes</i> . If this value is not included in the request, CyberSource uses the	Level III Visa (O) MasterCard (O)	String (3)
		 billTo_country value from the authorization request. 	()	

 Table 24
 Order-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length	
ship_to_address_ postal_code		destination PostalCode	Postal code for the shipping address. This is the same as shipFrom_ postalCode when your customer takes possession of the items at your location. CyberSource recommends that this value not exceed 10 characters. If this value is not included in the request, CyberSource uses the bilITo_postalCode value from the authorization request. If the shipping country is the U.S., the 9-digit postal code must follow this format:	Level III Visa (O) MasterCard (O)	String (20)
		[5 digits][dash][4 digits]	its][dash][4 digits] nple 12345-6789 shipping country is Canada, the it postal code must follow this at: a][numeric][alpha] e][numeric][alpha]		
		If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]			
		Example A1B 2C4			

 Table 24
 Order-Level Fields for Worldpay VAP (Continued)

Item-Level Fields



When you include the item-level fields in your request, you must include the **line_item_count** field (string 3).

nt The maximum number of items you can include in a request is:

- American Express Level II: 4 items
- MasterCard Level III: 99 items
- Visa Level III: 99 items

You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 25 Item-Level Fields for Worldpay VAP

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_	taxAmount	Amount collected for a special	Level III	String (8)
amount		type of tax.	 Visa (Not used) 	
			 MasterCard (O) 	
item_#_alternate_tax_id	cardAcceptor	Your tax ID number to use for the	Level III	String (20)
	TaxId	alternate tax amount.	 Visa (Not used) 	
			 MasterCard (O) 	
item_#_alternate_tax_	taxRate	Tax rate for the special tax.	Level III	String (5)
rate			 Visa (Not used) 	
			 MasterCard (O) 	

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_ type	taxType Identifier	 Flag that indicates the type of tax collected for item_#_alternate_tax_amount. Possible values: 00: unknown 01: federal or national sales tax 02: states sales tax 03: city sales tax 04: local sales tax 05: municipal sales tax 06: other tax 10: value-added tax (VAT) 11: goods and services tax (GST) 12: provincial sales tax 13: harmonized sales tax 20: room tax 21: occupancy tax 22: energy tax 	Level III • Visa (Not used) • MasterCard (O)	String (2)
item_#_commodity_ code	commodity Code	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III Visa (R) MasterCard (O)	String (12)
item_#_discount_ amount	itemDiscount Amount	Discount applied to the item.	Level III Visa (R) MasterCard (O)	String (8)
item_#_invoice_number	No corresponding Worldpay VAP field	Invoice number for the transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III Visa (O) MasterCard (O)	String (23)
item_#_code	productCode	Product code for the item. In the United States, this may be a UPC code, part number, or product number.	Level III Visa (R) MasterCard (R)	String (12)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_name	item	Text description of the item.	Level III	String (26)
	Description		 Visa (R) 	
			 MasterCard (R) 	
item_#_quantity	quantity	Number of units of the item	Level III	Integer (9)
		purchased. Must be a whole number.	 Visa (R) 	
			 MasterCard (R) 	
item_#_tax_amount	taxAmount	Total tax to apply to the product.	Level II	String (8)
item_#_tax_amount		This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_ price of 10.00 and taxAmount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_ #_tax_amount and the item_#_ unit_price must be in the same currency. For Level II, if you do not include this field in your request, CyberSource sets this field to the default value of 0.	 Visa (R for the best rate for corporate cards; R if tax_indicator= Y; otherwise, O.) MasterCard (R for the best rate for corporate cards; R if tax_indicator = Y; otherwise, O.) American Express (R for the best rate for corporate cards; R if tax_indicator = Y; otherwise, C.) 	
			 Level III Visa (R for the best rate for corporate cards; R if tax_ indicator = Y; otherwise, O.) MasterCard (R for the best rate for corporate cards; R if tax_ indicator = Y; otherwise, O.) 	

Table 25	Item-Level Fields	for Worldpay	VAP	(Continued)
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Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_total_amount	lineItemTotal	Total purchase amount for the	Level III	String (8)
		item. Normally calculated as the unit price x quantity. MasterCard (Visa (R) 	
			 MasterCard (R) 	
item_#_unit_of_	unitOfMeasure	Unit of measure, or unit of	Level III	String (12)
measure		measure code, for the item. See Appendix A, "Codes for Units of	 Visa (R) 	
			 MasterCard (R) 	
item_#_unitPrice	unitCost	Unit cost of the item.	Level III	String (12)
		Important For a Level III	 Visa (R) 	
		transaction, this value cannot be zero (0).	 MasterCard (O) 	

Table 25	Item-Level Fields for Worldpay VAP (Continued)
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APPENDIX

Codes for Units of Measurement

The following table lists the codes for units of measurement used in international trade.

Value	Description	
EA	Unknown unit of measure	
ACR	Acre (4840 yd ²)	
AMH	Ampere-hour (3.6 kC)	
AMP	Ampere	
ANN	Year	
APZ	Ounce GB, US (31.10348 g) (tr oz.)	
ARE	Are (100 m ²)	
ASM	Alcoholic strength mass	
ASV	Alcoholic strength by volume	
ATM	Standard atmosphere (101325 Pa)	
ATT	Technical atmosphere (98066.5 Pa)	
BAR	Bar	
BFT	Board foot	
BG	Unknown unit of measure	
BHP	Brake horsepower (745.7 W)	
BHX	Hundred boxes	
BIL	Billion Eur (trillion US)	
BLD	Dry barrel (115.627 dm ³)	
BLL	Barrel	
BQL	Becquerel	
BTU	British thermal unit (1.055 Kilojoules)	
BUA	Bushel (35.2391 dm ³)	
BUI	Bushel (36.36874 dm ³)	
BX	Unknown unit of measure	
С	Unknown unit of measure	
CA	Unknown unit of measure	

Table 26 Codes for Units of Measurement

Value	Description
CCT	Carrying capacity in metric tons
CD	Unknown unit of measure
CDL	Candela
CEL	Celsius degrees
CEN	Hundred
CGM	Centigram
CKG	Coulomb per kg
CLF	Hundred leaves
CLT	Centiliter
CMK	Square centimeter
CMT	Centimeter
CNP	Hundred packs
CNT	Cental GB (45.359237 kg)
COU	Coulomb
CS	Unknown unit of measure
CTM	Metric carat (200 Mg = 2.10-4 kg)
CUR	Curie
CWA	Hundredweight US (45.3592 kg)
D	Unknown unit of measure
DAA	Decare
DAD	Ten days
DAY	Day
DEC	Decade (10 years)
DLT	Deciliter
DMK	Square decimeter
DMQ	Cubic decimeter
DMT	Decimeter
DPC	Dozen pieces
DPT	Displacement tonnage
DRA	Dram US (3.887935 g)
DRI	Dram GB (1.771745 g)
DRL	Dozen rolls
DRM	Drachm gm (3.887935 g)
DTH	Hectokilogram
DTN	Centner / Quintal, metric (100 kg) (decitonne)

DZUnitDZNDozDZPDozDZRDozEAUnitEACEacFAHFatFARFar	zen packs zen pairs known unit of measure ch nrenheit degrees
DZNDozDZPDozDZRDozEAUnitEACEacFAHFarFARFar	zen packs zen pairs known unit of measure ch mrenheit degrees rad ot (.3048 m)
DZPDozDZRDozEAUnitEACEacFAHFatFARFar	zen packs zen pairs known unit of measure ch mrenheit degrees rad ot (.3048 m)
DZRDozEAUnitEACEacFAHFairFARFar	zen pairs known unit of measure ch mrenheit degrees ad ot (.3048 m)
EAUnitEACEacFAHFahFARFan	known unit of measure ch mrenheit degrees rad ot (.3048 m)
EAC Eac FAH Fat FAR Fat	ch nrenheit degrees ad ot (.3048 m)
FAH Fat FAR Far	ad bt (.3048 m)
FAR Far	ad
	ot (.3048 m)
FOT For	
	known unit of measure
FT Unk	
FTK Squ	uare foot
FTQ Cut	pic foot
G Unk	known unit of measure
GAL Unk	known unit of measure
GBQ Gig	abequerel
GFI Gra	am of fissile isotopes
GGR Gre	eat gross (12 gross)
GIA Gill	(11.8294 cm ³)
GII Gill	(0.142065 dm ³)
GLD Dry	r gallon (4.404884 dm ³)
GLI Gal	llon (4.546092 dm ³)
GLL Liqu	uid gallon (3.78541 dm ³)
GRM Gra	am
GRN Gra	ain GB, US (64.798910 mg)
GRO Gro	DSS
GRT Gro	oss (Register) ton
GWH Gig	awatt-hour (1 Million kWh)
HAR Hee	ctare
HBA Hee	ctobar
HGM Hee	ctogram
HIU Hur	ndred international units
HLT Heo	ctoliter
HMQ Mill	ion cubic meters
HMT Heo	ctometer

Table 26	Codes for Units of Measurement	(Continued)
		(00000000)

Value	Description
HPA	Hectoliter of pure alcohol
HTZ	Hertz
HUR	Hour
INH	Inch (25.4 mm)
INK	Square inch
INQ	Cubic inch
ITM	Item
JOU	Joule
KBA	Kilobar
KEL	Kelvin
KGM	Kilogram
KGS	Kilogram per second
KHZ	Kilohertz
KJO	Kilojoule
KMH	Kilometer per hour
KMK	Square kilometer
KMQ	Kilogram per cubic meter
KMT	Kilometer
KNI	Kilogram of nitrogen
KNS	Kilogram of named substance
KNT	Knot (1 nautical mile per hour)
KPA	Kilopascal
KPH	Kilogram of caustic potash (kilogram of potassium hydroxide)
KPO	Kilogram of potassium oxide
KPP	Kilogram of phosphoric anhydride (kilogram of phosphoric pentoxide)
KSD	Kilogram of substance 90% dry
KSH	Kilogram of caustic soda
KTN	Kilotonne
KUR	Kilogram of uranium
KVA	Kilovolt-ampere
KVR	Kilovar
KVT	Kilovolt
KWH	Kilowatt-hour

Value	Description
KWT	Kilowatt
LBR	Pound GB, US (0.45359237 kg)
LBS	Unknown unit of measure
LBT	Troy pound, US (373.242 g)
LEF	Leaf
LPA	Liter of pure alcohol
LTN	Long ton GB, US (1.0160469 T)
LTR	Liter (1 dm ³)
LUM	Lumen
LUX	Lux
MAL	Megaliter
MAM	Megameter
MAW	Megawatt
MBE	Thousand standard brick equivalent
MBF	Thousand board-feet (2.36 m ³)
MBR	Millibar
MCU	Millicurie
MGM	Milligram
MHZ	Megahertz
MIK	Square mile
MIL	Thousand
MIN	Minute
MIO	Million
MIU	Million international units
MLD	Billion US (milliard)
MLT	Milliliter
MMK	Square millimeter
MMQ	Cubic millimeter
MMT	Millimeter
MON	Month
MPA	Megapascal
MQH	Cubic meter per hour
MQS	Cubic meter per second
MSK	Meter per second squared
MTK	Square meter

Table 26	Codes for Units of Measurement	(Continued)
		(0011111000)

Value	Description
MTQ	Cubic meter
MTR	Meter
MTS	Meter per second
MVA	Megavolt-ampere (1000 kva)
MWH	Megawatt-hour (1000 kWh)
NAR	Number of articles
NBB	Number of bobbins
NCL	Number of cells
NEW	Newton
NIU	Number of international units
NMB	Number
NMI	Nautical mile (1852 m)
NMP	Number of packs
NMR	Number of pairs
NPL	Number of parcels
NPT	Number of parts
NRL	Number of rolls
NTT	Net (register) ton
OHM	Ohm
ONZ	Ounce GB, US (28.349523 g)
OZA	Fluid ounce (29.5735 cm ³)
OZI	Fluid ounce (28.413 cm ³)
PAL	Pascal
PCB	Piece
PCE	Unknown unit of measure
PER	Unknown unit of measure
PGL	Proof gallon
PK	Unknown unit of measure
PTD	Dry pint (0.55061 dm ³)
PTI	Pint (0.568262 dm ³)
PTL	Liquid pint (0.473176 dm ³)
QAN	Quarter (of a year)
QTD	Dry quart (1.101221 dm ³)
QTI	Quart (1.136523 dm ³)
QTL	Liquid quart (0.946353 dm ³)

QTRQuarter, GB (12.700586 kg)RLUnknown unit of measureRMUnknown unit of measureRPMRevolution per minuteRPSRevolution per secondSANHalf year (6 months)SCOScoreSCRScruple GB, US (1.295982 g)SECSecondSETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
RMUnknown unit of measureRPMRevolution per minuteRPSRevolution per secondSANHalf year (6 months)SCOScoreSCRScruple GB, US (1.295982 g)SECSecondSETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
RPMRevolution per minuteRPSRevolution per secondSANHalf year (6 months)SCOScoreSCRScruple GB, US (1.295982 g)SECSecondSETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
RPSRevolution per secondSANHalf year (6 months)SCOScoreSCRScruple GB, US (1.295982 g)SECSecondSETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
SANHalf year (6 months)SCOScoreSCRScruple GB, US (1.295982 g)SECSecondSETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
SCOScoreSCRScruple GB, US (1.295982 g)SECSecondSETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
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SEC Second SET Set SHT Shipping ton SIE Siemens SMI (Statute) mile (1609.344 m)
SETSetSHTShipping tonSIESiemensSMI(Statute) mile (1609.344 m)
SHT Shipping ton SIE Siemens SMI (Statute) mile (1609.344 m)
SIE Siemens SMI (Statute) mile (1609.344 m)
SMI (Statute) mile (1609.344 m)
SST Short Standard (7200 matches)
ST Unknown unit of measure
STI Stone GB (6.350293 kg)
STN Short ton GB, US (0.90718474 T)
TAH Thousand ampere-hour
TNE Metric ton (1000 kg) (tonne (1000 kg))
TPR Ten pairs
TQD Thousand cubic meters per day
TRL Trillion EUR
TSD Tonne of substance 90% dry
TSH Ton of steam per hour
VLT Volt
WCD Cord (3.63 m ³)
WEB Weber
WEE Week
WHR Watt-hour
WSD Standard
WTT Watt
YDK Square yard
YDQ Cubic yard
YRD Yard (0.9144 m)