Merchant Management Service

Developer Guide

October 2019



CyberSource Contact Information

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

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

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

Copyright

© 2019 CyberSource Corporation. All rights reserved. CyberSource Corporation ("CyberSource") furnishes this document and the software described in this document under the applicable agreement between the reader of this document ("You") and CyberSource ("Agreement"). You may use this document and/or software only in accordance with the terms of the Agreement. Except as expressly set forth in the Agreement, the information contained in this document is subject to change without notice and therefore should not be interpreted in any way as a guarantee or warranty by CyberSource. CyberSource assumes no responsibility or liability for any errors that may appear in this document. The copyrighted software that accompanies this document is licensed to You for use only in strict accordance with the Agreement. You should read the Agreement carefully before using the software. Except as permitted by the Agreement, You may not reproduce any part of this document, store this document in a retrieval system, or transmit this document, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written consent of CyberSource.

Restricted Rights Legends

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

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 Unpublished rights reserved under the copyright laws of the United States.

Trademarks

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

Contents

	Recent Revisions to This Document 3		
	About This Guide 6		
	Audience 6		
	Conventions 6		
Chapter 1	Introduction 7		
•	Guidelines and Assumptions 7		
	Merchant Management Service API Authentication 7 Create a Shared Secret Key for HTTP Signature Authentication 8 Create a P12 Certificate for JSON Web Token Authentication 8		
	Merchant Management Service Flow 9		
	Merchant Management REST API 10 HTTP Responses 11		
Chapter 2	Merchant Management Service Specifications 12		
	Schema Diagrams 12		
	Merchant Boarding Schema 12		
	Processor Information Schema 16		
	Request XML Schema 17 Mass Boarding XSD 18		
	Enterprise XSD 18		
	Merchant Boarding XSD 19 Processor Information XSD 22		
	XML Request and Response Examples 22 Merchant Boarding Request XML Example 23		
	Merchant Boarding Skip Processor Request Example 25 Successful Service Response Example 26		
	Authentication Failure Response Example 27 Service Response Example 28		
	Merchant Board/Update Response Example 29		

Chapter 3	Merchant Management Service Field Specifications 30
Appendix A	Codes 40 Response Status Codes 40 Error Codes 40 Specific Error Codes and Descriptions 41
Appendix B	Test Integration with Merchant Management Service 45 Client Code Implementation 45 Merchant Management Service API Call 45

Recent Revisions to This Document

Release	Changes
October 2019	 Updated API version number.
	 Updated authentication information for creating keys.
September 2018	 This revision contains only editorial changes and no technical updates.
October 2014	 Updated requirements for Merchant City field.
September 2014	 Updated Guidelines for Client Development.
	 Added list of processors.
April 2014	 Added skip processor functionality.
November 2013	 Added details for new processor attributes.
	 Added information for unified Board/Update request.

About This Guide

Audience

This guide is intended for developers of the merchant management service client application.

Conventions



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



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



A *Warning* contains information or instructions, which, if not heeded, can result in a security risk, irreversible loss of data, or significant cost in time or revenue or both.

6

CHAP

Merchant Management Service enables a portfolio user to board or update one or multiple merchants and configure products for those merchants. Merchant Management Service is a REST API and supports client requests in XML object format.

Guidelines and Assumptions

- 1 Clients planning to use this service should be configured on the Portfolio Management platform and should have access to the New Business Center.
- 2 Boarding Request ID is a unique identifier and is required in each service request.
- 3 A service request object should have a unique merchant ID for each merchant to be boarded.
- 4 At least one board merchant or update merchant request is required in the service request.
- The submitted update request must contain all relevant entity level details in order to update the entity information successfully.
- 6 The format of the Merchant Management Service request should conform to the XSDs.
- 7 The OrganizationID, Batch Group, and Processor Name information will be provided by CyberSource prior to using this service, as these are specific for each portfolio.

Merchant Management Service API Authentication

Merchant Management Service REST API uses a custom HTTP scheme, based on Public Key Infrastructure (PKI) for authentication. You can use either an HTTP Signature key or a JWT key. After you have created a security key, you must generate a header to include in your API request. See the Developer Center Getting Started Guide for instructions.

Create a Shared Secret Key for HTTP Signature Authentication

HTTP Signature authentication is provided by a Base-64 encoded transaction key, represented in a string format. The shared secret key created in the Business Center is valid for 3 years. The public key and the shared secret key generated in this process are required to use the HTTP signature as an authentication mechanism.



You must use separate keys for the test and production environments.

To create a shared secret key:

- Step 1 Log in to the Business Center.
- Step 2 On the left navigation pane, click the Payment Configuration icon.
- Step 3 Click Key Management. The Key Management page appears.
- **Step 4** Click **Generate Key**. The Create Key page appears.
- Step 5 Select API Cert/Secret.
- Step 6 Click Next.
- Step 7 Select Shared Secret.
- Step 8 Click Submit.
- **Step 9** To download the shared secret key to a .txt file, click **Download Key**.



Make note of the public key that is also generated. This value is required in the header of each REST API call.

Create a P12 Certificate for JSON Web Token Authentication

The certificate contains both the public and private key.

To create a P12 certificate:

- Step 1 Log in to the Business Center.
- **Step 2** On the left navigation pane, click the **Payment Configuration** icon.
- **Step 3** Click **Key Management**. The Key Management page appears.
- Step 4 Click Generate Key. The Create Key page appears.
- Step 5 Select API Cert/Secret.
- Step 6 Click Next.

- Step 7 Select Certificate.
- Step 8 Click Submit.
- **Step 9** When prompted, download the certificate file.

To get access to the Merchant Management Service use the syntax as described below:

```
POST /merchant-mgmt/v2/merchant-batch-jobs HTTP/1.1

Host: api.cybersource.com

Organization-Id: <organization_id>

Content-Type: application/xml
```

Merchant Management Service Flow

Merchant boarding requests are processed as follows:

- 1 The service request object is received from the portfolio via a REST API call.
- 2 The request is authenticated.
- 3 The service request is validated to ensure it conforms to the XSD.
 - If the validation fails, no records are processed and the corresponding error message is sent in the response.
 - If the validation is successful, the acknowledgment is returned with the service response URL, all merchant records are parsed, and service calls are made to board or update the merchants asynchronously.
- 4 The records in the service request are processed.
 - The merchant is boarded or updated based on the request type.
 - If there are business logic errors while processing the records, the error description is captured and request processing for the remaining records continues.
- 5 The service response is generated which includes information about the:
 - total number of requests received.
 - how many merchants were successfully processed.
 - how many merchant records failed to be processed.
- The service response can be retrieved using the URL information returned in the validation acknowledgment.

Figure 1 Merchant Management Service Process

Merchant Management REST API

The Merchant Management Service is used by portfolios to board/update multiple merchants through the REST API. This service acknowledges the receipt of the request and provides the response with the ATOM URL. The client may use the ATOM URL and perform GET operations to retrieve the service response.

See Chapter 2, "XML Request and Response Examples," on page 22 for examples of service requests and responses.

Table 1 Merchant Management Service Request to Board/Update Merchants

Base URI	https://api.cybersource.com/merchant-mgmt/v2/merchant-batch-jobs		
Scope	RESTful service for managing multiple merchants that includes		
	boarding/updating merchants.		
HTTP method	POST		
Request Formats	Application / XML		
Response Formats	Application / XML		
Examples	Board/update request:		
	"Merchant Boarding Request XML Example," page 23		
	Board/update request response:		
	"Successful Service Response Example," page 26		
	Response authentication failure:		
	"Authentication Failure Response Example," page 27		

Table 2 Merchant Management Service Request to Get Service Response

Base URI	https://api.cybersource.com/merchant-mgmt/v2/merchant-batch-jobs/ {uuid}
Scope	RESTful Service to get the service response for a given Request ID
HTTP method	GET
Request Formats	Application/XML
Response Formats	Application/XML
Example	Service response:
	"Service Response Example," page 28

Table 3 Merchant Management Service Request to Get Merchant Response

Base URI	https://api.cybersource.com/merchant-mgmt/v2/merchant-batch-jobs/merchant-response/{uuid}
Scope	RESTful Service to get the merchant board/update response
HTTP method	GET
Request Formats	Application/XML
Response Formats	Application/XML
Example	Board/update response:
	"Merchant Board/Update Response Example," page 29

HTTP Responses

The Merchant Management Service uses standard HTTP status codes to indicate the status of processing of the given service request.

Table 4 Service Request Responses

HTTP Status Code	Code	User Message
200	OK	Status of records that processed successfully. Records that failed processing because of data validation errors will be provided in the XML response.
202	Accepted	Service request is validated and stored in the database.
		202 Status code - signifies asynchronous processing of the RESTful Service.
400	Unauthorized	Authentication failure.

СНАР

This chapter contains the schemas and XML examples for the merchant boarding and updating responses and requests.

Schema Diagrams

The merchant boarding and update merchant XSD files are required to validate the request XML. These files define all attributes required for boarding and updating merchants. Validation rules and field lengths have been defined in Chapter 3, Merchant Management Service Field Specifications.

Merchant Boarding Schema

This schema definition contains the root element for the request and response. Common attributes like merchant information, contact information, product information, and profile information for boarding or updating merchants are stored in this file. The processor details information is provided in the Processor Information XSD, which contains all the processor attributes.

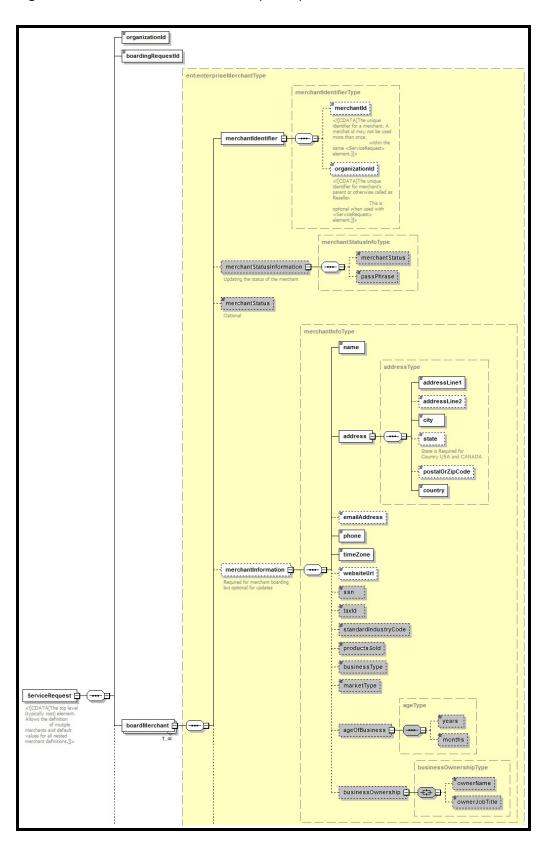


Figure 2 Board Merchant Schema (Part 1)

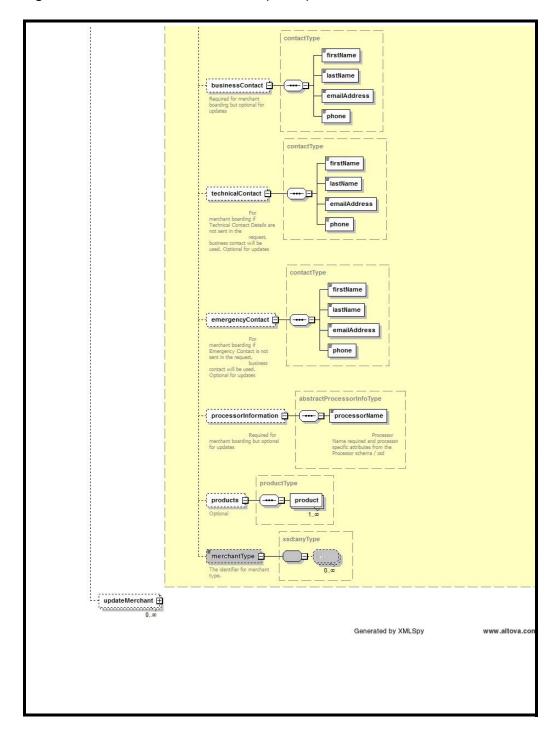
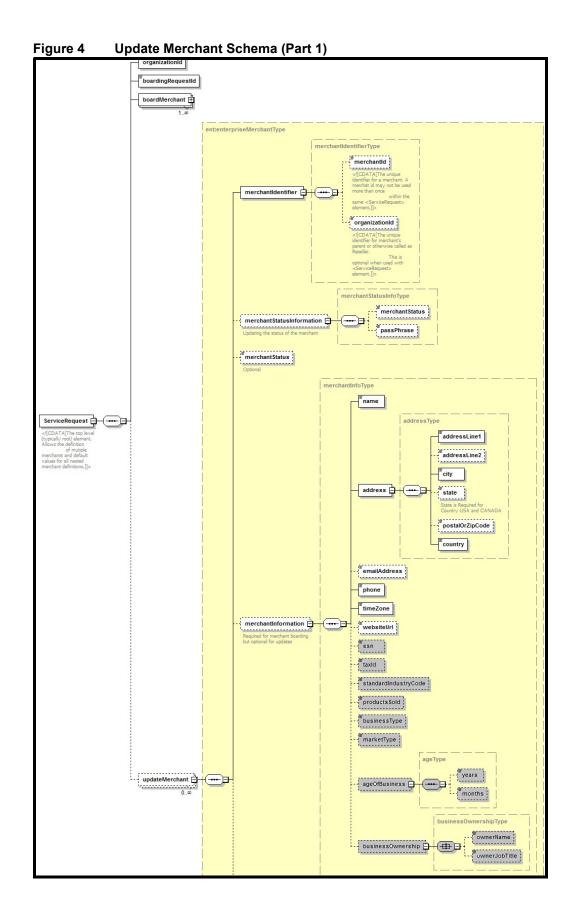


Figure 3 Board Merchant Schema (Part 2)



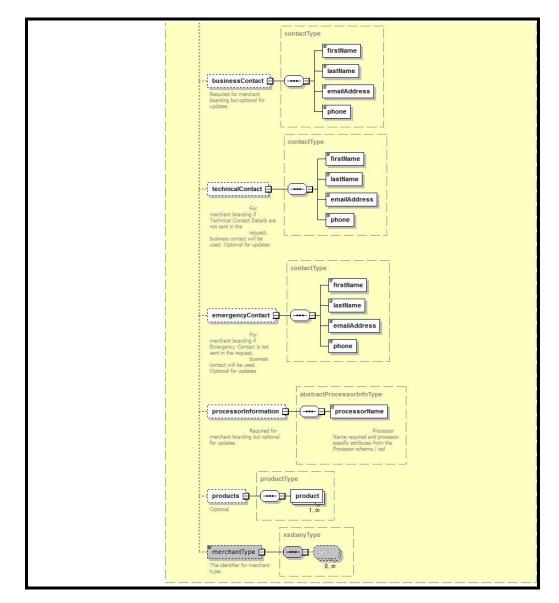


Figure 5 Update Merchant Schema (Part 2)

Processor Information Schema

This schema contains all the processor attributes that need to be populated for the merchant boarding or merchant update request to be successful. This definition is an extension of the processor information section in the Merchant Boarding XSD.

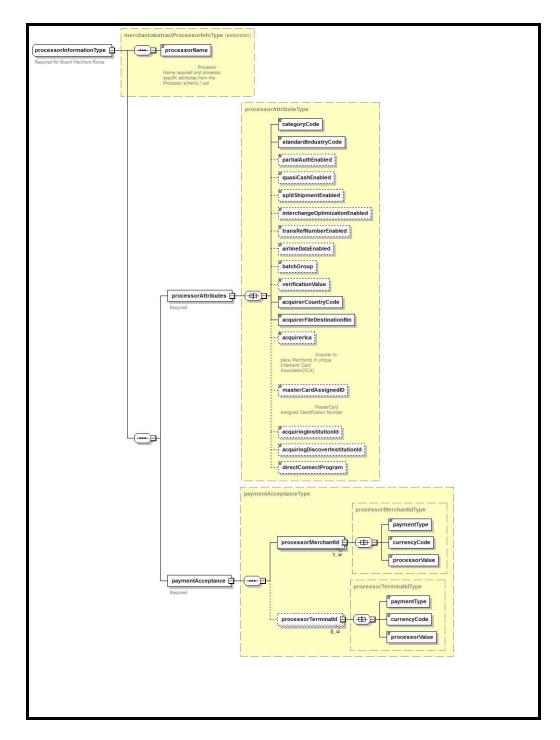


Figure 6 Processor Information Schema

Request XML Schema

The Mass Boarding, Enterprise, Merchant Boarding, and Processor Information XSDs are part of the Request XML Schema.

Mass Boarding XSD

The complete mass boarding XSD can be downloaded at:

http://apps.cybersource.com/library/documentation/dev_guides/Universal_Management_ Portal/MassBoard.xsd.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<xsd:schema xmlns="http://www.cybersource.com/v1/schema/massboard"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         xmlns:ent="http://www.cybersource.com/v1/schema/enterprise"
         targetNamespace="http://www.cybersource.com/v1/schema/
massboard"
         elementFormDefault="qualified"
         attributeFormDefault="unqualified">
   <xsd:import namespace="http://www.cybersource.com/v1/schema/</pre>
enterprise schemaLocation="Enterprise.xsd"/>
   <xsd:annotation>
      <xsd:documentation>
         <![CDATA[CyberSource Merchants XML Schema, Version 1.0
         This defines a schema for managing the merchants through XML
instance. Each 'merchant' element in this document defines a merchant
with the appropriate elements and what do with the given merchant
information. 'boardMerchant' element needs to be used to create merchant
and 'updateMerchant' for updating the merchant.]]>
      </xsd:documentation>
   </xsd:annotation>
   <xsd:element name="ServiceRequest">
      <xsd:annotation>
         <xsd:documentation>
         <![CDATA[The top level (typically root) element. Allows the
definition of mutiple merchants and default values for all nested
merchant definitions.]]>
         </xsd:documentation>
      </xsd:annotation>
      <xsd:complexType>
         <xsd:sequence>
            <xsd:element name="organizationId" type="xsd:ID"/>
            <xsd:element name="boardingRequestId" type="xsd:ID"/>
            <xsd:element name="boardMerchant"</pre>
type="ent:enterpriseMerchantType" maxOccurs="unbounded"/>
            <xsd:element name="updateMerchant"</pre>
type="ent:enterpriseMerchantType" minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:complexType>
   </xsd:element>
</xsd:schema>
```

Enterprise XSD

The complete enterprise XSD can be downloaded at:

http://apps.cybersource.com/library/documentation/dev_guides/Universal_Management_ Portal/Enterprise.xsd.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<xsd:schema xmlns="http://www.cybersource.com/v1/schema/enterprise"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         xmlns:merchant="http://www.cybersource.com/v1/schema/merchant"
         targetNamespace="http://www.cybersource.com/v1/schema/
enterprise"
         elementFormDefault="qualified"
         attributeFormDefault="unqualified">
   <xsd:import namespace="http://www.cybersource.com/v1/schema/</pre>
merchant " schemaLocation="MerchantCommonServiceType.xsd"/>
   <xsd:element name="EnterpriseMerchant" type="merchant:merchantType"/</pre>
   <xsd:complexType name="enterpriseMerchantType">
      <xsd:complexContent>
         <xsd:extension base="merchant:merchantType"/>
      </xsd:complexContent>
   </xsd:complexType>
</xsd:schema>
```

Merchant Boarding XSD

The complete merchant boarding XSD can be downloaded at:

http://apps.cybersource.com/library/documentation/dev_guides/Universal_Management_ Portal/MerchantCommonServiceType.xsd.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<xsd:schema xmlns="http://www.cybersource.com/v1/schema/merchant"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         targetNamespace="http://www.cybersource.com/v1/schema/
merchant" elementFormDefault="qualified"
         attributeFormDefault="unqualified">
   <xsd:complexType name="merchantType" abstract="true">
      <xsd:annotation>
         <xsd:documentation>
            Update Merchant Request information - only the information
that will need to be updated could be passed in the request
         </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
         <xsd:element name="merchantIdentifier"</pre>
type="merchantIdentifierType"/>
         <xsd:element name="merchantStatusInformation"</pre>
type="merchantStatusInfoType" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>Updating the status of the merchant/
xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="merchantStatus"</pre>
type="extMerchantStatusType" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>Optional</xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="merchantInformation"</pre>
type="merchantInfoType" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>Required for merchant boarding but
optional for updates</xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="businessContact" type="contactType"</pre>
minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>Required for merchant boarding but
optional for updates</xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="technicalContact" type="contactType"</pre>
minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>
```

```
For merchant boarding if Technical Contact Details are
not sent in the request, business contact will be used. Optional for
updates
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="emergencyContact" type="contactType"</pre>
minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>
                  For merchant boarding if Emergency Contact is not sent
in the request, business contact will be used. Optional for updates
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="skipProcessor" type="xsd:boolean"</pre>
minOccurs="0" default="false">
            <xsd:annotation>
               <xsd:documentation>
               Required for skipping processor validations
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="processorInformation"</pre>
type="abstractProcessorInfoType" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>
                  Required for merchant boarding but optional for
updates
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="products" type="productType" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>Optional</xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="merchantType" minOccurs="0"</pre>
type="xsd:anyType">
            <xsd:annotation>
               <xsd:documentation>The identifier for merchant type./
xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:sequence>
   </xsd:complexType/>
</xsd:schema>
```

Processor Information XSD

If skipProcessor is 'true' in the Merchant Boarding XSD, then Processor Information XSD is not required. The following processors are currently supported:

- CyberSource through VISANET
- GPN
- Paymentech
- Enterprise FDIGlobal
- FDC South
- Vital
- FDC Nashville
- StreamLine2
- AmexBrighton
- Barclays2

Please contact Customer Support to obtain the XSD for your processor.

XML Request and Response Examples

The field lengths, validation rules, and field types for the examples below are listed in Chapter 3, Merchant Management Service Field Specifications.

Merchant Boarding Request XML Example

```
<?xml version="1.0" encoding="utf-8"?>
<ServiceRequest xmlns="http://www.cybersource.com/v1/schema/massboard"</pre>
                xmlns:ctv="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
                xmlns:mer="http://www.cybersource.com/v1/schema/
merchant"
                xmlns:ent="http://www.cybersource.com/v1/schema/
enterprise"
                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="
                   http://www.cybersource.com/v1/schema/massboard
MassBoard.xsd
                   http://www.cybersource.com/v1/schema/merchant
MerchantCommonServiceType.xsd
                   http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet CyberSourcethroughVisaNet.xsd <!-Please apply
the namespace based on the processor selected
                   http://www.cybersource.com/v1/schema/enterprise
Enterprise.xsd
   <organizationId><!--OrganizationId--></organizationId>
   <boardingRequestId>ba6df680-b2d8--37b3f7c67698/boardingRequestId>
   <boardMerchant xsi:type="ent:enterpriseMerchantType">
      <mer:merchantIdentifier>
         <mer:merchantId>merchant_112021</mer:merchantId>
      </mer:merchantIdentifier>
      <mer:merchantInformation>
         <mer:name>Buy com</mer:name>
         <mer:address>
            <mer:addressLine1>111 Tester St</mer:addressLine1>
            <mer:addressLine2>Address Two 1/mer:addressLine2>
            <mer:city>Seattle</mer:city>
            <mer:state>MA</mer:state>
            <mer:postalOrZipCode>94587</mer:postalOrZipCode>
            <mer:country>USA</mer:country>
         </mer:address>
         <mer:emailAddress>supportmms@visa.com</mer:emailAddress>
         <mer:phone>5107897418</mer:phone>
         <mer:timeZone>Pacific/Pago_Pago</mer:timeZone>
         <mer:websiteUrl>http://www.cybersource.com</mer:websiteUrl>
      </mer:merchantInformation>
      <mer:businessContact type="Business">
         <mer:firstName>Christian</mer:firstName>
         <mer:lastName>Doe</mer:lastName>
         <mer:emailAddress> supportmms@visa.com</mer:emailAddress>
         <mer:phone>4153697852
      </mer:businessContact>
      <mer:technicalContact type="Technical">
         <mer:firstName>Christian</mer:firstName>
         <mer:lastName>Doe</mer:lastName>
```

```
<mer:emailAddress> supportmms@visa.com</mer:emailAddress>
        <mer:phone>4153697852
     </mer:technicalContact>
     <mer:emergencyContact type="Emergency">
        <mer:firstName>John</mer:firstName>
        <mer:lastName>Doe</mer:lastName>
        <mer:emailAddress> supportmms@visa.com</mer:emailAddress>
        <mer:phone>2697894561
     </mer:emergencyContact>
     <!--<mer:skipProcessor>true</mer:skipProcessor> IF NO PROCESSOR IS
CONFIGURED'
     <!-Please refer to Addendum for appropriate Processor'
     <mer:products>
        <mer:product profileName="<!--Profile name-->" type="Virtual_
Terminal" />
     </mer:products>
      <mer:merchantType>EXTERNAL</mer:merchantType>
   </boardMerchant>
</ServiceRequest>
```

Merchant Boarding Skip Processor Request Example

```
<?xml version="1.0" encoding="utf-8"?>
<ServiceRequest xmlns="http://www.cybersource.com/v1/schema/massboard"</pre>
            xmlns:ctv="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
            xmlns:mer="http://www.cybersource.com/v1/schema/merchant"
            xmlns:ent="http://www.cybersource.com/v1/schema/enterprise"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="
            http://www.cybersource.com/v1/schema/massboard
MassBoard.xsd
            http://www.cybersource.com/v1/schema/merchant
MerchantCommonServiceType.xsd
            http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet CyberSourcethroughVisaNet.xsd
            http://www.cybersource.com/v1/schema/enterprise
Enterprise.xsd
   <organizationId><!--OrganizationId--></organizationId>
   <boardingRequestId>ba6df680-b2d8--37b3f7c67698/boardingRequestId>
   <boardMerchant xsi:type="ent:enterpriseMerchantType">
      <mer:merchantIdentifier>
         <mer:merchantId>merchant_112021</mer:merchantId>
      </mer:merchantIdentifier>
      <mer:merchantInformation>
         <mer:name>Buy com</mer:name>
         <mer:address>
            <mer:addressLine1>111 Tester St</mer:addressLine1>
            <mer:addressLine2>Address Two 1</mer:addressLine2>
            <mer:city>Seattle</mer:city>
            <mer:state>MA</mer:state>
            <mer:postalOrZipCode>94587</mer:postalOrZipCode>
            <mer:country>USA</mer:country>
         </mer:address>
         <mer:emailAddress>supportmms@visa.com</mer:emailAddress>
         <mer:phone>5107897418
         <mer:timeZone>Pacific/Pago_Pago</mer:timeZone>
         <mer:websiteUrl>http://www.cybersource.com</mer:websiteUrl>
      </mer:merchantInformation>
      <mer:businessContact type="Business">
         <mer:firstName>Christian</mer:firstName>
         <mer:lastName>Doe</mer:lastName>
         <mer:emailAddress> supportmms@visa.com</mer:emailAddress>
         <mer:phone>4153697852/mer:phone>
      </mer:businessContact>
      <mer:technicalContact type="Technical">
         <mer:firstName>Christian</mer:firstName>
         <mer:lastName>Doe</mer:lastName>
```

```
<mer:emailAddress> supportmms@visa.com</mer:emailAddress>
         <mer:phone>4153697852
      </mer:technicalContact>
      <mer:emergencyContact type="Emergency">
         <mer:firstName>John</mer:firstName>
         <mer:lastName>Doe</mer:lastName>
         <mer:emailAddress> supportmms@visa.com</mer:emailAddress>
         <mer:phone>2697894561</mer:phone>
      </mer:emergencyContact>
      <mer:skipProcessor>true</mer:skipProcessor>
      <mer:products>
         <mer:product profileName="<!--Profile name-->" type="Virtual_
Terminal" />
     </mer:products>
      <mer:merchantType>EXTERNAL</mer:merchantType>
   </boardMerchant>
</ServiceRequest>
```

Successful Service Response Example

When the request is accepted by the server and there are no authentication or XML validation errors, the service response is returned.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ServiceResponseType xmlns:ns2="http://www.cybersource.com/v1/
schema/merchant"
    xmlns="http://www.w3.org/2005/Atom" xmlns:ns4="http://
www.cybersource.com/v1/schema/anet"
    xmlns:ns3="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
    xmlns:ns5="http://www.cybersource.com/v1/schema/massboard"
xmlns:ns6="http://www.cybersource.com/v1/schema/enterprise"
    xmlns:ns7="http://www.cybersource.com/v1/schema/smallbusiness">
    link
        href="https://api.cybersource.com/werchant-mgmt/v2/merchant-batch-jobs/<response_code>"
        rel="self" title="Processing of uploadeded file is in progress." /
        <ns2:responseStatus>In_Progress</ns2:responseStatus>
</ns2:ServiceResponseType>
```

When the request is accepted by the server, and if the processing is not complete for all records in the request, the sample response as shown below is returned.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ServiceResponseType</pre>
   xmlns:ns2="http://www.cybersource.com/v1/schema/merchant"
   xmlns="http://www.w3.org/2005/Atom"
   xmlns:ns4="http://www.cybersource.com/v1/schema/anet"
   xmlns:ns3="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
   xmlns:ns5="http://www.cybersource.com/v1/schema/massboard"
   xmlns:ns6="http://www.cybersource.com/v1/schema/enterprise"
   xmlns:ns7="http://www.cybersource.com/v1/schema/smallbusiness">
   <link href=" https://api.cybersource.com/merchant-mgmt/v2/merchant-</pre>
batch-jobs/fa9467ee-02e7-4f45-afda-9b334ba91c52" rel="self"
title="Service Response"/>
   <ns2:responseStatus>In_Progress</ns2:responseStatus>
   <ns2:message>
      <ns2:code>S7002</ns2:code>
      <ns2:description>Request is being processed, please check back
later</ns2:description>
   </ns2:message>
</ns2:ServiceResponseType>
```

Authentication Failure Response Example

When authentication fails, the example response as shown below is returned.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ServiceResponseType</pre>
   xmlns:ns2="http://www.cybersource.com/v1/schema/merchant"
   xmlns="http://www.w3.org/2005/Atom"
   xmlns:ns4="http://www.cybersource.com/v1/schema/anet"
   xmlns:ns3="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
   xmlns:ns5="http://www.cybersource.com/v1/schema/massboard"
   xmlns:ns6="http://www.cybersource.com/v1/schema/enterprise"
   xmlns:ns7="http://www.cybersource.com/v1/schema/smallbusiness">
   <ns2:responseStatus>401</ns2:responseStatus>
   <ns2:message>
      <ns2:code>401</ns2:code>
      <ns2:description>Authentication Failed</ns2:description>
   </ns2:message>
</ns2:ServiceResponseType>
```

Service Response Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ServiceResponseType
   xmlns:ns2="http://www.cybersource.com/v1/schema/merchant"
   xmlns="http://www.w3.org/2005/Atom"
   xmlns:ns4="http://www.cybersource.com/v1/schema/anet"
   xmlns:ns3="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
   xmlns:ns5="http://www.cybersource.com/v1/schema/massboard"
   xmlns:ns6="http://www.cybersource.com/v1/schema/enterprise"
   xmlns:ns7="http://www.cybersource.com/v1/schema/smallbusiness">
   <link href="https://api.cybersource.com/merchant-mgmt/v2/merchant-</pre>
batch-jobs/8047bc13-56c2-4dc5-8115-62032501ed22" rel="self"
title="Service Response"/>
   <ns2:responseStatus>Partial_Success</ns2:responseStatus>
   <ns2:totalMerchantsProcessed>2</ns2:totalMerchantsProcessed>
   <ns2:totalMerchantsProcessedSuccess>1/
ns2:totalMerchantsProcessedSuccess>
   <ns2:totalMerchantsFailed>1</ns2:totalMerchantsFailed>
   <ns2:merchantResponse>
      <link href=" https://api.cybersource.com/merchant-mgmt/v2/</pre>
merchant-batch-jobs/merchant-response/61c3cf46-bac9-404d-af1e-
3ef4e5d9e77e/" rel="self" title="Merchant Response"></link>
      <ns2:merchantId><!-merchant id--></ns2:merchantId>
      <ns2:operation>Board</ns2:operation>
      <ns2:status>Success</ns2:status>
      <ns2:messages/>
   </ns2:merchantResponse>
   <ns2:merchantResponse>
      <link href=" https://api.cybersource.com/merchant-mgmt/v2/</pre>
merchant-batch-jobs/merchant-response/7f760a9c-3a72-456f-aa87-
4a3c11190fa9/" rel="self" title="Merchant Response"></link>
      <ns2:merchantId><!-merchant_id--></ns2:merchantId>
      <ns2:operation>Board</ns2:operation>
      <ns2:status>ValidationFailed/ns2:status>
      <ns2:messages>
         <ns2:message>
            <ns2:code>E3012</ns2:code>
            <ns2:description>Invalid payment type.</ns2:description>
         </ns2:message>
      </ns2:messages>
   </ns2:merchantResponse>
</ns2:ServiceResponseType>
```

Merchant Board/Update Response Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ServiceResponseType
  xmlns:ns2="http://www.cybersource.com/v1/schema/merchant"
  xmlns="http://www.w3.org/2005/Atom"
  xmlns:ns4="http://www.cybersource.com/v1/schema/
cybersourcethroughvisanet"
  xmlns:ns3="http://www.cybersource.com/v1/schema/anet"
  xmlns:ns5="http://www.cybersource.com/v1/schema/massboard"
  xmlns:ns6="http://www.cybersource.com/v1/schema/smallbusiness"
  xmlns:ns7="http://www.cybersource.com/v1/schema/enterprise">
   <link href="https://api.cybersource.com/merchant-mgmt/v2/merchant-</pre>
batch-jobs/" rel="self" title="Service Response"/>
   <ns2:responseStatus>Successful</ns2:responseStatus>
   <ns2:totalMerchantsProcessed>1</ns2:totalMerchantsProcessed>
   <ns2:totalMerchantsProcessedSuccess>1/
ns2:totalMerchantsProcessedSuccess>
   <ns2:totalMerchantsFailed>0</ns2:totalMerchantsFailed>
   <ns2:merchantResponse>
      <link href="https://api.cybersource.com/merchant-mgmt/v2/</pre>
merchant-batch-jobs/merchant-response/c5853ef4-7c1c-4e80-aa27-
d42281dd594b/" rel="self" title="Merchant Response"></link>
      <ns2:merchantId><!-merchant_id--></ns2:merchantId>
      <ns2:operation>Board</ns2:operation>
      <ns2:status>Success</ns2:status>
      <ns2:messages/>
   </ns2:merchantResponse>
</ns2:ServiceResponseType>
```

Merchant Management Service Field Specifications

N = Numeric

AN = Alphanumeric

OBJECT = XML object containing multiple fields

Table 5 Service Request Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
organizationId	OrganizationId / ResellerId as assigned by CyberSource for the portfolio	AN	Required
boardingRequestId	Unique request Id	8-36AN	Required unique identifier for the service request.
boardMerchant (List)	See definition below	Enterprise MerchantType OBJECT (extends MerchantType OBJECT)	Required at least one board merchant or update merchant request is required.
updateMerchant (List)	See definition below	Enterprise MerchantType OBJECT (extends MerchantType OBJECT)	Optional at least one board merchant or update merchant is required.

Table 6 MerchantType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
merchantldentifier	Merchant Identifier	Merchant IdentifierType OBJECT	Required

Table 6 MerchantType Object (Continued)

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
merchantStatus Information		MerchantStatus InfoType OBJECT	Not Required for Board Merchant Request.
			Required for Update Merchant Request if the update is to change status to Live.
merchantStatus	Merchant Status information:	String	Not Required for Board Merchant Request.
	INACTIVE		•
	■ LIVE		Optional for Update Merchant request.
	■ TEST		·
merchantInformation	Merchant Information	merchantInfo Type OBJECT	Required for Board Merchant request.
businessContact	Merchant Business Contact	contactType OBJECT	Required- All merchant notification emails are sent to the merchant business contact email address.
			Optional for Update Merchant request.
technicalContact	Merchant Technical Contact	contactType OBJECT	Optional - Business Contact will be used, if not provided.
emergencyContact	Merchant Emergency Contact	contactType OBJECT	Optional - Business Contact will be used, if not provided.
skipProcessor	Must be 'true' if processorInformation is not provided.	true/false	Required if processor Information is not provided.
processorInformation	Processor Information required for boarding Merchant	abstract ProcessorInfo Type OBJECT	Required if skipProcessor is 'false' or if skipProcessor is not present

Table 6 MerchantType Object (Continued)

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
List <products></products>	Product Profile - Virtual Terminal	productType Object	Optional - Currently we support Product Profile for Virtual Terminal and Secure Acceptance.
merchantType	INTERNAL	OBJECT	Not required for portfolios.

Table 7 MerchantIdentifierType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
merchantld	Merchant Identifier	6-30AN	Required
organizationId	Organization ID. This field is assigned to the Portfolio by CyberSource.		Optional. This information is sent in the Service request.

Table 8 MerchantStatusInfoType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
merchantStatus	Status of the merchant to be updated:	String	Optional - This Object will be required if the
	INACTIVE		request is to update the merchant status.
	LIVE		Merchant Status to
	■ TEST		be updated - TEST to LIVE; or LIVE to INACTIVE; or INACTIVE to LIVE.
passphrase	Merchant passphrase.	7-32AN	Optional - This information will be required if the request is to update merchant status to LIVE.

Table 9 MerchantInfoType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
name	Merchant Name	25AN	Required. In addition to alphanumeric characters, the following special characters are allowed: space _ + * " / ' & , () ! \$; : ? @ #
address	Merchant Address Information	addressType OBJECT	Required
emailAddress	Merchant Email Address	30AN	Optional
phone	Merchant Phone	14AN	Required -Phone is allowed for 13 digits, can also accept plus (+) for international along with 13 digits.
Time Zone	Merchant Time Zone	Enumeration	Optional
websiteUrl	Merchant Web Site URL	100AN	Optional
ssn	The owner's social security number.	9-11N	Not required for portfolios. Hyphen (-) allowed.
taxld	Merchant Tax ID Number	9-11N	Not required for portfolios. Hyphen (-) allowed.
standardIndustry Code	Standard Industry Code (SIC) associated with the merchant's business.	3-4N	Not required for portfolios.
productsSold	The type of products the merchant's business sells.	1-256AN	Not required for portfolios.
businessType	Merchant business type:	String	Not required for portfolios.
	■ SOLE_ PROPRIETORSHIP		
	■ PARTNERSHIP		
	■ CORPORATION		
	■ NON_PROFIT		
	■ TRUST		

Table 9 MerchantInfoType Object (Continued)

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
marketType	The primary market the business sells through:	String	Not required for portfolios.
	ECOMMERCE		
	MOTO		
	■ RETAIL		
ageOfBusiness	Age Of business	ageType OBJECT	Not required for portfolios.
businessOwnership	Ownership of business	businessOwnership OBJECT	Not required for portfolios.

Table 10 ContactType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
firstName	Contact First Name	50AN	Optional (Business Contact is used)
lastName	Contact Last Name	50AN	Optional (Business Contact is used)
emailAddress	Contact Email	50AN	Optional (Business Contact is used)
Phone	Contact Phone	14AN	Optional (Business Contact is used). Phone is allowed for 13 digits, can also accept plus (+) for international along with 13 digits.

Table 11 abstractProcessorInfoType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
processorName	Name of the Processor that is being used by the Portfolio / Organization. This is provided by CyberSource.	AN	Required

Table 12 processorInfoType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
processorAttributes	Processor Attributes	processorAttribut eType Object	Required
paymentAcceptance	Payment Acceptance - MIDS and TIDS	paymentAccepta nce Type Object	Required

Table 13 processorAttributeType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
acquirerCountryCode	Code that identifies the country of the acquiring institution for the merchant. This field is used in all messages related to a customer transaction. The value used in the original transaction must be used in any subsequent messages, including responses.	3N	Required
acquirerFileDestination Bin	BIN (Bank Identification Number) to which the capture file is sent.	6N	Required
acquirerIca	MasterCard assigned BIN for the acquirer.	6N	Optional
acquiringInstitutionId	BIN of the merchant's acquiring financial institution.	11N (Visa assigned BIN values are 6N in length. The maximum length supported by the spec is 11)	Required
acquiringDiscover InstitutionId	Acquiring Discover Institution ID	11N (Visa assigned BIN values are 6N in length. The maximum length supported by the spec is 11)	Optional - Required for a few processors when Discover Card is selected.
categoryCode	Four-digit code that indicates merchant's type of product or service.	4N	Required

Table 13 processorAttributeType Object (Continued)

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
standardIndustryCode	Four-digit code that indicates merchant's type of product or service.	4N	Optional
directConnectProgram	Direct Connect Program	AN	Optional (default- >02_DC)
batchGroup	Defines the transaction cutoff time and batch file delivery time for processing batch payment files for payment gateways.	AN	Optional- The batch group value will be provided by CyberSource.
airlineDataEnabled	When enabled, allows merchant to accept airline data in transactions.	Enabled/ Disabled/Ignored	Optional
quasiCashEnabled	When enabled, allows merchant to process quasi-cash transactions.	true/false	Optional
partialAuthEnabled	When enabled, allows merchant to send partial authorization transactions.	true/false	Optional
interchangeOptimizatio n Enabled	When enabled, ensures the best rate possible for the merchant's transactions.	true/false	Optional
verificationValue	Ten-digit number that identifies merchant participating in Select Merchant Fee (SMF) programs. This number is unique to each merchant.	10N	Optional
splitShipmentEnabled	When enabled, allows merchant to split an order into multiple shipments with multiple captures.	true/false	Optional
transactionRefNumber Enabled	Transaction Reference Number required for transactions	true/false	Optional

Table 13 processorAttributeType Object (Continued)

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
masterCardAssignedID	MasterCard Assigned ID	6N	Required if MasterCard is one of the payment methods.

Table 14 paymentAcceptanceType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
processorMerchantId	Processor MID Information	processor MerchantIdType Object	Required
processorTerminalId	Payment Acceptance - MIDS and TIDS	processor TerminalIdType Object	Required

Table 15 processorMerchantIdType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
paymentType	Payment card types supported by CyberSource Through VisaNet Processors - VISA, MasterCard, JCB, Discover, American Express, Diners Club.	N	Required
currencyCode	Currency code combination with paymentType	N	Required
processorValue	Processor Merchant IDs	15 AN	Required

Table 16 processorTerminalIdType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
paymentType	Payment card types supported by CyberSource Through VisaNet Processors - VISA, MasterCard, JCB, Discover, American Express, and Diners Club.	N	Required

Table 16 processorTerminalIdType Object (Continued)

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
currencyCode	Currency code combination with paymentType	N	Required
processorValue	Processor Terminal IDs	8 AN	Required

Table 17 productType Object

Field Name	Field Description	Field Length/ Data Type	Required/ Optional
type	Product Type	N	Required - Currently, it is Virtual_Terminal.
profileId	Profile ID that was registered with UMP application.	AN	Required
profileName	Profile Name	5-100 AN	Required
profileDescription	Profile Description	5-250 AN	Required

Table 18 addressType Object

Field Name	Field Description	Field Length/ Data Type	Required/Optional
addressLine1	First line of merchant street address.	60AN	Required
addressLine2	Second line of merchant street address.	60AN	Optional
City	Merchant City	25AN	Required
State/Province	Merchant State or Province	AN	Conditional (required for USA and CA)
postalOrZipCode	Merchant Postal or Zip code	14AN	Conditional (required for USA and CA)
Country	Merchant Country	N	Required

Table 19 ageType Object

Field Name	Field Description	Field Length/ Data Type	Required/Optional
years	Number of years that the business has been in operation.	N (Whole numbers, no decimals, between 0 and 255)	Not required for portfolios.
months	Number of months that the business has been in operation.	N (Whole numbers, no decimals, between 1 and 12)	Not required for portfolios.

Table 20 BusinessOwnershipType Object

Field Name	Field Description	Field Length/ Data Type	Required/Optional
ownerName	Business owner name	40AN	Not required for portfolios.
ownerJobTitle	Business owner job title	40AN	Not required for portfolios.

Codes



Response Status Codes

The table below contains specific response status codes and their descriptions.

Table 21 Response Status Codes

Message	Description
Failed	An error occurred while processing the request.
In Progress	Request processing is in progress.
Partial Success	Some of the merchants in the request were processed but others had errors.
Pending	The request is pending due to an issue and will continue after some time.
Successful	The request was successfully processed.

Error Codes

When failures occur during request processing, the response XML provides the information necessary in order to explain the cause of the failure, including the error code and error description.

An error code range is defined based on components like errors in the merchant information, processor information, user details, product settings, and admin and contact details. Each component maps to a different range of error codes.

System- and database-related errors are included in a different range.

Table 22 Error Code Ranges

Error Code Range	Error Description
E1001 - E2000	Errors in the merchant information.
E2001 - E3000	Errors in the merchant contact and administrator information.

Table 22 Error Code Ranges

Error Code Range	Error Description
E3001 - E4000	Errors in the processor information.
E4001 - E5000	Errors in the product settings information.
E5001 - E6000	System and database errors.

Specific Error Codes and Descriptions

The table below contains specific error codes and their descriptions.

Table 23 Error Codes

Error Code	Description
E1001	Merchant Name is required.
E1002	Merchant Name can accept alphanumeric characters, spaces, and some special characters.
E1003	Merchant Name cannot exceed 25 characters.
E1004	Merchant Address is required.
E1005	Merchant Address can accept only alphanumeric characters and spaces.
E1006	Merchant Address cannot exceed 60 characters.
E1007	Merchant Address 2 can accept only alphanumeric characters and spaces.
E1008	Merchant Address 2 cannot exceed 60 characters.
E1009	Merchant City is required.
E1010	Merchant City can accept only alphanumeric characters and spaces.
E1011	Merchant City cannot exceed 13 characters.
E1012	Merchant State or Province can contain only alphanumeric characters.
E1013	Merchant State specified is not present in the allowed US states list.
E1014	Merchant Postal Code does not meet the postal code standard of the specified country.
E1015	Merchant Country is required.
E1016	Merchant Country can contain only alphanumeric characters.
E1017	Merchant Country is three characters.
E1018	Merchant Country specified is not present in the allowed countries list.
E1019	Merchant Phone Number is required.
E1020	Merchant Phone Number does not meet the phone number standard.
E1021	Merchant email address is not in the correct format.
E1022	Merchant email address cannot exceed 30 characters.
E1023	Merchant Time Zone is required.
E1024	Merchant Time Zone is not present in the allowable time zone list.

Table 23 Error Codes (Continued)

Error Code	Description
E1113	Merchant already exists.
E1026	Account ID <value> is already in use.</value>
E1027	Merchant ID format is invalid: <value></value>
E1103	Merchant ID not found.
E1100	Merchant ID cannot be blank or Null.
E1029	Merchant is already activated.
E1030	Company configuration already exists for profile <value>.</value>
E1031	Merchant mapping already exists for platform <value>.</value>
E1032	Attempted to add a duplicate merchant profile using profileId <value>.</value>
E1033	Merchant URL is invalid.
E1034	Merchant URL cannot exceed 13 characters.
E1090	Invalid merchant status.
E1091	Invalid transition of Merchant status from <value> to <value>.</value></value>
E1095	System Error while performing update for merchant information.
E1038	Merchant ID is required.
E1101	Merchant ID cannot exceed 30 characters.
E1040	Merchant ID can contain only alphanumeric characters and underscores.
E1041	Merchant ID not found.
E1104	Boarding Request ID is required.
E1105	Boarding Request ID must be between eight and 36 characters.
E1107	Passphrase must be between 7 and 32 characters and cannot contain spaces. Please re-enter.
E1108	Passphrase is required.
E1109	Organization ID is required.
E1110	Organization ID cannot be greater than 30 characters.
E1112	Organization ID not found.
E1044	Boarding Request ID can contain only alphanumeric characters and hyphen.
E2001	Contact First Name is required.
E2002	Contact First Name cannot exceed 50 characters.
E2003	Contact Last Name is required.
E2004	Contact Last Name must be between two and 50 characters.
E2005	Contact Email Address is required.
E2006	Contact Email Address is not in the correct format.
E2007	Contact Email cannot exceed 100 characters.
E2008	Contact Phone Number is required.
_	

Table 23 Error Codes (Continued)

Error Code	Description
E2009	Contact Phone Number does not meet the phone number standard.
E2010	Business information was not found for profile <value>.</value>
E2011	Company configuration already exists for profile <value>.</value>
E2012	System Error while performing update for contact information.
E2013	Business contact information is required.
E3001	<value> is not a valid attribute name for processor <value>.</value></value>
E3002	<value> is not a valid processor name.</value>
E3003	The processor type <value> is not a supported processor for the <value> gateway platform.</value></value>
E3004	The solution type <value> is not supported in this context.</value>
E3005	Merchant ID <value> was not boarded with solution type <value>.</value></value>
E3006	More than one active processor has been specified for merchant ID <value>.</value>
E3007	<value> processor configuration already exists for profile <value>.</value></value>
E3008	Processor configuration was not found for profile <value>.</value>
E3009	Multiple configurations for processor <value> are not supported.</value>
E3010	<value> is not a valid attribute name for a miscellaneous configuration item.</value>
E3011	Invalid currency code.
E3012	Invalid payment type.
E3013	Processor Name is required.
E3014	Processor Name is not valid.
E3015	At least one merchant ID is required for a Visa payment type.
E3016	At least one merchant ID is required for a Visa payment type.
E3017	Merchant ID for <value> currency with payment type <value> should have a minimum of 2 characters.</value></value>
E3018	Merchant ID for <value> currency with payment type <value> cannot exceed <value> characters.</value></value></value>
E3019	Merchant ID for <value> currency with payment type <value> can contain only alphanumeric characters.</value></value>
E3020	Terminal ID for <value> currency with payment type <value> should have a minimum of two characters.</value></value>
E3021	Terminal ID for <value> currency with payment type <value> cannot exceed <value> characters.</value></value></value>
E3022	Terminal ID for <value> currency with payment type <value> can contain only alphanumeric characters.</value></value>
E3023	<value> is a required field.</value>
E3024	Not a valid value for field <value>.</value>
E3025	<value> can contain only numbers.</value>

Table 23 Error Codes (Continued)

Error Code	Description
E3026	<value> can contain only alphanumeric characters.</value>
E3027	<value> cannot exceed 1 characters.</value>
E3028	<value> should have a minimum of 1 character(s).</value>
E3029	System Error while performing update for processor information.
E4001	Profile Name is required.
E4002	Profile Name cannot exceed 100 characters.
E4003	Profile Name does not exist.
E4004	Profile Description cannot exceed 250 characters.
E4005	System Error while performing update for products.
E5001	Database error updating <value> with <value>.</value></value>
E5002	Account Boarding on Cybs failed for Profile ID <value> using Account ID <value>.</value></value>
E5003	Merchant Boarding on Cybs failed for Profile ID <value> using Merchant ID <value>.</value></value>
E5004	Merchant Activation on Cybs failed for Profile ID <value> using Merchant ID <value>.</value></value>
E5005	Generic System Error during merchant update.
E7001	Invalid request identifier in the URL. Verify and resubmit the request.
E7002	Request is being processed. Check back later.
E7003	Duplicate boarding request Id. Correct and submit the request again.
E7004	Request does not contain xml payload. Correct and submit the request again.
E7007	Request does not contain Processor Information. Please correct and submit the request again.
E7008	Invalid Request. Either Processor Information or Skip Processor should be sent in the request.
E3032	Skip Processor is not valid for merchant update.

B

Test Integration with Merchant Management Service

Client Code Implementation

Follow these steps to ensure that the client code is implemented correctly and will pass Merchant Management Service API authentication.

- **Step 1** Create the authentication keys as described in "Merchant Management Service API Authentication," page 7.
- **Step 2** Generate the header as described in the Developer Center Getting Started Guide.
- **Step 3** Create an XML file with the merchant details. See Chapter 2, "Merchant Boarding Request XML Example," on page 23 for an example.
- **Step 4** Use the above file to create the ServiceRequest object.
- **Step 5** Execute the client to send the request to: https://api.cybersource.com/merchant-mgmt/v2/merchant-batch-jobs.

A success response should be returned. See Chapter 2, "Successful Service Response Example," on page 26 for an example.

Merchant Management Service API Call

Follow these steps to test the board merchant -Merchant Management Service API call.

- Step 1 Use the href value https://api.cybersource.com/merchant-mgmt/v2/merchant-batch-jobs/ {uuid} from the previous client code implementation test successful response.
- Step 2 Use the above URL to form the ServiceRequest object.
- Step 3 Execute the client and send the request. (Header holds the authentication information.)
 A success response should be returned. See Chapter 2, "Service Response Example," on page 28 for an example.