



CyberSource Reporting

Developer's Guide

April 2010

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Documentation Changes and Enhancements

The following table lists changes made in recent releases of this document.

Release	Changes
April 2010	Updated the On-Demand Single Transaction Report version 1.3 with the includeExtendedDetail field.
January 2010	Added FDC Compass. Added an appendix of card types and account types: Appendix E, " Types of Cards and Bank Accounts ," on page 171. Added RBS WorldPay Atlanta.
August 2009	<p>Updated the Single Transaction Report with version 1.6 as follows:</p> <ul style="list-style-type: none">• For information about requesting the report, see "On-Demand Single Transaction Report" on page 16.• For information about the new elements, see "Single Transaction Report" on page 45. The new elements are <BinAccountType>, <BinCountry>, <BinIssuer>, <BinScheme>, <GrandTotal>, <InfoCodes>, <IPCity>, <IPCountry>, <IPRoutingMethod>, <IPState>, and <TravelData>.• For the new DTD, see "Version 1.6" on page 137.• For the information codes that can be displayed in the new <InfoCodes> element, see Appendix H, "Score Information Codes," on page 183. <p>Added information about Boletos Bancários and about the Brazil extension for CyberSource Latin American Processing to these reports:</p> <ul style="list-style-type: none">• Single Transaction Report (version 1.4):<ul style="list-style-type: none">- For information about requesting the report, see "On-Demand Single Transaction Report" on page 16.- For a description of the report, see "Single Transaction Report" on page 45.- For the report's DTD, see "Version 1.4" on page 130.- For a sample for the Brazil extension, see "Version 1.4 for a Credit Card" on page 152.- For a Boleto Bancário sample, see "Version 1.4 for a Boleto Bancário" on page 154.• Payment Events Report (XML format only):<ul style="list-style-type: none">- For descriptions of the new fields, see "<BankTransfer>, <CreditCard>, and <DirectDebit>" on page 34.- For the report's DTD, see "Payment Events Report" on page 118.• Payment Submission Detail Report (XML format only):<ul style="list-style-type: none">- For a description of the report, see "Payment Submission Detail Report" on page 43.- For the report's DTD, see "Payment Submission Detail Report" on page 119.- For a sample for the Brazil extension, see "Transaction with CyberSource Latin American Processing" on page 148.

Release	Changes
June 2009	<p>Added an appendix of processor values: Appendix D, “Payment Processors,” on page 167.</p> <p>Added version 1.5 of the Single Transaction Report: “On-Demand Single Transaction Report” on page 16.</p> <p>Added information for check transactions processed with the CyberSource ACH Service:</p> <ul style="list-style-type: none">• In the Single Transaction Report (XML format only): <EventType> in Table 44 on page 61.• In the Payment Events Report:<ul style="list-style-type: none">- XML format: Event in Table 22 on page 38.- CSV format: event_type in Table 82 on page 104.- Both formats: “Banking Codes in the Payment Events Report” on page 179.
March 2009	<p>Added version 1.3 of the Single Transaction Report: “On-Demand Single Transaction Report” on page 16.</p>

Chapter 1

Introduction

This chapter explains how to use CyberSource reports.

[User Permissions](#)

[Available Reports](#)

[Report Formats](#)

To download most of the reports described in this guide, you need to subscribe to them in the [Business Center](#). All merchants are automatically subscribed to the Payment Submission Detail Report and the Transaction Exception Detail Report.

Reports are available in XML and CSV formats. You cannot receive a report in more than one format.

User Permissions

Administrators can subscribe to, configure, view, and download reports for all the merchant IDs that they control. If you are an administrator, control access to reports by creating users for each of your merchant IDs, and give each user the correct access rights. You must set the permissions for all the users in the User Administration and Role Administration sections of the [Business Center](#) ([Figure 1](#)). For instructions on setting the user permissions, see the online help.

This table describes the reports permissions available for users.

Table 1 Reporting Permissions

Permission	Description
Report Settings View	Can see the report settings and subscriptions.
Report Settings Management	Can modify report settings and subscriptions.
Report View	Can search for and view reports.
Report Download	Can download programmable reports but cannot log into the Business Center .
Important You cannot use an administrator account to download reports.	

User Administration

[I need help with this page.](#)

Users currently authorized to access your account are listed below. To add a new user, click **Add User**. To modify or delete a user, click a user name in the table.

User Name	Role	Name	Email Address
ubcyp1_3	admin	James	
ubcp3user1	reportdownload	ubc p3user1	
ubcp3user2	custom	ubcp3 user2	
ubcp3user4	custom	ubcp3 user4	
ubcp3user5	custom	ubcp3 user5	
ubcp3user6	custom	ubcp3 user6	
akuma	custom	ashok	
hmoham	custom	Haneef	
vdddsa	custom	Vin	

Add User

Role Management

[I need help with this page.](#)

Roles associated with your organization are listed below. To add a new role, click **Add New Role**. To modify or delete an existing role, click a role name in the table.

Role	Description
Administrator	This role has all permissions.
Report Download	This role has only the report download permission.
xxxxxxxxxx	
'xxxxxxxxxx	
yxxxxxxxxxx	
"	

Add Role

Figure 1 Sample User Administration Page

Available Reports

Each report shows your transactions for a single day. To view information for an entire week, month, or year, you must combine the daily reports.

[Payment Batch Detail Report](#)

[Payment Submission Detail Report](#)

[Payment Events Report](#)

[Transaction Exception Detail Report](#)

[Single Transaction Report](#)

[User Management Report](#)

Important The CSV version of the Payment Submission Detail Report uses quotation marks around each of the report's values. The CSV versions of other reports do not use quotation marks around each value.

Payment Batch Detail Report

This report contains summary information about credit card, electronic check, bank transfer, and direct debit transactions.

Payment Submission Detail Report

This report is identical to the Payment Batch Detail Report with the following additions: The Payment Submission Detail Report includes additional payment types and values. The XML format has more additional payment types and values than for the CSV format.

Payment Events Report

This report contains information about payment events that occur after a transaction is sent to the payment processor.

Transaction Exception Detail Report

This report provides detailed information about transactions that were flagged by CyberSource or by the processor because of errors in requests for follow-on transactions. When these errors occur, you are notified in the Message Center. These notifications remain in the Message Center for seven days. The following figures show the Message Center and descriptions of transaction errors.

Single Transaction Report

This report contains summary information about credit card, electronic check, Bill Me Later, China processing, Boletos Bancários, and bank transfers for a single request ID.

Cybersource Business Center

Welcome

Welcome to the CyberSource Business Center — your complete resource for payment management. Here, you can find enhanced versions of CyberSource support applications, such as transaction search screens, reporting, user management, and new applications, such as our Virtual Terminal and the Subscription Payments service.

First visit to the Business Center?


If you are using the Business Center for the first time, please verify your contact information to ensure that you have access to all relevant information and alerts, and that you receive the best possible service. To review your account information, click Account Management > Merchant Information.

To find out how to create a complex password that is easy for you to remember but difficult for others to guess, see the [online help](#).

Thank you,
Cybersource Customer Support

Message Center

Processing Alerts

 [Transaction Errors for 04, Dec 2006](#) 12.05.2006

Products & Services Notifications

No Messages

Message Center

Transaction Errors for 04, Dec 2006

Some of the transactions, such as capture or credit requests, that you processed in the PRODUCTION system on Dec 04 were flagged by CyberSource or by your processor because of errors. These transactions, which were rejected at the time of the original request with the same errors, are displayed for your review in the Transaction Exception Detail Report. To see the errors, make sure that you are logged in to the PRODUCTION version of the Business Center, and go to Transaction Search > Exception Search. To download the errors in the Transaction Exception Detail Report, go to Reports > Reports Search.

[Back to Home](#)

Note For the Global Payment Services, this report covers errors in primary requests and follow-on requests.

Although you are automatically subscribed to this report, you can change the type of output between XML and CSV in the Report Subscription area of the [Business Center](#).

Reporting Formats

The reported errors are available in three forms:

- Daily report in XML ([page 25](#)) or CSV ([page 97](#)) format: You can view and download this report in the reports section of the [Business Center](#). If you view the report in the Business Center and the report contains data, you can link directly to each transaction's details page. Daily reports remain available for 6 months.

- On-demand query ([“Requesting a Report With a Query API”](#) on page 13): You can request this kind of report at any time during the day. On-demand reports cover transactions that have taken place during the previous 24 hours.
- Exception search: In the Transaction Search area of the [Business Center](#), you can search for errors that might have occurred during a specific period of time, with a maximum of six months. These errors link to the transaction details page. With this feature, you can find and correct the errors before the daily report becomes available. For more information, see the online help.

Regardless of the format that you choose, the reported data remains available for six months.

Errors Reported

In all forms of the report, you are notified when follow-on transactions fail all processing attempts, which can occur even after you receive a success message in the API reply. Therefore, before accepting an order, you need to check this report to make sure no errors occurred for the transaction.

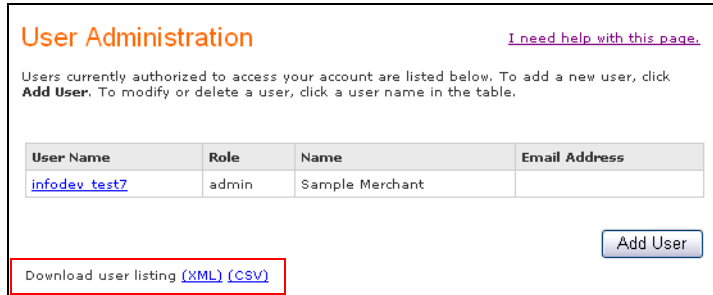
User Management Report

To see at a glance all the permissions and roles granted to users, users with the appropriate permission can download a daily report or use a query to request an on-demand user management report. The report is available in CSV or XML format. For example, this report in CSV format was run September 14, 2007. The report shows two enabled users:

- The first user has a custom role with permissions for processing payment authorizations in the Virtual Terminal.
- The second user has the report download role, which enables the user to download reports but not to log into the Business Center.

```
User Listing Report,Version 1.0,2007-09-14
Username,Merchant ID,First Name,Last Name,Email,Date Created,LastAccess,Status,Role,
Permissions
infodev_user,infodev,Jane,Doe,,2007-03-29 07:47 GMT,2007-09-21 11:44 GMT,Enabled,
Custom,Virtual Terminal Transaction|Payment Authorization
infodev_user_2,infodev,John,Doe,,2007-03-29 07:47 GMT,2007-09-21 08:00 GMT,Enabled,
Report Download,Report Download
```

This figure shows the User Administration page with the download feature outlined in red.



The screenshot shows the 'User Administration' page. At the top, there is a title 'User Administration' in orange and a link 'I need help with this page.' in purple. Below the title, a message states: 'Users currently authorized to access your account are listed below. To add a new user, click **Add User**. To modify or delete a user, click a user name in the table.' A table with four columns is displayed: 'User Name', 'Role', 'Name', and 'Email Address'. The first row contains the values 'infodev_test7', 'admin', 'Sample Merchant', and an empty cell. Below the table, there is a button labeled 'Add User'. At the bottom left, a red rectangular box highlights the text 'Download user listing (XML) (CSV)'.

User Name	Role	Name	Email Address
infodev_test7	admin	Sample Merchant	

[Download user listing \(XML\) \(CSV\)](#) [Add User](#)

CyberSource recommends that you immediately save the report on your computer. You can save the report by date if you are a merchant or by merchant ID if you are an administrator. By downloading the report regularly, you can easily keep track of the changes among your users and their permissions. You can obtain this report at any time.

For a complete description of the report, see "[User Management Report](#)" on page 91 for the XML format or "[User Management Report](#)" on page 114 for the CSV format.

Report Formats

Each report is available in one or more formats: PDF, CSV (comma-separated values), or XML (eXtensible Markup Language):

- PDF is available for some of the pre-defined reports only. You can use Adobe Acrobat Reader® to view, save, or print PDF files. If Acrobat Reader is not installed on your computer, you can download it for free at [Adobe Systems](http://adobe.com). The authorization and capture reports are available in PDF format.
- CSV is a data format in which each column value is separated by a comma from the value in the next column, which allows you to transfer data from one application to another (such as Microsoft Excel), and each row starts a new line of data. For example, data taken from a database and represented in CSV format looks similar to this sample that contains the same information as the XML report above:

```
Row_Descriptor,MerchantID,RequestID,TransactionDate,MerchantReferenceCode,
Request,abc0002,0818691223270167904565,2004-04-13T15:12:09-07:00, 1081869122069,
```

All reports are available in CSV format.

- XML is designed especially for Web documents. With it, you can create your own tags so that you can interpret your data precisely and completely. This sample shows a sample report in XML format.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM "https://ebc.cybersource.com/ebc/reports/dtd/per.dtd">
<Report Name="Payment Events"
  Version="1.0"
  xmlns="https://ebc.cybersource.com/ebc/reports/dtd/per.dtd"
  MerchantID="abc0002"
  ReportStartDate="2009-04-13T07:00:00-07:00"
  ReportEndDate="2009-04-14T07:00:00-07:00">
  <Requests>
    <Request RequestID="0818691223270167904565"
      TransactionDate="2009-04-13T15:12:09-07:00"
      MerchantReferenceCode="1081869122069">
    </Request>
  </Requests>
</Report>
```

XML Conventions

To understand how a report in XML format is constructed, you need to be familiar with the syntax and the data types used for XML reports.

Report Declaration

The report is described as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM URIreference>
<Report Name= CDATA
    Version=NMToken
    xmlns=CDATA
    MerchantID=CDATA
    ReportStartDate=CDATA
    ReportEndDate=CDATA>
```

Note The value of `URIreference` is the same as that for `xmlns`. Whether you are operating in test or live mode, the namespace always refers to `ebctest` instead of `ebc`.

Element Declaration

Elements are described as follows:

```
<Sample Attribute=CDATA>
    (Element)
    (ChoiceOne) | (ChoiceTwo)
    (ComplexElement)
    (OptionalElement)?
    (RequiredRecurringElement)+
    (OptionalRecurringElement)*
</Sample>
```

Note In the DTDs, the `?`, `+`, and `*` characters may be inside or outside the parentheses. Either syntax is acceptable.

Table 2 Conventions for XML Syntax

Convention	Description
<Sample>	Parent of the following elements.
Attribute=CDATA	Name of the attribute, followed by the XML data format for the attribute.
(Element)	Required element. Must appear only once.
(ChoiceOne) (ChoiceTwo)	Either the element <ChoiceOne> or the element <ChoiceTwo>, but not both.

Table 2 Conventions for XML Syntax (Continued)

Convention	Description
(ComplexElement)	Element with one or more child elements.
(OptionalElement)?	Optional element. Can appear once or be omitted.
(RequiredRecurringElement)+	Required element. Can appear one or more times.
(OptionalRecurringElement)*	Optional element. Can appear zero or more times.

CSV Conventions

CSV reports are described as follows:

- The first and second records in the report describe the report format and indicate the dates included in the report.
- If the value of a field contains a comma, the contents of the field are surrounded by double quotes ("). For example, the value A, B, C is represented by "A, B, C".
- If the value of a field contains a double quote ("), the contents of the field are surrounded by double quotes, and the double quote is represented as two double quotes. For example, the value Sample "value" is represented by "Sample ""value"""
- Records are separated by a carriage return and a line feed.

Data Types and Lengths

These terms are used to refer to the data type of each field:

- Amount: Amount includes a decimal point if necessary.
- Boolean: Single character, such as T for true or F for false.
- Date and time:
 - Date: YYYY-MM-DD, with YYYY (four-digit year), MM (two-digit month), and DD (two-digit day).
 - Time: <date>THH:MM:SS[+ | -]HH:MM where:
 THH:MM:SS is the time, with HH (hours), MM (minutes), and SS (seconds).
 [+ | -]HH:MM is the time zone's offset from Greenwich Mean Time (GMT or UTC), with HH representing hours and MM representing minutes. The number is prefixed by either a plus (+) or minus (-) to indicate whether the offset adds to or subtracts from UTC. For example, the offset for Pacific Daylight Time is -07:00.

Example 2009-04-13T07:00:00-07:00 represents April 4, 2009 at 7 AM PDT.

- Numeric: string containing numbers.
- String: Letters, numbers, and special characters (for example, @, #, and %). All text uses UTF-8 character encoding.

Data lengths indicate the maximum length of each field. Fields shorter than the maximum length are not padded.

Chapter 2

Requesting On-Demand Reports

This chapter explains how to download CyberSource reports.

[Requesting a Report With a Client Application](#)

[Requesting a Report With a Query API](#)

Requesting a Report With a Client Application

The client uses a GET method and does not use search parameters. For the Single transaction report, you can obtain the complete daily report in XML or CSV format as follows:

- XML: Because you cannot specify a DTD version, the most current report version is used.
- CSV: The basic report version is used.

Client Application Requirements

To connect to the report server, your client application must support HTTPS connections. An HTTPS connection is similar to an HTTP connection, but it is encrypted by using Secure Sockets Layer (SSL). Your client application must support HTTP/1.0 or HTTP/1.1 and SSL v2 or SSL v3 connections.

HTTPS libraries are available for many programming languages, including Java, C/C++, Perl, and Visual Basic. You can implement a client in any language that allows you to use HTTPS to communicate with the report server.

Your client application must use Basic Access Authentication to send the user name and password. Many HTTPS client libraries implement this authentication method. For information about Basic Access Authentication, see <http://www.ietf.org/rfc/rfc2617.txt>.

Important Although you may be able to use a third-party client application to download CyberSource reports, CyberSource does not recommend or support third-party client applications or client libraries that may interfere with CyberSource applications.

You can use the information in this guide to write applications that process these reports automatically.

Format Requirements

This section describes the appropriate format for a request and a reply.

Request Format

To request a report, your client application must send an HTTP GET message to the report server. The URL that you specify in your message indicates which report you want to download. Format the URL as follows:

```
https://<server_name>/DownloadReport/YYYY/MM/DD/<merchant_ID>/  
<report_name>.<report_format>
```

For example, if your merchant ID were `sample`, you would use the following URL to download the XML version of the August 1, 2009 Payment Events Report from the production system:

```
https://ebc.cybersource.com/ebc/DownloadReport/2009/08/01/sample/  
PaymentEventsReport.xml
```

[Table 3](#) describes each value in the URL.

Table 3 Report URL Values

Value	Description
<code><server_name></code>	Name of the server from which to download the report. Use one of these values: <ul style="list-style-type: none">• Test server: <code>ebctest.cybersource.com/ebctest</code>• Production server: <code>ebc.cybersource.com/ebc</code>• Test reports server: <code>downloadreportstest.cybersource.com</code>• Production reports server: <code>downloadreports.cybersource.com</code>
<code>YYYY</code>	Four-digit year
<code>MM</code>	Two-digit month. For example, use <code>08</code> for August.
<code>DD</code>	Two-digit day. For example, use <code>01</code> for the first day of the month.
<code><merchant_id></code>	CyberSource merchant ID
<code><report_name></code>	Name of the report to download. Use one of these values: <ul style="list-style-type: none">• <code>PaymentBatchDetailReport</code>• <code>PaymentSubmissionDetailReport</code>• <code>PaymentEventsReport</code>• <code>TransactionExceptionDetailReport</code>

Table 3 Report URL Values (Continued)

Value	Description
<code><report_format></code>	Report format to download. Use one of these values: <ul style="list-style-type: none"> • <code>csv</code>: Comma-separated values • <code>xml</code>: Extensible Markup Language

You can add Basic Access Authentication parameters to the URL as follows:

```
https://<username>:<password>@<server_name>/DownloadReport/YYYY/MM/DD/<merchant_ID>/<report_name>.<report_format>
```

Reply Format

If the request is successful, the server responds by sending an HTTPS reply message. The body of this message contains the report that you requested.

Note You cannot receive the Payment Batch Detail Report in both XML and CSV formats.

For information about report formats, see Chapter 3, “[XML Reports](#),” on page 25 and Chapter 4, “[CSV Reports](#),” on page 97. For information about configuring your reports, see the online help.

If the request fails, the server sends an HTTP reply message that describes the error. Use this information to determine why the request failed and to debug your client application.

Requesting a Report With a Query API

The query uses a POST method with search parameters. As with the client application, this application uses Basic Access Authentication to send the user name and password. You can request these reports:

[On-Demand Transaction Exception Detail Report](#)

[On-Demand Single Transaction Report](#)

[On-Demand User Management Report](#)

On-Demand Transaction Exception Detail Report

Note In the Transaction Search area of the Business Center, you can search for errors that might have happened during a specific period of time, for a maximum of six months. These errors link to the transaction details page. With this feature, you can find and correct the errors before the daily report becomes available. For more information, see the online help.

The On-Demand Transaction Exception Detail Report is identical to the daily report except in the time of delivery and in the method used for obtaining the report. The reported data remains available for six months.

The query can be automated by a computer or viewed by a human. Although you can request this report as many times as you wish during the day, each time you will see only the errors that occurred after midnight Pacific time. The errors that occurred earlier appear in the daily version of the report.

The result of a query can include up to 2000 transactions. If your query results cover more than 2000 transactions, the report shows transactions from the start time until the limit is reached. If the report contains no errors, you receive an empty report. You are responsible for making sure that transactions are counted only once.

Formulating the Query

The requested interval cannot exceed 24 hours and you must use the UTC time format, which is indicated in the report as Pacific time. For example, when you set the time interval from 07:00:00 to 07:00:00, your search results will be identical to the daily report, which covers midnight to midnight Pacific time. To request the report, send the required data described in [Table 4](#) to one of these URLs:

```

Production https://ebc.cybersource.com/ebc/
            TransactionExceptionDetailReportRequest.do

Test        https://ebctest.cybersource.com/ebctest/
            TransactionExceptionDetailReportRequest.do

```

Table 4 Data for the On-Demand Transaction Exception Detail Report Query

Parameter	Field Name	Format	Required/ Optional
Merchant ID	merchantID		Required
User name	username	This optional field can be different from the merchant ID. If this field is empty, the merchant ID will be used to generate the report. Important If you use this field, make sure that the user name has the permission to download reports. Otherwise, you will receive an error message and will not be able to download the report.	Optional
Password	password		Required
Start date	startDate	YYYY-MM-DD	Required
Start time	startTime	HH:MM:SS	Required
End date	endDate	YYYY-MM-DD	Required
End time	endTime	HH:MM:SS	Required

Table 4 Data for the On-Demand Transaction Exception Detail Report Query (Continued)

Parameter	Field Name	Format	Required/ Optional
Report format	format	xml csv	Required

XML format. To use the XML format, write a program that can send the required fields in a POST request.

HTML format. To use the HTML format, write an HTML form with one of the URLs listed above. The following sample shows the `form` tag with the action to send a report request to the production URL. The form includes the required fields and a Submit button.

```
<form action="https://ebc.cybersource.com/ebc/
TransactionExceptionDetailReportRequest.do" method="post">
  <table>
    <tr><td>MerchantID</td><td> <input type="text" name="merchantID"></td></tr>
    <tr><td>UserName </td><td> <input type="text" name="username"></td></tr>
    <tr><td>Password </td><td> <input type="text" name="password"></td></tr>
    <tr><td>StartDate </td><td> <input type="text" name="startDate"></td></tr>
    <tr><td>StartTime </td><td> <input type="text" name="startTime"></td></tr>
    <tr><td>EndDate </td><td> <input type="text" name="endDate"></td></tr>
    <tr><td>EndTime </td><td> <input type="text" name="endTime"></td></tr>
    <tr><td>ReportFormat</td><td> <input type="text" name="format"></td></tr>
  </table>
  <input type="submit" value="Submit">
</form>
```

Viewing and Saving the Report

After sending a request, you receive a response immediately. The report contains all the transactions with data errors that occurred during the requested time period. If no orders contained errors, the report is empty.

XML format. If the query is successful, the results appear as a document of mime type `application/xml`. To use this report, write a program to save or process the XML data in the report.

HTML format. If you use a browser that supports XSLT, such as Microsoft Internet Explorer 6.0+ or Firefox 2.0, the XML file that you receive can be converted to HTML and formatted into a table that you can see in your browser. Save the report as follows:

- 1 Right-click the report.
- 2 Select **View Source**.

If you do not save the source, only the URL for the request is saved. The report appears in your default text editor.

- 3 Save the text file as an XML file.

The table representation is restored when you view the report again in the browser.

Interpreting Result Messages

All requests return the status code 200. If a system error occurs, you receive the HTTP error code 503 (Service unavailable). If your query contains an error, the body mime type is `text/plain` and the body of the message contains one of these errors:

Error	Message
Incorrect merchant ID user name, or password	Invalid login credentials Permission Denied
Incorrect date or time	Invalid date/time range
Format	Invalid format
Other error	The server is busy

Sample Report

Empty fields are represented slightly differently between the daily and the on-demand XML versions of the report: in the daily report, empty fields are shown in the format `<PaymentMethod/>` whereas in the on-demand report, they are shown in the format `<PaymentMethod></PaymentMethod>`.

For a sample report, see “[Transaction Exception Detail Report](#)” on page 160. The DTD is in Appendix A “[Transaction Exception Detail Report](#)” on page 142.

On-Demand Single Transaction Report

The query uses a POST method with search parameters to obtain the details of a single transaction. The content of the report is described on [page 45](#), the DTDs on [page 120](#), and the samples on [page 149](#).

Formulating the Query

You can request this report as many times as you wish each day. [Table 5](#) describes the request information.

Table 5 Data for the On-Demand Single Transaction Query

Parameter	Value	Required/ Optional
merchantID	Your CyberSource ID	Required
type	<code>transaction</code>	Required
subtype	<code>transactionDetail</code>	Required
requestID	Number of the transaction that you want to see	Required

Table 5 Data for the On-Demand Single Transaction Query (Continued)

Parameter	Value	Required/ Optional
includeExtendedDetail	<p>This field is optional and is used to determine the status of a capture request and its associated system-generated authorization for split shipment transactions. This field can contain one of these values:</p> <ul style="list-style-type: none"> • Predecessor: For follow-on capture requests, this includes details of the capture and the system-generated authorization. • Related: This includes the details of the capture request, the system-generated authorization, and any related transactions, such as original auth and capture. <p>Note This element is included only in versions 1.3 and greater.</p> <p>For more information on split shipment, see Credit Card Services Implementation Guide.</p>	Optional
versionNumber	<p>Version number that contains the information that you want. Each higher version contains all the elements and attributes of the lower version in addition to the elements and attributes introduced in the new version. If your report does not contain the data specific to the version, the elements and attributes specific to that version do not appear in your report.</p> <p>Note Although you can specify any of the versions, versions 1.4 and 1.5 are specific to the on-demand Single Transaction Report With a Query API whereas all other versions are specific to the daily report. If you do not specify a version, version 1.1 is used.</p> <p>1.6 BinAccountType, BinCountry, BinIssuer, BinScheme, GrandTotal, InfoCodes, IPCity, IPCountry, IPRoutingMethod, IPState, TravelData</p> <p>1.5 ACHVerificationResult, ACHVerificationResultMapped</p> <p>1.4 BoletoNumber, NumberOfInstallments</p> <p>1.3 PredecessorRequestID, User, includeExtendedDetail</p> <p>1.2 EventType, TransactionReferenceNumber</p> <p>1.1 Default version</p>	Optional

Send the information in the preceding table to one of these URLs:

Production <https://ebc.cybersource.com/ebc/Query>

Test <https://ebctest.cybersource.com/ebctest/Query>

XML format. To use the XML format, write a program that can send the required fields in a POST request.

HTML format. To use the HTML format, write an HTML form that uses one of the above URLs. The sample below shows the `form` tag with the `action` attribute to send a query request to the production URL. The form includes the required fields and a Submit button.

```
<form action="https://ebc.cybersource.com/ebc/Query" method="POST">
  <table>
    <tr>
      <td>merchantID</td>
      <td><input type="text" name="merchantID" value="example"></td>
    </tr>
    <tr>
      <td>type</td>
      <td><input type="text" name="type" value="transaction"></td>
    </tr>
    <tr>
      <td>subtype</td>
      <td><input type="text" name="subtype" value="transactionDetail"></td>
    </tr>
    <tr>
      <td>requestID</td>
      <td><input type="text" name="requestID" value="1613857572210138565732"></td>
    </tr>
    <tr>
      <td>versionNumber</td>
      <td><input type="text" name="versionNumber" value="1.5"></td>
    </tr>
    <tr>
      <td></td>
      <td><input type="reset"> <input type="submit" value="Submit"></input></td>
    </tr>
  </table>
</form>
```

Viewing and Saving the Report

You receive a response immediately.

XML format If the query is successful, the results appear as a document of mime type `application/xml`. To use this report, write a program to save or process the XML data in the report.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM "https://ebctest.cybersource.com/ebctest/reports/dtd/
tdr_1_5.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_5.dtd"
  Name="Transaction Detail"
  Version="1.5"
  MerchantID="example"
  ReportStartDate="2009-08-20T04:22:37-11:00"
  ReportEndDate="2009-08-20T04:22:37-11:00">
  <Requests>
    <Request>
      Complete details of a single transaction here
    </Request>
  </Requests>
</Report>
```

HTML format. The XML file that you receive is converted to HTML and formatted into a table that you can see in any browser that supports XSLT, such as Microsoft Internet Explorer 6.0 or Mozilla Firefox 3. Save the report as follows:

- 1 Right-click the report.
- 2 Select **View Source**.
If you do not save the source, only the URL for the request will be saved. The report appears in Notepad or in your default text editor.
- 3 Save the text file as an XML file.
The table representation is restored when you view the report again in the browser.

Interpreting Result Messages

All requests return the status code 200. If your query contains an error, the body mime type is `text/plain` and the body of the message contains one of these errors:

Error	Message
400	Please check the username and password Missing input parameter: type Missing input parameter: merchantID Invalid input parameter: type or subtype
401	Requires authentication
403	You are not authorized to access it

Error	Message
500	Invalid
	Missing input data
	Unable to find the request
	System error. Please try again later
501	GET is not supported by this URL

On-Demand User Management Report

The query uses a POST method with search parameters to obtain the list of your users and their permissions. A report applies only to users in production, not to those in the test environment.

Formulating the Query

You can request this report at any time. This table describes the request information.

Table 6 Data for the On-Demand User Management Report

Parameter	Field Name	Format
Merchant ID	merchantID	Merchant or account ID used to access the Business Center.
User name	username	Name used to access the Business Center. This field can be different from the merchant ID. If this field is empty, the value of merchantID is used to generate the report. Important To use this field, the user name must have the User Management permission.
Password	password	Password associated with the user name.
Users to be reported	reportMerchantID	Value that determines which users can be included in the report. This optional field can contain one of these values: <ul style="list-style-type: none"> <code>all</code>: Default value if the field is empty. Account ID (example: <code>sampleMerchant_acct</code>) Account user (example: <code>sampleMerchant_admin</code>) Merchant ID (example: <code>sampleMerchant</code>) Merchant user (example: <code>sampleMerchant</code>) Table 7 on page 21 shows how to use the preceding values with the merchant ID and user name.
Report format	format	xml csv

Table 7 Sample Report Content Options

merchantID	username	reportMerchantID	Content of the Report
Account Level			
sampleMerchant_acct	sampleMerchant_admin	all	All account users for sampleMerchant_acct and its merchant users
		sampleMerchant_acct	All account users for sampleMerchant_acct
		sampleMerchant	All merchant users for sampleMerchant
Merchant Level			
sampleMerchant	sampleMerchant	all	All merchant users for sampleMerchant
		sampleMerchant_acct	Not allowed
		sampleMerchant	All merchant users for sampleMerchant

Send the information in [Table 6](#) on page 20 to one of these URLs:

Production <https://ebc.cybersource.com/ebc/UserListing>

Test <https://ebctest.cybersource.com/ebctest/UserListing>

XML format. To use the XML format, write a program that can send the required fields in a POST request.

HTML format. To use the HTML format, write an HTML form that uses one of the previous URLs. The following sample shows the `form` tag with the `action` attribute to send a query request to the production URL. The form includes the required fields and a Submit button.

```
<form action="https://ebc.cybersource.com/ebc/UserListing" method="POST">
  <table>
    <tr>
      <td>merchantID</td>
      <td><input type="text" name="merchantID" value="example"></td>
    </tr>
    <tr>
      <td>username</td>
      <td><input type="text" name="username" value="userlisting"></td>
    </tr>
    <tr>
      <td>password</td>
      <td><input type="text" name="password" value="securepassword"></td>
    </tr>
    <tr>
      <td>format</td>
      <td><input type="text" name="format" value="csv"></td>
    </tr>
    <tr>
      <td></td>
      <td><input type="reset"> <input type="submit" value="Submit"></input></td>
    </tr>
  </table>
</form>
```

Interpreting Result Messages

All requests return the status code 200. If your query contains an error, the body mime type is `text/plain` and the body of the message contains one of these errors:

Error	Message
400	Please check the username and password Missing input parameter: type Missing input parameter: merchantID Invalid input parameter: type or subtype
401	Invalid user
403	You are not authorized to access it
405	Request method not allowed

Error	Message
500	Invalid Missing input data Unable to find the request System error. Please try again later.
501	GET is not supported by this URL

Viewing and Saving the Report

After sending a request, you receive a response immediately.

XML format If the query is successful, the results appear as a document of mime type `application/xml`. To use this report, write a program to save or process the XML data in the report.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM "https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd">
<Report Name="User Listing"
  Version="1.0"
  xmlns="https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd"
  ReportDate="2007-09-21 05:31 GMT">
  <Users>
    <User username="infodev_user"
      merchantid="infodev"
      firstname="Jane"
      lastname="Doe"
      email=""
      datecreated="2007-03-29 07:47 GMT"
      lastaccess="2007-09-21 04:26 GMT"
      status="Enabled"
      role="Custom">
      <Permissions>
      </Permissions>
    </User>
  </Users>
</Report>
```

HTML format. If you use a browser that supports XSLT, such as Microsoft Internet Explorer 6.0 or Firefox 2.0, you can convert the XML file that you receive to HTML and format the HTML into a table that you can see in your browser. Save the report as follows:

- 1 Right-click the report.
- 2 Select **View Source** or **Save Target As**.
If you do not save the source, only the URL for the request will be saved. The report appears in your default text editor.
- 3 Save the text file as an XML file.
The table representation is restored when you view the report again in the browser.

Chapter 3

XML Reports

This chapter describes the format of these CyberSource XML reports:

[Payment Batch Detail Report](#)

[Payment Events Report](#)

[Payment Submission Detail Report](#)

[Single Transaction Report](#)

[Transaction Exception Detail Report](#)

[User Management Report](#)

See “[XML Report DTDs](#)” on page 117 for the DTDs for XML reports.

Payment Batch Detail Report

The Payment Batch Detail Report can include these types of transactions:

- Bank transfer and bank transfer refund
- Credit card capture and credit
- Direct debit and direct debit refund
- Electronic check debit and electronic check credit
- PayPal transactions
- Bill Me Later transactions

The report includes only transactions that CyberSource has sent to the payment processor.

Note Transactions appear in the Payment Batch Detail Report before funds are transferred to or from your merchant bank account. To determine whether funds have been transferred, you must reconcile this report with your bank statements.

For more information about reconciling transactions, see the implementation guides for the services you are using.

<Report>

The <Report> element is the root element of the report.

Syntax

```
<Report Name=CDATA
      Version=NMTOKEN
      xmlns=CDATA
      MerchantID=CDATA
      ReportStartDate=CDATA
      ReportEndDate=CDATA>
  (Batches)
</Report>
```

Table 8 Attributes of <Report> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
Name	Name of the report. This element always contains the text <code>Payment Batch Detail</code> .	String (100)
Version	Version number of the report. The current version number is 1.0.	Numeric (10)
xmlns	XML namespace for the report. The namespace for the current version is <code>https://ebctest.cybersource.com/ebctest/reports/dtd/pbdr.dtd</code> .	String (100)
MerchantID	CyberSource merchant ID used for the transactions in the report.	String (30)
ReportStartDate	First date included in the report.	DateTime (25)
ReportEndDate	Last date included in the report.	DateTime (25)

Table 9 Child Elements of <Report> in the Payment Batch Detail Report

Element Name	Description
<Batches>	Payment batches that are included in the report. For a list of child elements, see <Batches> .

Example <Report> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://ebctest.cybersource.com/ebctest/reports/dtd/pbdr.dtd">
<Report Name="Payment Batch Detail"
  Version="1.0"
  xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/pbdr.dtd"
  MerchantID="sample"
  ReportStartDate="2001-06-25T07:00:00-07:00"
  ReportEndDate="2001-06-26T07:00:00-07:00">
  <Batches>
    ...
  </Batches>
</Report>
```

<Batches>

The <Batches> element contains all of the payment batches that are included in the report.

Syntax

```
<Batches>
  (Batch) *
</Batches>
```

Table 10 Child Elements of <Batches> in the Payment Batch Detail Report

Element Name	Description
<Batch>	Requests associated with a payment batch. For a list of child elements, see <Batch> .

Example <Batches> Element

```
<Batches>
  <Batch BatchID="10101"
    BatchDate="2001-08-15">
    ...
  </Batch>
</Batches>
```

<Batch>

The <Batch> element contains the requests associated with a payment batch. The element's attributes provide information about the payment batch.

Syntax

```
<Batch BatchID=CDATA
      BatchDate=CDATA>
  (Requests)
</Batch>
```

Table 11 Attributes of <Batch> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
BatchID	CyberSource batch in which the transaction was sent.	Numeric (39)
BatchDate	Date when the batch was sent to the processor.	Date (10)

Example <Batch> Element

```
<Batch BatchID="10101"
      BatchDate="2001-08-15">
  <Requests>
    ...
  </Requests>
</Batch>
```

<Requests>

The <Requests> element contains all of the requests from a payment batch.

Syntax

```
<Requests>
  (Request) *
</Requests>
```

Table 12 Child Elements of <Requests>

Element Name	Description
<Request>	Information about a payment transaction. For a list of child elements, see <Request> .

Example <Requests> Element

```

<Requests>
  <Request RequestID="0062929390000167905114"
    MerchantReferenceNumber="58EA07517FE5A71C016884DCB">
    ...
  </Request>
</Requests>

```

<Request>

The <Request> element contains information about a payment transaction.

Syntax

```

<Request RequestID=CDATA
  MerchantReferenceNumber=CDATA>
  (TransactionReferenceNumber)
  (PaymentMethod)
  (CurrencyCode)
  (Amount)
  (Application)
</Request>

```

Table 13 Attributes of <Request> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
RequestID	Unique identifier generated by CyberSource for the transaction.	Numeric (26)
MerchantReferenceNumber	Merchant-generated order reference or tracking number.	String (50)

Table 14 Child Elements of <Request> in the Payment Batch Detail Report

Element Name	Description	Data Type and Length
<TransactionReferenceNumber>	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID (Simple Order API) and to the <service>_trans_ref_no (SCMP API) reply fields.	String (60)
<PaymentMethod>	Type of card or bank account. For the possible values, see Appendix E, “ Types of Cards and Bank Accounts ,” on page 171.	String (50)

Table 14 Child Elements of <Request> in the Payment Batch Detail Report (Continued)

Element Name	Description	Data Type and Length
<CurrencyCode>	ISO currency code used for the transaction.	String (5)
<Amount>	Amount of the transaction.	Amount (19)
<Application>	CyberSource payment application processed for the transaction.	String (50)

Example <Request> Element

```
<Request RequestID="0062929390000167905114"
  MerchantReferenceNumber="58EA07517FE5A71C016884DCB">
  <TransactionReferenceNumber>SJZPTM07Y805
</TransactionReferenceNumber>
  <PaymentMethod>Visa</PaymentMethod>
  <CurrencyCode>USD</CurrencyCode>
  <Amount>100.00</Amount>
  <Application>ics_bill</Application>
</Request>
```

Payment Events Report

This report contains information about events that occur for:

- Bank transfers
- China payments and refunds
- Credit card transactions processed with the CyberSource Global Payment Service
- Direct debits
- Electronic check debits and credits
- PayPal transactions

Report Generation for the Global Payment Service. The report is generated daily Monday through Friday unless CyberSource does not receive a data file from the processor, receives the data file after the cut-off time, or receives an empty data file. Because the report is not generated on weekends, the report that you download on Mondays contains all your weekend transactions. Make sure your implementation can handle reports that contain transactions spanning multiple processing days.

The report is generated for the date when CyberSource processes the file, not for the date when the processor submits the file. Because of cut-off and processing times, transactions that you process on Day 1 will most likely appear on the report on Day 3.

If the generation of the report is delayed, you are notified. Because the report generated

after a delay may span more than one day, make sure you can track the delayed reports.

When CyberSource needs to regenerate a report, the entire report is generated, not selected transactions. You are notified as soon as the new version of the report is available. Make sure your implementation can recognize and process only the transactions that were modified or added to the report.

Transaction Exceptions for the Global Payment Service. Although most reports contain transactions that you can match, your implementation also needs to recognize payment and refund exceptions. In some cases, you might need to search your system manually for the original request ID, which remains in the CyberSource system for six months.

- **Rejected payments and refunds**
Although the reply that you receive from CyberSource might indicate that a transaction was successful, the processor can occasionally reject a transaction. Rejected transactions do not appear on the Payment Events Report. However, Customer Support will notify you by email if rejections occur.
- **Delayed payments**
You need to be aware that payments can occasionally be delayed.
- **Unmatched payments and refunds**
Unmatched events occur when the processor generates an event that cannot be matched or when the event is older than six months. If CyberSource cannot match the payment or refund to a specific transaction, CyberSource generates a new request ID for the unmatched event. You may need to search manually for the original request in your system.
- **Corrections to payments and refunds**
When the amount of the original event is changed or the event is reversed, you need to update the original payment or refund.

Duplicate payments and refunds can appear in the same or different reports. You can ignore these events because they will match an existing request ID. You may need to search manually for the original request in your system.

<Report>

The <Report> element is the root element of the report.

Syntax

```
<Report Name=CDATA
    Version=NMTOKEN
    xmlns=CDATA
    MerchantID=NMTOKEN
    ReportStartDate=NMTOKEN
    ReportEndDate=NMTOKEN>
    (Requests)
</Report>
```

Table 15 Attributes of <Report> in the Payment Events Report

Attribute Name	Description	Data Type and Length
MerchantID	CyberSource merchant ID used for the transaction.	String (30)
Name	Name of the report. This field always contains the text <code>Payment Events</code> .	String (100)
ReportStartDate	First date that is included in the report.	DateTime (25)
ReportEndDate	Last date that is included in the report.	DateTime (25)
Version	Version number of the report. The current version number is 1.0.	Numeric (10)
xmlns	XML namespace for the report. The namespace for the current version is <code>https://ebc.cybersource.com/ebc/reports/dtd/per.dtd</code> .	String (100)

Table 16 Child Elements of <Report> in the Payment Events Report

Element Name	Description
<Requests>	Contains all of the requests in the report. For a list of child elements, see <Requests> .

Example <Report> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://ebc.cybersource.com/ebc/reports/dtd/per.dtd">
<Report Name="Payment Events"
    Version="1.0"
    xmlns="https://ebc.cybersource.com/ebc/reports/dtd/per.dtd"
    MerchantID="CyberSource"
    ReportStartDate="2002-08-16T08:00:00-07:00"
    ReportEndDate="2002-08-17T08:00:00-07:00">
    <Requests>
        ...
    </Requests>
</Report>
```


<Requests>

The <Requests> element contains all the requests that are included in the report.

Syntax

```
<Requests>
  (Request) *
</Requests>
```

Table 17 Child Elements of <Requests> in the Payment Events Report

Element Name	Description
<Request>	Information about a single request. For a list of child elements, see <Request> .

Example <Requests> Element

```
<Requests>
  <Request RequestID="0004223530000167905139"
    MerchantReferenceNumber="3C515C71D48F631">
    ...
  </Request>
</Requests>
```

<Request>

The <Request> element contains information about the type of payment transaction.

Syntax

```
<Request RequestID=CDATA
  MerchantReferenceNumber=CDATA>
  (BankTransfer) | (CreditCard) | (DirectDebit) | (Check) | (PayPal)
</Request>
```

Table 18 Attributes of <Request> in the Payment Events Report

Attribute Name	Description	Data Type and Length
RequestID	Unique identifier generated by CyberSource for the transaction. If your payment processor is Global Collect, the value inserted into this field can be 1 followed by 21 zeros in these cases: <ul style="list-style-type: none"> The transaction is older than six months, and the request ID is no longer stored. The transaction information sent by the processor, excluding a valid request ID. 	Numeric (26)
MerchantReferenceNumber	Merchant-generated order reference or tracking number.	String (50)

Table 19 Child Elements of <Request> in the Payment Events Report

Element Name	Description
<BankTransfer>	Information about a bank transfer transaction, a China payment, or a China refund. For a list of child elements, see <BankTransfer> , <CreditCard> , and <DirectDebit> .
<CreditCard>	Information about a credit card transaction, a China payment, or a China refund. For a list of child elements, see <BankTransfer> , <CreditCard> , and <DirectDebit> .
<DirectDebit>	Information about a direct debit transaction. For a list of child elements, see <BankTransfer> , <CreditCard> , and <DirectDebit> .
<Check>	Information about a check transaction. For a list of child elements, see <Check> .
<PayPal>	Information about a PayPal transaction. For a list of child elements, see <PayPal> .

Example <Request> Element

```
<Request RequestID="0004223530000167905139">
  MerchantReferenceNumber="3C515C71D48F631">
    <BankTransfer>
      ...
    </BankTransfer>
  </Request>
```

<BankTransfer>, <CreditCard>, and <DirectDebit>

The <BankTransfer>, <CreditCard>, and <DirectDebit> elements contain information about transactions that use these payment types. Information about China payments and China refunds is contained in the <CreditCard> element for international credit card transactions and in the <BankTransfer> element for Chinese bank card and PayEase eWallet transactions. All three elements have the same attributes and child elements. The <BankTransfer> element is used in the rest of this section to show the syntax for all three elements.

Syntax

```
<BankTransfer Event=CDATA
  EventDate=NMToken>
  (TransactionReferenceNumber)
  (MerchantCurrencyCode)
  (MerchantAmount)
  (ConsumerCurrencyCode)
  (ConsumerAmount)
  (ProcessorMessage)?
  (Exception)?
  (BoletoNumber)?
</BankTransfer>
```

Table 20 Attributes of <BankTransfer>, <CreditCard>, and <DirectDebit> in the Payment Events Report

Attribute Name	Description	Data Type and Length
Event	<p>Type of event that occurred for the transaction.</p> <p>Bank Transfers, Credit Cards, and Direct Debits</p> <ul style="list-style-type: none"> • Chargeback: The customer did not authorize the transaction. For details about the chargeback, see <ProcessorMessage>. • Correction: The payment or refund was corrected, or the bank was unable to credit the customer's account; the values is either positive or negative. • Failed: The account was invalid or disabled. For details about the failure, see <ProcessorMessage>. • Other: The processor reported an unanticipated event. • Payment: The payment was received by the processor's bank; the value is always positive. • Refund: The money was returned to the customer; the value is always negative. For details about the refund, see <ProcessorMessage>. • Reversal: A payment was reversed. For details about the reversal, see <ProcessorMessage>. • Settled: The transaction has been settled: the payment has been received, or the refund has been given to the customer. 	Alpha (20)

Table 20 Attributes of <BankTransfer>, <CreditCard>, and <DirectDebit> in the Payment Events Report

Attribute Name	Description	Data Type and Length
	<ul style="list-style-type: none"> Settled Unmatched: A bank transfer payment has been received but cannot be matched to the original request. 	
	China Payments and China Refunds	
	<ul style="list-style-type: none"> Chargeback: The original payment transaction is being disputed by the cardholder or the cardholder's bank. Payment Abnormal: The payment has been held up for regulatory or legal reasons. Payment Declined: The processor has refused the payment request. Payment Failed: The payment request failed. The reason is not specified. Payment Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled payment. Payment Initiated: The payment request was received from the merchant. Payment Lost: The processor does not acknowledge receiving the payment request. Payment Pending Proc: The payment has not been completed. It is awaiting settlement by the processor. Payment Settled: The payment has been confirmed by the processor and is expected to be funded. Refund Abnormal: The refund has been held up for regulatory or legal reasons. Refund Declined: The processor has refused the refund request. Refund Failed: The refund request failed. The reason is not specified. Refund Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled refund. Refund Pending Cyb: The refund has not been completed. It is awaiting transmission by CyberSource. Refund Pending Proc: The refund has not been completed. It is awaiting settlement by the processor. Refund Settled: The refund has been confirmed by the processor and is expected to be funded. Unknown: The processor does not acknowledge receiving the request. 	
	Boletos Bancários	
	<ul style="list-style-type: none"> Fulfilled: The bank issuing the Boleto Bancário has received funds and has deposited them into your account. Pending Fulfillment: The Boleto Bancário was issued, but the customer has not submitted it, or it is still in the Brazilian Clearing System. 	

Table 20 Attributes of <BankTransfer>, <CreditCard>, and <DirectDebit> in the Payment Events Report

Attribute Name	Description	Data Type and Length
EventDate	Date of the event.	DateTime (25)

Table 21 Child Elements of <BankTransfer>, <CreditCard>, and <DirectDebit> in the Payment Events Report

Element Name	Description	Data Type and Length
<TransactionReferenceNumber>	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to these reply fields: <service>_reconciliationID (Simple Order API) and <service>_trans_ref_no (SCMP API).	String (60)
<MerchantCurrencyCode>	ISO currency code of the merchant's currency.	String (5)
<MerchantAmount>	The amount deposited or withdrawn from the merchant's account for the event.	Amount (19)
<ConsumerCurrencyCode>	ISO currency code of the customer's currency.	String (5)
<ConsumerAmount>	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
<ProcessorMessage>	Additional information about the event from the processor, such as an error message or explanation. For Global Collect direct debit reversals, this field contains a banking reversal code. For more information, see Appendix G, " Banking Codes in the Payment Events Report ," on page 179.	String (255)
<Exception>	Additional information about an exception that occurred for the Boleto Bancário transaction. This field can contain one of these values: <ul style="list-style-type: none"> Overpaid: The amount paid was larger than the amount of the order. Underpaid: The amount paid was smaller than the amount of the order. Unmatched: The transaction information could not be matched to an order in the CyberSource database. If you receive this value, contact Customer Support. 	String (12)
<BoletoNumber>	Boleto Bancário payment number.	String (6)

Example <BankTransfer> Element

```
<BankTransfer Event="Payment" EventDate="2003-02-16T00:00-07:00">
  <TransactionReferenceNumber>5652882910</TransactionReferenceNumber>
  <MerchantCurrencyCode>EUR</MerchantCurrencyCode>
  <MerchantAmount>100.00</MerchantAmount>
  <ConsumerCurrencyCode>EUR</ConsumerCurrencyCode>
  <ConsumerAmount>100.00</ConsumerAmount>
</BankTransfer>
```

<Check>

The <Check> element contains information about electronic check transactions.

Syntax

```
<Check Event=CDATA
  EventDate=NMTOKEN>
  (TransactionReferenceNumber)
  (MerchantCurrencyCode)
  (MerchantAmount)
  (ConsumerCurrencyCode)
  (ConsumerAmount)
  (FeeCurrencyCode)
  (FeeAmount)
  (ProcessorMessage) ?
</Check>
```

Important Depending on your check processor, the impact of the type of event in the following table on the movement of funds may differ. Contact your processor to understand the implications of each event type for your payment process.

Table 22 Attributes of <Check> in the Payment Events Report

Attribute Name	Description	Data Type and Length
Event	<p>Type of event that occurred for the check transaction. These values vary with the processor.</p> <p>Successful Events</p> <ul style="list-style-type: none"> • Payment: Payment has been received. The value is always positive. • Refund: A refund (credit) occurred. The value is always negative. • Completed: The transaction was completed: <p><i>CyberSource ACH Service:</i> The event type is <code>Payment</code> after a debit request is received by the bank. CyberSource waits for three days. If the bank does not inform CyberSource about any problems with the funds transfer, the bank considers the check cleared. The event type listed in the report is <code>Completed</code> when the check clears. CyberSource does not guarantee that the check has truly cleared.</p>	String (20)

Table 22 Attributes of <Check> in the Payment Events Report (Continued)

Attribute Name	Description	Data Type and Length
	<p><i>Bank of America ACH Service:</i> The event type is not automatically updated to Completed. Contact Customer Support to have your account configured to display the Completed event. CyberSource does not recommend using this event type because it is not a reliable indication that a check has cleared.</p> <p>Failed Events</p> <ul style="list-style-type: none"> • Correction: A positive or negative correction occurred to a payment or refund. • Declined: The account was invalid or disabled. For details about the decline, see <ProcessorMessage>. • Error: An error occurred. For details about the error, see <ProcessorMessage>. • Failed: The account was invalid or disabled. For details about the failure, see <ProcessorMessage>. • Final NSF: The final instance of insufficient funds occurred. • First NSF: The bank will attempt to re-deposit the funds. • NSF: The bank returned the check because of insufficient funds. • Other: The processor reported an unanticipated event. • Second NSF: The bank will attempt to re-deposit the funds for the second time. • Stop Payment: The customer stopped the payment. • Void: The check was successfully voided. 	
EventDate	Date in GMT format that the event occurred. This field can be null for some event types, such as Declined.	DateTime (25)

Table 23 Child Elements of <Check> in the Payment Events Report

Element Name	Description	Data Type and Length
<FeeCurrencyCode>	ISO currency code of the assessed fee.	String (5)
<FeeAmount>	The processor's fee for the transaction.	Amount (19)
<ProcessorMessage>	Additional information from the processor about the event, such as an error message or explanation.	String (255)
<Check>	Also includes the child elements described in Table 21 on page 37.	

Example <Check> Element

```
<Check Event="Payment" EventDate="2003-02-16T00:00-07:00">
  <TransactionReferenceNumber>5652882910</TransactionReferenceNumber>
  <MerchantCurrencyCode>USD</MerchantCurrencyCode>
  <MerchantAmount>100.00</MerchantAmount>
  <ConsumerCurrencyCode>USD</ConsumerCurrencyCode>
  <ConsumerAmount>100.00</ConsumerAmount>
  <FeeCurrencyCode>USD</FeeCurrencyCode>
  <FeeAmount>1.00</FeeAmount>
</Check>
```

<PayPal>

The <PayPal> element contains information about transactions that use this payment type.

Syntax

```
<PayPal Event=CDATA
  EventDate=NMToken>
  (TransactionReferenceNumber)
  (MerchantCurrencyCode)?
  (MerchantAmount)
  (ConsumerCurrencyCode)
  (ConsumerAmount)
  (FeeCurrencyCode)
  (FeeAmount)
  (ProcessorMessage)?
</PayPal>
```

Table 24 Attributes of <PayPal> in the Payment Events Report

Attribute Name	Description	Data Type and Length
Event	Type of event that occurred for the PayPal transaction. This field contains one of these values: <ul style="list-style-type: none">• Batched: The PayPal transaction was completed, but the funds have not been transferred to your account.• Canceled_reversal: You requested that the reversal requested by the customer be cancelled.• Completed: The PayPal transaction was completed, and the funds have been transferred to your account.• Denied: You denied the request. The reason is not specified.• Failed: The request failed. The reason is not specified.• MIPS: A billing agreement was created or modified.	Alpha (20)

Table 24 Attributes of <PayPal> in the Payment Events Report (Continued)

Attribute Name	Description	Data Type and Length
	<ul style="list-style-type: none"> Pending: The PayPal transaction is not completed. The value will eventually change to <code>Completed</code>, <code>Failed</code>, or <code>Denied</code>. Refunded: You initiated a refund of the PayPal payment. Reversed: A payment was reversed due to a chargeback or other type of reversal. 	
EventDate	Date of the event. This field is null for some event types, such as <code>Declined</code> . For PayPal transactions, the date is always present.	DateTime (25)

Table 25 Child Elements of <PayPal> in the Payment Events Report

Element Name	Description	Data Type and Length
<TransactionReferenceNumber>	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID (Simple Order API) and to the <service>_trans_ref_no (SCMP API) reply fields.	String (60)
<MerchantCurrencyCode>	ISO currency code of the merchant's currency. Reported only if <code>MerchantAmount</code> is greater than zero.	String (5)
<MerchantAmount>	The amount deposited or withdrawn from the merchant's account for the event. Reported only if the Paypal account is set to automatically convert payment.	Amount (19)
<ConsumerCurrencyCode>	ISO currency code of the customer's currency.	String (5)
<ConsumerAmount>	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
<FeeCurrencyCode>	This element does not apply to PayPal Payments and is always empty.	NA
<FeeAmount>	The processor's fee for the transaction.	Amount (19)
<ProcessorMessage>	<p>Additional information that may appear about the event from the processor, such as an error message or reason. This field contains one of these values:</p> <ul style="list-style-type: none"> <code>pending</code>: The payment status is pending. For a credit or a reversal, this field contains one of these values: <ul style="list-style-type: none"> <code>address</code>: The customer did not include a confirmed shipping address. You must manually accept or deny this payment. 	String (255)

Table 25 Child Elements of <PayPal> in the Payment Events Report (Continued)

Element Name	Description	Data Type and Length
	<ul style="list-style-type: none"> • buyer_complaint: The customer has placed a reversal about this transaction. • chargeback: The customer has initiated a chargeback. • echeck: The check has not yet cleared. • guarantee: The customer triggered a money back guarantee. • intl: You hold a non-U.S. account and do not have a withdrawal method. You must manually accept or deny this payment. • multi_currency: You do not have a balance in the currency sent. You must manually accept or deny this payment. • other: A <i>reversal</i> has occurred for a reason other than buyer_complaint, chargeback, guarantee, or refund. Alternately, the payment is <i>pending</i> for a reason other than address, echeck, intl, multi_currency, unilateral, upgrade, or verify. • refund: You have given the customer a refund. • unilateral: The payment was made to an email address that is not yet registered or confirmed. • upgrade: You have reached the monthly limit for transactions on your account, or the payment was made via credit card, and you do not have a Business or Premier PayPal account. • verify: The payment is pending. You must verify your account before accepting this payment. 	

Example <PayPal> Element

```

<PayPal Event="Completed" EventDate="2003-02-16T00:00-07:00">
  <TransactionReferenceNumber>5652304882910</TransactionReferenceNumber>
  <MerchantAmount>0.00</MerchantAmount>
  <ConsumerAmount>100.00</ConsumerAmount>
  <FeeCurrencyCode/>
  <FeeAmount>1.00</FeeAmount>
</PayPal>

```

Payment Submission Detail Report

The XML version of the Payment Submission Detail Report is identical to the XML version of the Payment Batch Detail Report with these exceptions:

- The Payment Submission Detail Report includes these types of transactions:
 - China payments and China refunds
 - Boletos Bancários
- The Payment Submission Detail Report includes these elements, which are child elements of the <Request> element:
 - <PaymentProcessor>
 - <DCCIndicator>
 - <BoletoNumber>
 - <NumberOfInstallments>

<Request>

The <Request> element in the Payment Submission Detail Report has several additional fields that are not included in the <Request> element in the Payment Batch Detail Report. The <Request> element contains information about a payment transaction.

Syntax

```
<Request RequestID=CDATA
    MerchantReferenceNumber=CDATA>
    (TransactionReferenceNumber)
    (PaymentMethod)
    (CurrencyCode)
    (Amount)
    (Application)
    (PaymentProcessor)
    (TargetAmount?)
    (TargetCurrency?)
    (ExchangeRate?)
    (ExchangeRateDate?)
    (DCCIndicator?)
    (BoletoNumber?)
    (NumberOfInstallments?)
</Request>
```

Table 26 Additional Child Elements of <Request> in the Payment Submission Detail Report

Element Name	Description	Data Type and Length
The first five child elements are the same as the child elements in the <Request> element in the Payment Batch Detail Report. See " <Request> " on page 29.		
<PaymentMethod>	Type of card or bank account. Values found only in the Payment Submission Detail Report: <ul style="list-style-type: none"> • Brazil Bank Transfer • China Bank Transfer • China eWallet For the values that can be in the Payment Batch Detail Report and the Payment Submission Detail Report, see <Request> .	String (50)
<PaymentProcessor>	For the list of payment processors, see Appendix D, " Payment Processors ," on page 167.	String (40)
<TargetAmount>	Converted amount.	String (15)
<TargetCurrency>	Billing currency. This is the ISO code for the currency of the converted amount. See the Support Center for a list of ISO codes.	String (5)
<ExchangeRate>	Exchange rate. Includes a decimal point and up to 4 decimal places.	Amount (13)
<ExchangeRateDate>	Time stamp for the exchange rate in the format YYYYMMDD~HH:MM where ~ denotes a space.	String (14)
<DCCIndicator>	Flag that indicates if DCC is being used for the transaction. This field can contain one of these values: <ul style="list-style-type: none"> • 1: Converted—DCC is being used. • 2: Non-convertible—DCC cannot be used. • 3: Declined—DCC could be used, but the customer declined it. 	String (1)
<BoletoNumber>	Boleto Bancário payment number.	String (6)
<NumberOfInstallments>	Total number of installments when making payments in installments. For more information, see the Credit Card Services Implementation Guide .	Numeric (2)

Example <Request> Element

```
<Request RequestID="0062929390000167905114"
  MerchantReferenceNumber="58EA07517FE5A71C016884DCB">
  <TransactionReferenceNumber>SJZPTM07Y805
</TransactionReferenceNumber>
  <PaymentMethod>Visa</PaymentMethod>
  <CurrencyCode>USD</CurrencyCode>
  <Amount>100.00</Amount>
  <Application>ics_bill</Application>
  <PaymentProcessor>fdcsouth</PaymentProcessor>
  <TargetAmount>120.00</TargetAmount>
  <TargetCurrency>EUR</TargetCurrency>
  <ExchangeRate>1.2</ExchangeRate>
  <ExchangeRateDate>20071001 16:00</ExchangeRateDate>
  <DCCIndicator>1</DCCIndicator>
</Request>
```

Single Transaction Report

This report contains this information about a single request ID:

- Summary information about your payment transactions: credit card, electronic check, Bill Me Later, China processing, Boletos Bancários, and bank transfers.
- ACH Verification results
- Detailed information about Decision Manager and the score or Advanced Fraud Screen service.

<Report>

The <Report> element is the root element of the report.

Syntax

```
<Report MerchantID=CDATA
  Name=CDATA
  ReportStartDate=CDATA
  ReportEndDate=CDATA
  Version=CDATA
  xmlns=CDATA>
  (Requests)
</Report>
```

Table 27 Attributes of <Report> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
MerchantID	CyberSource merchant ID used for the transaction.	String (30)
Name	Name of the report. This field always contains the text <code>Transaction Detail</code> .	String (100)
ReportStartDate	First date that is included in the report.	DateTime (25)
ReportEndDate	Last date that is included in the report.	DateTime (25)
Version	Version number of the report from 1.0 to 1.6.	Numeric (10)
xmlns	XML namespace for the report version that you requested: <ul style="list-style-type: none"> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_6.dtd</code> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_5.dtd</code> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_4.dtd</code> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_3.dtd</code> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_2.dtd</code> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_1.dtd</code> • <code>https://ebctest.cybersource.com/ebctest/reports/dtd/td_r_1_0.dtd</code> 	String (100)

Table 28 Child Elements of <Report> in the Single Transaction Report

Element Name	Description
<Requests>	Contains all the requests in the report. For a list of child elements, see <Requests> .

Example <Report> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM
"https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_1.dtd">
<Report MerchantID="CyberSource"
    Name="Transaction Detail"
    ReportStartDate="2001-08-16T08:00:00-08:00"
    ReportEndDate="2001-08-17T08:00:00-08:00"
    Version="1.1"
    xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_1.dtd">
    <Requests>
        ...
    </Requests>
</Report>
```

<Requests>

The <Requests> element contains all of the requests in the report.

Syntax

```
<Requests>
    (Request) *
</Requests>
```

Table 29 Child Elements of <Requests> in the Single Transaction Report

Element Name	Description
<Request>	Information about a single request. For a list of child elements and attributes, see <Request> .

Example <Requests> Element

```
<Requests>
    <Request MerchantReferenceNumber="3C515C71D48F631"
        RequestDate="2009-08-16T09:42:03-08:00"
        RequestID="0004223530000167905139">
        ...
    </Request>
</Requests>
```

<Request>

The <Request> element contains information about a single request. A request can include multiple CyberSource applications. The `TransactionReferenceNumber` attribute is available only in versions 1.2 and greater. The `User` and `PredecessorRequestID` attributes are available only in versions 1.3 and greater. The <TravelData> element is available only in versions 1.6 and greater.

Syntax

```
<Request MerchantReferenceNumber=CDATA
    RequestDate=CDATA
    RequestID=CDATA
    SubscriptionID=CDATA
    Source=CDATA
    User=CDATA
    Comments=CDATA
    TransactionReferenceNumber=CDATA
    PredecessorRequestID=CDATA
    (BillTo)
    (ShipTo) ?
    (Shipping) ?
    (PaymentMethod)
    (LineItems) ?
    (ApplicationReplies)
    (PaymentData) ?
    (MerchantDefinedData) ?
    (RiskData) ?
    (ProfileList) ?
    (TravelData) ?>
</Request>
```

Table 30 Attributes of <Request> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
<code>MerchantReferenceNumber</code>	Merchant-generated order reference or tracking number.	String (50)
<code>RequestDate</code>	Date on which the transaction was processed.	DateTime (25)
<code>RequestID</code>	Unique identifier generated by CyberSource for the transaction.	Numeric (26)
<code>SubscriptionID</code>	Unique identifier that is returned to you when a subscription is created.	String (26)
<code>Source</code>	Client application used to send the transaction. This field can contain one of these values: <ul style="list-style-type: none"> HOP PIN-less Debit Validation SCMP API 	String (50)

Table 30 Attributes of <Request> in the Single Transaction Report (Continued)

Attribute Name	Description	Data Type and Length
	<ul style="list-style-type: none"> • SOP • Subscription Add • UBC • UBC List Manager • UBC One Time Payment • UBC Subscription • UBC Subscription Edit • UBC Virtual Terminal 	
User	<p>User name in the Business Center of the person who performed the transaction.</p> <p>Note This element is included only in versions 1.3 and greater.</p>	String (36)
Comments	If present, brief description of the order or comment that was added to the order.	String (255)
TransactionReference Number	<p>CyberSource-generated reference or tracking number for the transaction. You can use this value to reconcile your CyberSource reports with your processor reports.</p> <p>Note This element is included only in versions 1.2 and greater.</p>	String (60)
PredecessorRequestID	<p>Unique identifier generated by CyberSource for the transaction against which the current request was applied.</p> <p>Note This element is included only in versions 1.3 and greater.</p>	Numeric (26)

Table 31 Child Elements of <Request> in the Single Transaction Report

Element Name	Description
<BillTo>	Information about the billing address and purchaser for the order. For a list of child elements, see <BillTo> .
<ShipTo>	Information about the shipping address and recipient for the order. For a list of child elements, see <ShipTo> .
<Shipping>	Information about the shipping method and shipping carrier for the order. For a list of child elements, see <Shipping> .
<PaymentMethod>	Information about the payment method for the order. For a list of child elements, see <PaymentMethod> .

Table 31 Child Elements of <Request> in the Single Transaction Report (Continued)

Element Name	Description
<LineItems>	Line items for the order. For a list of child elements, see <LineItems> .
<ApplicationReplies>	Reply information for all applications in the request. For a list of child elements, see <ApplicationReplies> .
<PaymentData>	Detailed information about the result of a payment transaction. For a list of child elements, see <PaymentData> .
<MerchantDefinedData>	Optional information that you added to the order. For a list of child elements, see <MerchantDefinedData> .
<RiskData>	Detailed information about the result of a risk transaction. For a list of child elements, see <RiskData> .
<ProfileList>	Information about the profile used for the order. For a list of child elements, see <ProfileList> .
<TravelData>	Detailed information about the travel data in the order. For a list of child elements, see <TravelData> .

Example <Request> Element

```

<Request MerchantReferenceNumber="3C515C71D48F631"
  RequestDate="2009-08-16T09:42:03-08:00"
  RequestID="0004223530000167905139"
  SubscriptionID=""
  Source=SCMP API
  User=""
  Comments=""
  TransactionReferenceNumber=""
  PredecessorRequestID="">
  <BillTo>...</BillTo>
  <ShipTo>...</ShipTo>
  <Shipping>...</Shipping>
  <PaymentMethod>...</PaymentMethod>
  <LineItems>...</LineItems>
  <ApplicationReplies>...</ApplicationReplies>
  <PaymentData>...</PaymentData>
  <MerchantDefinedData>...</MerchantDefinedData>
  <RiskData>...</RiskData>
  <ProfileList>...</ProfileList>
  <TravelData>...</TravelData>
</Request>

```

<BillTo>

The <BillTo> element contains information about the billing address and purchaser for the order.

Syntax

```
<BillTo>
  (FirstName)
  (LastName)
  (MiddleName)?
  (NameSuffix)?
  (Address1)?
  (Address2)?
  (City)
  (State)?
  (Zip)?
  (CompanyName)?
  (Email)
  (Country)
  (Title)?
  (Phone)
  (IPAddress)?
  (HostName)?
  (UserName)?
  (CustomerID)?
</BillTo>
```

Table 32 Child Elements of <BillTo> in the Single Transaction Report

Element Name	Description	Data Type and Length
<FirstName>	First name of the billed customer.	String (60)
<LastName>	Last name of the billed customer.	String (60)
<MiddleName>	Middle name of the billed customer.	String (60)
<NameSuffix>	Suffix of the billed customer's name.	String (60)
<Address1>	First line of the billing address.	String (60)
<Address2>	Second line of the billing address.	String (60)
<City>	City of the billing address.	String (50)
<State>	State, province, or territory of the billing address.	String (20)
<Zip>	Postal code of the billing address.	String (10)
<CompanyName>	Company name of the billing address.	String (60)
<Email>	Email address of the bill-to customer.	String (255)

Table 32 Child Elements of <BillTo> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<Country>	ISO country code of the billing address.	String (2)
<Title>	Title of the billed customer.	String (30)
<Phone>	Phone number of the billed customer.	String (15)
<IPAddress>	IP address of the billed customer.	String (15)
<HostName>	DNS-resolved host name from the customer's IP address.	String (255)
<UserName>	Reserved for future use.	String (50)
<CustomerID>	Optional customer's account ID, tracking number, reward number or other unique number.	String (50)

Example <BillTo> Element

```

<BillTo>
  <FirstName>John</FirstName>
  <LastName>Doe</LastName>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <Zip>94043</Zip>
  <Email>icsinfo@cybersource.com</Email>
  <Country>US</Country>
  <Phone>650-965-6000</Phone>
  <IPAddress>127.0.0.1</IPAddress>
  <CustomerID>jdoe94043</CustomerID>
</BillTo>

```

<ShipTo>

The <ShipTo> element contains information about the shipping address and recipient for the order.

Syntax

```

<ShipTo>
  (FirstName)?
  (LastName)?
  (Address1)?
  (Address2)?
  (City)?
  (State)?
  (Zip)?
  (CompanyName)?

```

```

        (Country)?
        (Phone)?
    </ShipTo>

```

Table 33 Child Elements of <ShipTo> in the Single Transaction Report

Element Name	Description	Data Type and Length
<FirstName>	First name of the customer to whom the order is shipped.	String (60)
<LastName>	Last name of the customer to whom the order is shipped.	String (60)
<Address1>	First line of the shipping address.	String (60)
<Address2>	Second line of the shipping address.	String (60)
<City>	City of the shipping address.	String (60)
<State>	State, province, or territory of the shipping address.	String (50)
<Zip>	Postal code of the shipping address.	String (10)
<CompanyName>	Company name of the shipping address.	String (60)
<Country>	ISO country code of the shipping address.	String (2)
<Phone>	Phone number of the customer to whom the order is shipped.	String (15)

Example <ShipTo> Element

```

<ShipTo>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <Zip>94043</Zip>
  <Country>US</Country>
</ShipTo>

```

<Shipping>

The <Shipping> element contains information about the shipping method and shipping carrier for the order.

Syntax

```
<Shipping>
  (Method)
  (Carrier)
</Shipping>
```

Table 34 Child Elements of <Shipping> in the Single Transaction Report

Element Name	Description	Data Type and Length
<Method>	Reserved for future use.	String (10)
<Carrier>	Reserved for future use.	String (12)

Example <Shipping> Element

```
<Shipping>
  <Method />
  <Carrier />
</Shipping>
```

<PaymentMethod>

The <PaymentMethod> element contains information about the payment method for the order.

If a credit card or China payment was used for the order, or if no payment method was specified, the <PaymentMethod> element will contain a <Card> element. If an electronic check was used for the order, the <PaymentMethod> element will contain a <Check> element.

Syntax

```
<PaymentMethod>
  (Card) | (Check)
</PaymentMethod>
```

Table 35 Child Elements of <PaymentMethod> in the Single Transaction Report

Element Name	Description
<Card>	Information used to process a credit card or China payment. For a list of child elements, see <Card> .
<Check>	Information used to process an electronic check. For a list of child elements, see <Check> .

Example <PaymentMethod> Element

```
<PaymentMethod>
  <Card>
    ...
  </Card>
</PaymentMethod>
```

<Card>

The <Card> element contains information used to process a credit card, China payment, or Boleto Bancário. For requests that do not include payment information, all child elements of <Card> will be empty. The <BoletoNumber> element is available only in versions 1.4 and greater.

Syntax

```
<Card>
  (AccountSuffix)
  (ExpirationMonth)
  (ExpirationYear)
  (StartMonth)?
  (StartYear)?
  (IssueNumber)?
  (CardType)?
  (BoletoNumber)?
</Card>
```

Table 36 Child Elements of <Card> in the Single Transaction Report

Element Name	Description	Data Type and Length
<AccountSuffix>	Last four digits of the customer's credit card number.	String (4)
<ExpirationMonth>	Expiration month (<i>MM</i>) of the credit card.	String (2)
<ExpirationYear>	Expiration year (<i>YYYY</i>) of the credit card.	String (4)
<StartMonth>	Start month (<i>MM</i>) of the credit card. Used for Maestro (UK Domestic) cards.	String (2)

Table 36 Child Elements of <Card> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<StartYear>	Start year (YYYY) of the credit card. Used for Maestro (UK Domestic) cards.	String (4)
<IssueNumber>	Issue number of the credit card. Used for Maestro (UK Domestic) cards.	String (5)
<CardType>	Type of card or bank account. For the possible values, see Appendix E, “ Types of Cards and Bank Accounts ,” on page 171.	String (50)
BoletoNumber	Boleto Bancário payment number. Note This value is included only for versions 1.4 and greater.	String (6)

Example <Card> Element

```
<Card>
  <AccountSuffix>1111</AccountSuffix>
  <ExpirationMonth>12</ExpirationMonth>
  <ExpirationYear>2015</ExpirationYear>
  <CardType>Visa</CardType>
</Card>
```

<Check>

The <Check> element contains information used to process an electronic check.

Syntax

```
<Check>
  (AccountSuffix)
  (CheckNumber)
</Check>
```

Table 37 Child Elements of <Check> in the Single Transaction Report

Element Name	Description	Data Type and Length
<AccountSuffix>	Last four digits of the customer's bank account number.	String (4)
<CheckNumber>	Reserved for future use.	String (10)

Example <Check> Element

```
<Check>
  <AccountSuffix>1111</AccountSuffix>
</Check>
```

<LineItems>

The <LineItems> element contains all of the line items for the order.

Note In the SCMP API, line items are referred to as offers.

Syntax

```
<LineItems>
  (LineItem) *
</LineItems>
```

Table 38 Child Elements of <LineItems> in the Single Transaction Report

Element Name	Description
<LineItem>	Information about a single line item in an order. For a list of child elements and attributes, see <LineItem> .

Example <LineItems> Element. This example includes two separate line items.

```
<LineItems>
  <LineItem Number="0">
    ...
  </LineItem>
  <LineItem Number="1">
    ...
  </LineItem>
</LineItems>
```

<LineItem>

The <LineItem> element contains information about a single line item in an order. In the SCMP API, line items are referred to as offers.

Syntax

```
<LineItem Number=CDATA>
  (FulfillmentType)
  (Quantity)?
  (UnitPrice)
  (TaxAmount)?
  (MerchantProductSKU)?
  (ProductName)?
  (ProductCode)?
</LineItem>
```

Table 39 Attributes of <LineItem> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
Number	Number of the line item. For the first line item, the value of this attribute is 0.	Numeric (10)

Table 40 Child Elements of <LineItem> in the Single Transaction Report

Element Name	Description	Data Type and Length
<FulfillmentType>	Information about the product code used for the line item. Possible values: <ul style="list-style-type: none"> E: The product code is <code>electronic_software</code>. P: The product code is not <code>electronic_software</code>. 	String (2)
<Quantity>	Quantity of the product being purchased.	Numeric (10)
<UnitPrice>	Per-item price of the product.	Amount (19)
<TaxAmount>	Tax amount associated with this item.	Amount (19)
<MerchantProductSKU>	Product identifier code.	String (30)
<ProductName>	Name of the product.	String (20)
<ProductCode>	Type of product that the offer contains. For detailed information about this field, see the Credit Card Services Implementation Guide . For a list of product codes used by the tax service, see the Product Code User Guide .	String (30)

Example <LineItem> Element

```
<LineItem Number="0">
  <FulfillmentType>P</FulfillmentType>
  <Quantity>1</Quantity>
  <UnitPrice>20.00</UnitPrice>
</LineItem>
```

<ApplicationReplies>

The <ApplicationReplies> element contains reply information for all applications in the request.

Syntax

```
<ApplicationReplies>
  (ApplicationReply)+
</ApplicationReplies>
```

Table 41 Child Elements of <ApplicationReplies> in the Single Transaction Report

Element Name	Description
<ApplicationReply>	Reply information for a single CyberSource application. For a list of child elements and attributes, see <ApplicationReply> .

Example <ApplicationReplies> Element. This example shows replies for a request that included the **ics_auth** and **ics_score** applications.

```
<ApplicationReplies>
  <ApplicationReply Name="ics_auth">
    ...
  </ApplicationReply>
  <ApplicationReply Name="ics_score">
    ...
  </ApplicationReply>
</ApplicationReplies>
```

<ApplicationReply>

The <ApplicationReply> element contains reply information for a single CyberSource application. The report includes an <ApplicationReply> element for each application in your request.

If one application in a request is declined, it can prevent other applications in the request from being run. You will receive an <ApplicationReply> element for each application that does not run; however, its child elements will be empty.

Syntax

```
<ApplicationReply Name=CDATA>
  (RCode)
  (RFlag)
  (RMsg)
</ApplicationReply>
```

Table 42 Attributes of <ApplicationReply> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
Name	Name of the CyberSource application whose reply is described in this element.	String (30)

Table 43 Child Elements of <ApplicationReply> in the Single Transaction Report

Element Name	Description	Data Type and Length
<RCode>	One-digit code that indicates whether the application was successful.	Numeric (1)
<RFlag>	One-word description of the result of the application.	String (50)
<RMsg>	Message that explains the reply flag for the application.	String (255)

Example <ApplicationReply> Element of a successful reply

```
<ApplicationReply Name="ics_score">
  <RCode>1</RCode>
  <RFlag>SOK</RFlag>
  <RMsg>score service was successful</RMsg>
</ApplicationReply>
```

Example <ApplicationReply> Element. This example shows the reply for an application that was not run because another application in the request failed.

```
<ApplicationReply Name="ics_auth">
  <RCode />
  <RFlag />
  <RMsg />
</ApplicationReply>
```

<PaymentData>

The <PaymentData> element contains detailed information about the result of a payment transaction. The <EventType> element is available only in versions 1.2 and greater. The <NumberOfInstallments> value is available only in versions 1.4 and greater. The

<ACHVerificationResult> and <ACHVerificationResultMapped> elements are available only in versions 1.5 and greater. The <GrandTotal> element is available in version 1.6 and greater.

Syntax

```
<PaymentData>
  (PaymentRequestID)
  (PaymentProcessor)
  (Amount)
  (CurrencyCode)
  (TotalTaxAmount)?
  (AuthorizationType)?
  (AuthorizationCode)?
  (AVSResult)?
  (AVSResultMapped)?
  (CVResult)?
  (ProcessorResponseCode)?
  (PayerAuthenticationInfo)?
  (EventType)?
  (NumberOfInstallments?)
  (ACHVerificationResult)?
  (ACHVerificationResultMapped?)
  (GrandTotal)?
</PaymentData>
```

Table 44 Child Elements of <PaymentData> in the Single Transaction Report

Element Name	Description	Data Type and Length
<PaymentRequestID>	Original request ID for the purchase. <ul style="list-style-type: none"> For authorizations and stand-alone credits, this element contains the request ID for the transaction. For captures, this element contains the request ID for the corresponding authorization. 	Numeric (26)
<PaymentProcessor>	See Appendix D, " Payment Processors ," on page 167.	String (40)
<Amount>	Total amount of the authorization, capture, debit, or credit if CyberSource processed the payment request. For requests that do not contain payment information, such as when Decision Manager is requested alone, you may see an amount in the <GrandTotal> element instead.	Amount (19)
<CurrencyCode>	Currency used for the transaction.	String (5)
<TotalTaxAmount>	Total tax amount for all of the line items in the transaction.	Amount (19)

Table 44 Child Elements of <PaymentData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<AuthorizationType>	Type of authorization. Possible values: <ul style="list-style-type: none"> o: Online authorization. Successful authorization that was captured normally or was not captured at all. v: Verbal authorization. Authorization captured with a verbal authorization code. If the authorization was not successful, or if the processor did not return an authorization code, this element is empty.	String (1)
<AuthorizationCode>	Authorization code.	String (15)
<AVSResult>	Address verification result code returned directly from the processor.	String (10)
<AVSResultMapped>	CyberSource standardized result of address verification. For a list of possible values, see the Credit Card Services Implementation Guide .	String (5)
<CVResult>	Results of processing the card verification number. For a list of possible values, see the Credit Card Services Implementation Guide .	String (1)
<ProcessorResponseCode>	Response code returned directly from the processor.	String (60)
<PayerAuthenticationInfo>	Results of the Payer Authentication service. For a list of child elements, see <PayerAuthenticationInfo> .	

Table 44 Child Elements of <PaymentData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<EventType>	<p>Type of event that occurred for the transaction. This element is included in versions 1.2 and greater.</p> <p>China Payments and China Refunds</p> <ul style="list-style-type: none"> • Chargeback: The original payment transaction is being disputed by the cardholder or the cardholder's bank. • Payment Abnormal: The payment has been held up for regulatory or legal reasons. • Payment Declined: The processor has refused the payment request. • Payment Failed: The payment request failed. The reason is not specified. • Payment Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled payment. • Payment Initiated: The payment request was received from the merchant. • Payment Lost: The processor does not acknowledge receiving the payment request. • Payment Pending Proc: The payment has not been completed. It is awaiting settlement by the processor. • Payment Settled: The payment has been confirmed by the processor and is expected to be funded. • Refund Abnormal: The refund has been held up for regulatory or legal reasons. • Refund Declined: The processor has refused the refund request. • Refund Failed: The refund request failed. The reason is not specified. • Refund Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled refund. • Refund Pending Cyb: The refund has not been completed. It is awaiting transmission by CyberSource. • Refund Pending Proc: The refund has not been completed. It is awaiting settlement by the processor. • Refund Settled: The refund has been confirmed by the processor and is expected to be funded. • Unknown: The processor does not acknowledge receiving the request. 	String (20)

Table 44 Child Elements of <PaymentData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
	<p>Successful Events for Electronic Check Transactions</p> <p>These values vary with the processor.</p> <ul style="list-style-type: none"> • Payment: Payment has been received. The value is always positive. • Refund: A refund (credit) occurred. The value is always negative. • Completed: The transaction was completed: • CyberSource ACH Service—The event type is Payment after a debit request is received by the bank. CyberSource waits for three days. If the bank does not inform CyberSource about any problems with the funds transfer, the bank considers the check cleared. The event type listed in the report is Completed when the check clears. CyberSource does not guarantee that the check has truly cleared. <p>Boletos Bancários</p> <ul style="list-style-type: none"> • Fulfilled: The bank issuing the Boleto Bancário has received funds and has deposited them into your account. • Pending Fulfillment: The Boleto Bancário was issued but the customer has not submitted it yet or it is still in the Brazilian Clearing System. <p>Failed Events for Electronic Check Transactions</p> <p>These values vary with the processor.</p> <ul style="list-style-type: none"> • Correction: A positive or negative correction occurred to a payment or refund. • Declined: The account was invalid or disabled. • Error: An error occurred. • Failed: The account was invalid or disabled. • Final NSF: The final instance of insufficient funds occurred. • First NSF: The bank will attempt to re-deposit the funds. • NSF: The bank returned the check because of insufficient funds. • Other: The processor reported an unanticipated event. • Second NSF: The bank will attempt to re-deposit the funds for the second time. • Stop Payment: The customer stopped the payment. • Void: The check was successfully voided. 	

Table 44 Child Elements of <PaymentData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
	<p>Other Types of Transactions</p> <ul style="list-style-type: none"> BATCH_ERROR: The batch file was rejected by the processor because of transaction errors. After the file is reset, the invalid transactions will be marked as TRXN ERROR. BATCH_RESET: Either the complete batch or specific transactions were reset after the problems with the merchant, connections, or processor were resolved. CANCELLED: The transaction was cancelled. CANCELED_REVERS: The reversal was cancelled. ERROR: An error occurred in your follow-on request. FAILED: The credit card (authorization, capture, or credit) or check debit request failed. The reason is not specified. FUNDED: The direct debit reversal is complete. MIPS: The PayPal billing agreement was created or modified. PAYMENT: The payment has been received. PENDING: The authorization was captured by CyberSource, the credit request was successful, or the credit card transaction was captured, and the request was sent to the payment processor. The reply from the payment processor is pending. REFUNDED: You initiated a refund of the payment. REVERSAL: The direct debit was reversed at the request of the customer. REVERSAL_FAILED: The PIN-less debit reversal request failed. REVERSED: The PIN-less debit reversal request was successful. REVERSING: The initial PIN-less debit request timed out. The subsequent reversal request is pending. TRANSMITTED: The check debit request was processed successfully. VOIDED: The request for the credit card capture, credit card credit, check debit, or check credit was successfully deleted. The authorization has not been deleted. You can see this transaction only on the search results page and in the exported search results. 	

Table 44 Child Elements of <PaymentData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<NumberOfInstallments>	Total number of installments. For more information, see the Credit Card Services Implementation Guide . This element is included only for versions 1.4 and greater.	Numeric(2)
<ACHVerificationResult>	<p>Raw result of the ACH Verification service. This element can contain one of these values:</p> <ul style="list-style-type: none"> • 1: Accepted: Routing number is valid. Account number is valid. • 2: Accepted: Routing number is valid. Account number is invalid; use corrected account number. • 3: Accepted: Routing number is valid. Account number is valid. • 4: Accepted: Routing number is valid. Account number structure not recognized; account may be valid. • 5: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is valid. • 6: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is invalid; use corrected account number. • 7: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is valid. • 8: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number structure not recognized; account may be valid. • 9: Declined: Routing number is not usable for ACH; no corrected routing number available. • 10: Declined: Routing number not found. • 11: Declined: Invalid routing number. 	String (2)
<ACHVerificationResult Mapped>	<p>Mapped result of the ACH Verification service. This element can contain one of these values:</p> <ul style="list-style-type: none"> • 00: Success: Routing and account numbers are OK. • 01: Success: Routing number is OK; account number is corrected. • 02: Success: Routing number is corrected; account number is OK. • 03: Success: Routing and account numbers are corrected. • 04: Declined: Routing number does not pass verification. • 98: Unavailable: Unable to perform ACH verification. • 99: Invalid: Response from ACH verification is invalid. 	String (2)

Table 44 Child Elements of <PaymentData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<GrandTotal>	Grand total amount for the order, including tax, for requests that do not contain payment information, such as when Decision Manager is requested alone. This element contains the value of the purchaseTotals_grandTotalAmount (Simple Order API) or grand_total_amount field. If this field is absent, the grand total is calculated from the total of the line item amounts.	Amount (19)

Example <PaymentData> Element

```

<PaymentData>
  <PaymentRequestID>9935369793074590426287</PaymentRequestID>
  <PaymentProcessor>sample</PaymentProcessor>
  <Amount>20.00</Amount>
  <CurrencyCode>USD</CurrencyCode>
  <AuthorizationType>O</AuthorizationType>
  <AuthorizationCode>123456</AuthorizationCode>
  <AVSResult>YYY</AVSResult>
  <AVSResultMapped>Y</AVSResultMapped>
  <CVResult>M</CVResult>
  <ProcessorResponseCode>A</ProcessorResponseCode>
  <PayerAuthenticationInfo></PayerAuthenticationInfo>
  <EventType></EventType>
  <NumberOfInstallments></NumberOfInstallments>
  <ACHVerificationResult></ACHVerificationResult>
  <ACHVerificationResultMapped><ACHVerificationResultMapped>
  <GrandTotal>20.00</GrandTotal>
</PaymentData>

```

<PayerAuthenticationInfo>

The <PayerAuthenticationInfo> element contains optional information about the Payer Authentication service. For detailed information about the possible values and their usage, see the [Payer Authentication Developer's Guide](#).

Syntax

```

<PayerAuthenticationInfo>
  (ECI) ?
  (AAV_CAVV) ?
  (XID) ?
</PayerAuthenticationInfo>

```

Table 45 Child Elements of <PayerAuthenticationInfo> in the Single Transaction Report

Element Name	Description	Data Type and Length
<ECI>	Optional information that you can receive if you use the Payer Authentication service.	String (64)
<AAV_CAVV>	Optional authentication data that you can receive after the customer is authenticated.	String (32) (in base 64)
<XID>	Optional transaction identifier generated by Payer Authentication that you can receive when the customer is enrolled and when validation is successful.	String (28) (in base 64)

Example <PayerAuthenticationInfo> element for a MasterCard card.

```
<PayerAuthenticationInfo>
  <ECI>2</ECI>
  <AAV_CAVV>jLw9xEMqcxPMABEAAADH1UGO/7k=<A/AV_CAVV>
  <XID>7DDCrSDjEdqNhsAcOxv1jwAHBwE=</XID>
</PayerAuthenticationInfo>
```

<MerchantDefinedData>

The <MerchantDefinedData> element contains optional information that you add to the order, such as an order number, additional customer information, or a special comment or request from the customer.

Syntax

```
<MerchantDefinedData Name=CDATA>
  (field1)?
  .
  .
  (field20)?
</MerchantDefinedData>
```

Table 46 Attribute of <MerchantDefinedData> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
Name	Optional name of the custom field. The name appears only if the field was given a name in the Business Center before being added to the request. No name appears if the field was added to the API request.	String (30)

Table 47 Child Elements of <MerchantDefinedData> in the Single Transaction Report

Element Name	Description	Data Type and Length
<field1> through <field20>	Optional information that was added to the order, such as an order number, additional customer information, or a special comment or request from the customer.	String (255)

Example <MerchantDefinedData> element

```
<MerchantDefinedData>
  <field1>order number=1234</field1>
  <field4 name=shipping>see shipping address</field4>
</MerchantDefinedData>
```

<RiskData>

The <RiskData> element contains detailed information about the result of a risk transaction. If you use Smart Authorization, some reply fields for the card authorization service are returned as children of the <RiskData> element.

Syntax

```
<RiskData>
  (Factors)?
  (HostSeverity)?
  (Score)?
  (TimeLocal)?
  (ConsumerPasswordProvided)?
  (LostPassword)?
  (RepeatCustomer)?
  (CookiesAccepted)?
  (ConsumerLoyalty)?
  (ConsumerPromotions)?
  (GiftWrap)?
  (ReturnsAccepted)?
  (ProductRisk)?
  (AppliedThreshold)?
  (AppliedTimeHedge)
  (AppliedVelocityHedge)
  (AppliedHostHedge)
  (AppliedCategoryGift)
  (AppliedCategoryTime)
  (AppliedAVS)?
  (AppliedCV)?
  (BinAccountType)?
  (BinScheme)?
  (BinIssuer)?
```

```

(BinCountry)?
(IPCity)?
(IPCountry)?
(IPRoutingMethod)?
(IPState)?
(InfoCodes)?
</RiskData>

```

Table 48 Child Elements of <RiskData> in the Single Transaction Report

Element Name	Description	Data Type and Length
<Factors>	Comma-separated list of codes that indicate what factors affected the score of the order. For a list of factor codes, see the Decision Manager Developer's Guide . Note If you use Smart Authorization, the value of the reply field auth_factor_code is returned in this field.	String (100)
<HostSeverity>	Indicates the risk associated with the customer's email domain.	Numeric (5)
<Score>	Total score calculated for the order.	Numeric (5)
<TimeLocal>	The customer's local time, which is calculated from the transaction request time and the customer's billing address.	DateTime (25)
<ConsumerPasswordProvided>	Reserved for future use.	Boolean (1)
<LostPassword>	Reserved for future use.	Boolean (1)
<RepeatCustomer>	Reserved for future use.	Boolean (1)
<CookiesAccepted>	Reserved for future use.	Boolean (1)
<ConsumerLoyalty>	Reserved for future use.	Boolean (1)
<ConsumerPromotions>	Reserved for future use.	Boolean (1)
<GiftWrap>	Reserved for future use.	Boolean (1)
<ReturnsAccepted>	Reserved for future use.	Boolean (1)
<ProductRisk>	Reserved for future use.	String (6)
<AppliedThreshold>	Score threshold applied to the order. For information about how ics_score selects a threshold, see the Decision Manager Developer's Guide .	Numeric (5)
<AppliedTimeHedge>	Importance of time of day in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (6)

Table 48 Child Elements of <RiskData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<AppliedVelocityHedge>	Importance of the number of orders from the customer in a specific time period in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (6)
<AppliedHostHedge>	Importance of email and IP addresses of the customer in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (6)
<AppliedCategoryGift>	Importance of billing and shipping addresses in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (1)
<AppliedCategoryTime>	Importance of time of day in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (6)
<AppliedAVS>	Reserved for future use.	String (5)
<AppliedCV>	Reserved for future use.	String (1)
<BinAccountType>	Type of customer. This field can contain one of these values: <ul style="list-style-type: none"> • CN: (Consumer) private customer • CP: (Corporate) business customer 	String (2)
<BinScheme>	Subtype of card account. This field can contain one of these values: <ul style="list-style-type: none"> • Maestro International • Maestro UK Domestic • MasterCard Credit • MasterCard Debit • Solo • Visa Credit • Visa Debit • Visa Electron 	String (32)
<BinIssuer>	Name of the bank or entity that issued the card account.	String (128)
<BinCountry>	Country (two-digit country code) associated with the BIN of the customer's card used for the payment. Returned if the information is available. Use this field for additional information when reviewing orders. This information is also displayed in the details page of the Business Center.	String (2)

Table 48 Child Elements of <RiskData> in the Single Transaction Report (Continued)

Element Name	Description	Data Type and Length
<IPCity>	Name of the city decoded from the IP address used directly or indirectly by the customer to send the order.	String (50)
<IPCountry>	Name of the country decoded from the IP address used directly or indirectly by the customer to send the order.	String (2)
<IPRoutingMethod>	Routing method decoded from the IP address used directly or indirectly by the customer to send the order. Routing method decoded from the IP address used directly or indirectly by the customer to send the order. This field can contain one of these values: <ul style="list-style-type: none"> • Anonymizer • AOL, AOL dial-up, AOL POP, and AOL proxy • Cache proxy • Fixed • International proxy • Mobile gateway • POP • Regional proxy • Satellite • SuperPOP 	String (25)
<IPState>	Name of the state decoded from the IP address used directly or indirectly by the customer to send the order.	String (2)
<InfoCodes>	Information codes returned for the order. For a list of child elements, see InfoCodes .	

Example <RiskData> element

```

<RiskData>
  <Factors>G,U</Factors>
  <HostSeverity>3</HostSeverity>
  <Score>17</Score>
  <AppliedThreshold>50</AppliedThreshold>
  <AppliedTimeHedge>Normal</AppliedTimeHedge>
  <AppliedVelocityHedge>Normal</AppliedVelocityHedge>
  <AppliedHostHedge>Normal</AppliedHostHedge>
  <AppliedCategoryGift>No</AppliedCategoryGift>
  <AppliedCategoryTime>Normal</AppliedCategoryTime>
  <BinAccountType>CN<BinAccountType>
  <BinScheme>Visa Credit</BinScheme>
  <BinIssuer>sample card issuer</BinIssuer>

```



```
<BinCountry>US</BinCountry>
<IPCity>Sample Town</IPCity>
<IPCountry>US</IPCountry>
<IPRoutingMethod>Fixed</IPRoutingMethod>
<IPState>MI</IPState>
<InfoCodes>...</InfoCodes>
</RiskData>
```

<InfoCodes>

The <InfoCodes> contain all the information codes that can be returned for an order.

Syntax

```
<InfoCodes>
  (InfoCode) +
</InfoCodes>
```

Table 49 Child Elements of <InfoCodes>

Element Name	Description	Data Type and Length
<InfoCode>	Specific information code returned for an order. For a list of child elements, see <InfoCode> .	

Example <InfoCodes> element

```
<InfoCodes>
  <InfoCode>...</InfoCode>
</InfoCodes>
```

<InfoCode>

The <InfoCodes> contain all the information codes that can be returned for an order.

Syntax

```
<InfoCode Name=CDATA>
  (CodeValue)
  (CodeType)
</InfoCode>
```

Table 50 Child Elements of <InfoCode>

Element Name	Description	Data Type and Length
<CodeType>	Category of information code returned for an order. This element can contain one of these values: <ul style="list-style-type: none">• address• hotlist• identity• internet• merchant_velocity• phone• suspicious• velocity	String (20)
<CodeValue>	Description of the information code returned in the <CodeType> element. For a description of the values, see Appendix H, " Score Information Codes ," on page 183. For merchant_velocity, see the custom merchant velocity order and product rules and the corresponding information codes created for your implementation.	String (255)

Example <InfoCodes> element

```
<InfoCode>
  <CodeType>velocity</CodeType>
  <CodeValue>VEL-CC</CodeValue>
</InfoCode>
```

<ProfileList>

The <ProfileList> element contains detailed information about the evaluation of an order by Decision Manager.

Syntax

```
<ProfileList>
  (Profile)+
</ProfileList>
```

Table 51 Child Elements of <ProfileList> in the Single Transaction Report

Element Name	Description	Data Type and Length
<Profile>	Profile used to evaluate an order. See “<Profile>” on page 75.	String (255)

Example <ProfileList> element

```
<ProfileList>
  <Profile> </Profile>
</ProfileList>
```

<Profile>

The <Profile> element contains detailed information about the profile used to evaluate an order.

Syntax

```
<Profile Name=CDATA>
  (ProfileMode)
  (ProfileDecision)
  (RuleList)?
</Profile>
```

Table 52 Attributes of <Profile> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
Name	Name of the profile.	String (255)

Table 53 Child Elements of <Profile> in the Single Transaction Report

Element Name	Description	Data Type and Length
<ProfileMode>	Activity mode of the profile; this field contains one of these values: <ul style="list-style-type: none"> Active Passive 	String (255)
<ProfileDecision>	Decision returned by the profile; this field contains one of these values: <ul style="list-style-type: none"> ACCEPT REJECT REVIEW 	String
<RuleList>	List of rules used to evaluate an order. For a list of child elements, see <RuleList> .	String

Example <Profile> element

```
<Profile Name="Default Profile">
  <ProfileMode>Active</ProfileMode>
  <ProfileDecision>ACCEPT</ProfileDecision>
  <RuleList> ... </RuleList>
</Profile>
```

<RuleList>

The <RuleList> element lists all the rules in the profile.

Syntax

```
<RuleList>
  (Rule) *
</RuleList>
```

Table 54 Child Elements of <RuleList> in the Single Transaction Report

Element Name	Description	Data Type and Length
<Rule>	List of all the rules in the profile. For a list of child elements, see <Rule> .	String (255)

Example <RuleList> element

```
<RuleList>
  <Rule>
  </Rule>
  <Rule>
  </Rule>
  ...
</RuleList>
```

<Rule>

The <Rule> element contains information about the rules of the profile used to evaluate an order and the decision returned by each rule.

Syntax

```
<Rule>
  (RuleName)
  (RuleDecision)
</Rule>
```

Table 55 Child Elements of <Rule> in the Single Transaction Report

Element Name	Description	Data Type and Length
<RuleName>	Name of the rule	String (255)
<RuleDecision>	Decision returned by the rule. Possible values: <ul style="list-style-type: none"> • Accept • Reject • Review • Ignore 	String (6)

Example <Rule> element

```
<Rule>
  <RuleName>Card Verification Number was not submitted.</RuleName>
  <RuleDecision>IGNORE</RuleDecision>
  <RuleName>Card issued outside of US (AVS indicator)</RuleName>
  <RuleDecision>Ignore</RuleDecision>
  ...
</Rule>
```

<TravelData>

The <TravelData> element contains all the information about the purchased trip and the passengers.

Syntax

```
<TravelData>
  (TripInfo)
  (PassengerInfo)?
</TravelData>
```

Table 56 Child Elements of <TravelData>

Element Name	Description	Data Type and Length
<TripInfo>	Information about the itinerary. For a list of the child elements, see <TripInfo> .	
<PassengerInfo>	Information about the passengers. For a list of the child elements, see <PassengerInfo> .	

Example <TravelData> element

```
<TravelData>
  <TripInfo>...</TripInfo>
  <PassengerInfo>...</PassengerInfo>
</TravelData>
```

<TripInfo>

The <TripInfo> element contains all the information about the itinerary.

Syntax

```
<TripInfo>
  (CompleteRoute)?
  (JourneyType)?
  (DepartureDateTime)?
</TripInfo>
```

Table 57 Child Elements of <TripInfo>

Element Name	Description	Data Type and Length
<CompleteRoute>	Concatenation of individual travel legs in the format ORIG1-DEST1[:ORIG2-DEST2...:ORIGn-DESTn], for example: SFO-JFK:JFK-LHR:LHR-CDG. For a complete list of airport codes, see IATA's City Code Directory .	String (255)
<JourneyType>	Type of travel. For example, you can use values such as one way or round trip.	String (32)
<DepartureDateTime>	Departure date and time of the first leg of the trip in one of these formats: <ul style="list-style-type: none"> yyyy-MM-dd HH:mm z yyyy-MM-dd hh:mm a z yyyy-MM-dd hh:mmz z HH = hour in 24-hour format hh = hour in 12-hour format a = am or pm (case insensitive) z = your time zone	DateTime (25)

Example <TripInfo> element

```
<TripInfo>
  <CompleteRoute>AB-CD:EF-GH</CompleteRoute>
  <JourneyType>round trip</JourneyType>
  <DepartureDateTime>2009-03-20 11:30 PM PDT</DepartureDateTime>
</TripInfo>
```

<PassengerInfo>

The <PassengerInfo> element contains all the passengers' reference information.

Syntax

```
<PassengerInfo>
  (Passenger) *
</PassengerInfo>
```

Table 58 Child Elements of <PassengerInfo>

Element Name	Description	Data Type and Length
<Passenger>	Complete information about a passenger. For a list of the child elements, see <Passenger> .	

Example <PassengerInfo> element

```
<PassengerInfo>
  <Passenger>...</Passenger>
</PassengerInfo>
```

<Passenger>

The <Passenger> element contains the complete information about a passenger.

Syntax

```
<Passenger Number=CDATA>
  (PassengerFirstName)?
  (PassengerLastName)?
  (PassengerID)?
  (PassengerStatus)?
  (PassengerType)?
  (PassengerPhone)?
  (PassengerEmail)?
</Passenger>
```

Table 59 Attribute of <Passenger>

Attribute Name	Description	Data Type and Length
Number	Offer level or rank of the passenger in the order.	Numeric (no limit)

Table 60 Child Elements of <TravelData>

Element Name	Description	Data Type and Length
<PassengerFirstName>	Passenger's first name.	String (60)
<PassengerLastName>	Passenger's last name.	String (60)
<PassengerID>	ID of the passenger to whom the ticket was issued. For example, you can use this field for the frequent flyer number.	String (32)
<PassengerStatus>	Your company's passenger classification, such as with a frequent flyer program. In this case, you might use values such as standard, gold, or platinum.	String (32)
<PassengerType>	Passenger classification associated with the price of the ticket. This element can contain one of these values: <ul style="list-style-type: none"> • ADT: Adult • CNN: Child • INF: Infant • YTH: Youth • STU: Student • SCR: Senior Citizen • MIL: Military 	String (32)
<PassengerPhone>	Passenger's phone number. If the order is from outside the U.S., CyberSource recommends that you include the country code.	String (15)
<PassengerEmail>	Passenger's email address, including the complete domain name, such as jdoe@example.com.	String (255)

Example <Passenger> element

```
<Passenger Number="1">
  <PassengerFirstName>john</PassengerFirstName>
  <PassengerLastName>doe</PassengerLastName>
  <PassengerID>sing-002</PassengerID>
  <PassengerStatus>Adult</PassengerStatus>
  <PassengerType>Gold</PassengerType>
  <PassengerPhone>9995551212</PassengerPhone>
  <PassengerEmail>jdoe@example.com</PassengerEmail>
</Passenger>
```

Transaction Exception Detail Report

This report gives detailed information about transactions that were flagged by CyberSource or by the processor because of errors that were sent in the request of your follow-on transactions, such as captures and credits. For example, you might see errors such as a capture amount greater than the authorized amount and missing or invalid fields.

After reviewing and correcting the errors, you can resend the requests and then update your system to avoid these errors in the future.

Important Error notifications received from card processors during authorization attempts will continue to be reported immediately.

With the Global Payment Services, all errors associated with the primary and follow-on requests associated will be included in this report. For more information, see the [Global Payment Services Planning and User's Guide](#).

<Report>

The <Report> element is the root element of the report.

Syntax

```
<Report Name=CDATA
  Version=CDATA
  xmlns=CDATA>
  MerchantID=CDATA
  ReportStartDate=CDATA
  ReportEndDate=CDATA
  (Requests)
</Report>
```

Table 61 Attributes of <Report> in the Transaction Exception Detail Report

Attribute Name	Description	Data Type and Length
Name	Name of the report. This field always contains the text <code>Transaction Exception Detail</code> .	String (100)
Version	Version number of the report. The current version number is 1.0.	Numeric (10)
xmlns	XML namespace for the report. The namespace for the current version is <code>https://ebc.cybersource.com/ebc/reports/dtd/tedr.dtd</code> .	String (100)
MerchantID	CyberSource merchant ID used for the transaction.	String (30)
ReportStartDate	First date included in the report.	DateTime (25)

Table 61 Attributes of <Report> in the Transaction Exception Detail Report (Continued)

Attribute Name	Description	Data Type and Length
ReportEndDate	Last date included in the report.	DateTime (25)

Table 62 Child Element of <Report> in the Transaction Exception Detail Report

Element Name	Description
<Requests>	Contains all the requests in the report. See “ <Requests> ” on page 83.

Example <Report> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://ebc.cybersource.com/ebc/reports/dtd/tedr.dtd">
<Report Name="Transaction Exception Detail"
  Version="1.0"
  xmlns="https://ebc.cybersource.com/ebc/reports/dtd/tedr.dtd"
  MerchantID="example"
  ReportStartDate="2006-05-20T05:00:00-05:00"
  ReportEndDate="2006-05-21T05:00:00-05:00"
  <Requests>
    ...
  </Requests>
</Report>
```

<Requests>

The <Requests> element contains all the requests in the report.

Syntax

```
<Requests>
  (Request) *
</Requests>
```

Table 63 Child Elements of <Requests> in the Transaction Exception Detail Report

Element Name	Description
<Request>	Information about a single request. See “ <Request> ” on page 84.

Example <Requests> Element

```
<Requests>
  <Request>
    ...
  </Request>
</Requests>
```

<Request>

The <Request> element contains information about a single request. A request can include many CyberSource applications.

Syntax

```
<Request>
  (BasicInformation)
  (PaymentData)
  (PaymentMethod)
  (ErrorInformation)
  (BillTo)
  (ShipTo) ?
</Request>
```

Table 64 Child Elements of <Request> in the Transaction Exception Detail Report

Element Name	Description
<BasicInformation>	Information, such as the request ID, that identifies the request. See “ <BasicInformation> ” on page 85.
<PaymentData>	Includes the amount and currency of the payment. See “ <PaymentData> ” on page 86.
<PaymentMethod>	Information about the payment method for the order. See “ <PaymentMethod> ” on page 87.
<ErrorInformation>	Information about the error that occurred. See “ <ErrorInformation> ” on page 88.
<BillTo>	Information about the billing address and purchaser for the order. See “ <BillTo> ” on page 89.
<ShipTo>	Information about the shipping address and recipient for the order. See “ <ShipTo> ” on page 90.

Example <Request> Element

```

<Request>
  <BasicInformation>
    ...
  </BasicInformation>
  <Amount>
  <PaymentMethod>
    ...
  </PaymentMethod>
  <ErrorInformation>
    ...
  </ErrorInformation>
  <BillTo>
    ...
  </BillTo>
  <ShipTo>
    ...
  </ShipTo>

```

<BasicInformation>

The <BasicInformation> element contains identifying information for the request.

Syntax

```

<BasicInformation>
  (RequestID)
  (TransactionDate)
  (MerchantReferenceNumber)
  (TransactionReferenceNumber)
  (TransactionType)
  (OriginalRequestID)
</BasicInformation>

```

Table 65 Child Elements of <BasicInformation> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<RequestID>	Unique identifier generated by CyberSource for the transaction.	Numeric (26)
<RequestDate>	Date when the transaction was processed.	DateTime (25)
<MerchantReferenceNumber>	Merchant-generated order reference or tracking number.	String (50)

Table 65 Child Elements of <BasicInformation> in the Transaction Exception Detail Report (Continued)

Element Name	Description	Data Type and Length
<TransactionReferenceNumber>	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the (Simple Order API) <service>_reconciliationID and to the (SCMP API) <service>_trans_ref_no reply fields.	String (60)
<TransactionType>	Type of transaction, such as credit card capture, credit, or bank transfer.	String (30)
<OriginalRequestID>	Request ID of the original transaction. For example, if the request that has an error is a refund, this field contains the request ID of the original payment.	Numeric (26)

Example <BasicInformation> Element

```

<BasicInformation>
  <RequestID>1406253049220167904565</RequestID>
  <TransactionDate>2006-02-22T16:21:44-08:00</RequestDate>
  <MerchantReferenceNumber>1140625304845</MerchantReferenceNumber>
  <TransactionReferenceNumber>02YZPT2EOGD3D</TransactionReferenceNumber>
  <TransactionType>Credit card capture</TransactionType>
  <OriginalRequestID>1406235110599167904565</OriginalRequestID>
</BasicInformation>

```

<PaymentData>

The <PaymentData> element lists the amount and currency for the transaction.

Syntax

```

<PaymentData>
  (Amount)
  (CurrencyCode)?
</PaymentData>

```

Table 66 Child Elements of <PaymentData> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<Amount>	Amount specified in the request.	Amount (19)
<CurrencyCode>	Optional ISO currency code used for the transaction.	String (5)

Example <PaymentData> Element

```
<PaymentData>
  <Amount>30.00</Amount>
  <Currency>USD</Currency>
</PaymentData>
```

<PaymentMethod>

The <PaymentMethod> element contains information about the payment method for the order.

Syntax

```
<PaymentMethod>
  (AccountSuffix) ?
  (BankCode) ?
  (BankAccountName) ?
  (ExpirationMonth) ?
  (ExpirationYear) ?
  (CardType) ?
</PaymentMethod>
```

Table 67 Child Elements of <PaymentMethod> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<AccountSuffix>	Last four characters of the account number.	String (4)
<BankCode>	Bank code or sort code for the account if a bank account was used for the transaction.	String (15)
<BankAccountName>	Name of account holder.	String (60)
<ExpirationMonth>	If a credit card was used for the transaction, expiration month of the card (<i>MM</i>).	Numeric (2)
<ExpirationYear>	If a credit card was used for the transaction, expiration year of the card (<i>YYYY</i>).	Numeric (4)
<CardType>	Type of card or bank account. For the possible values, see Appendix E, “ Types of Cards and Bank Accounts ,” on page 171.	String (50)

Example <PaymentMethod> element for a direct debit or bank transfer

```
<PaymentMethod>
  <AccountSuffix>4409</AccountSuffix>
  <BankCode>20-00-00</BankCode>
  <BankAccountName>John Smith</BankAccountName>
</PaymentMethod>
```

Example <PaymentMethod> element for a card transaction

```
<PaymentMethod>
  <AccountSuffix>4409</AccountSuffix>
  <ExpirationMonth>10</ExpirationMonth>
  <ExpirationYear>2010</ExpirationYear>
  <CardType>Visa</CardType>
</PaymentMethod>
```

<ErrorInformation>

The <ErrorInformation> element contains information about the error that occurred for the transaction.

Syntax

```
<ErrorInformation>
  (PaymentProcessor)?
  (Action)?
  (ErrorCategory)?
  (ErrorMessage)?
  (ReasonCode)?
  (ProcessorResponseCode)?
</ErrorInformation>
```

Table 68 Child Elements of <ErrorInformation> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<PaymentProcessor>	See Appendix D, " Payment Processors ," on page 167.	String (40)
<Action>	Brief description of the action. Possible values: <ul style="list-style-type: none"> • ERROR • FAILED • CANCELLED 	String (15)
<ErrorCategory>	Type of error. Possible values: <ul style="list-style-type: none"> • Data Error • Failure • Processor Error • Settlement Error 	String (20)
<ErrorMessage>	Description of the error.	String (255)
<ReasonCode>	Reason code for the error that occurred. This reason code is the same one that you receive in the reply or transaction receipt. See Appendix F, " Reason Codes in the Transaction Exception Detail Report ," on page 173.	Numeric (3)

Table 68 Child Elements of <ErrorInformation> in the Transaction Exception Detail Report (Continued)

Element Name	Description	Data Type and Length
<ProcessorResponseCode>	Code returned directly from the processor for the error that occurred.	String (60)

Example <ErrorInformation> Element

```

<ErrorInformation>
  <PaymentProcessor>sample processor</PaymentProcessor>
  <ErrorCategory>Failure</ErrorCategory>
  <ErrorMessage>The request ID is invalid.</ErrorMessage>
  <ReasonCode>241</ReasonCode>
  <ProcessorResponseCode>02</ProcessorResponseCode>
</ErrorInformation>

```

<BillTo>

The <BillTo> element contains information about the billing address and purchaser for the order.

Syntax

```

<BillTo>
  (FirstName)
  (LastName)
  (Address1)
  (Address2)?
  (City)
  (State)?
  (PostalCode)
  (Country)
  (CompanyName)?
  (Email)
  (Phone)
</BillTo>

```

Table 69 Child Elements of <BillTo> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<FirstName>	First name of the billed customer.	String (60)
<LastName>	Last name of the billed customer.	String (60)
<Address1>	First line of the billing address.	String (60)
<Address2>	Second line of the billing address.	String (60)

Table 69 Child Elements of <BillTo> in the Transaction Exception Detail Report (Continued)

Element Name	Description	Data Type and Length
<City>	City of the billing address.	String (50)
<State>	State, province, or territory of the billing address.	String (20)
<PostalCode>	Postal code of the billing address.	String (10)
<Country>	ISO country code of the billing address.	String (2)
<CompanyName>	Company name of the billing address.	String (60)
<Email>	Email address of the bill-to customer.	String (255)
<Phone>	Phone number of the billed customer.	String (15)

Example <BillTo> Element

```
<BillTo>
  <FirstName>John</FirstName>
  <LastName>Doe</LastName>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <PostalCode>94043</PostalCode>
  <Country>US</Country>
  <Email>example@example.com</Email>
  <Phone>650-965-6000</Phone>
</BillTo>
```

<ShipTo>

The <ShipTo> element contains information about the shipping address and recipient for the order.

Syntax

```
<ShipTo>
  (FirstName)?
  (LastName)?
  (Address1)?
  (Address2)?
  (City)?
  (State)?
  (PostalCode)?
  (Country)?
</ShipTo>
```

Table 70 Child Elements of <ShipTo> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<FirstName>	First name of the customer receiving the shipment.	String (60)
<LastName>	Last name of the customer receiving the shipment.	String (60)
<Address1>	First line of the shipping address.	String (60)
<Address2>	Second line of the shipping address.	String (60)
<City>	City of the shipping address.	String (60)
<State>	State, province, or territory of the shipping address.	String (50)
<PostalCode>	Postal code of the shipping address.	String (10)
<Country>	ISO country code of the shipping address.	String (2)

Example <ShipTo> Element

```
<ShipTo>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <PostalCode>94043</PostalCode>
  <Country>US</Country>
</ShipTo>
```

User Management Report

This report provides information about the permissions and roles granted to users.

<Report>

<Report> is the root element of the report.

Syntax

```
<Report Name=CDATA
      ReportDate=CDATA
      Version=NMTOKEN
      xmlns=CDATA>
  (Users)
</Report>
```

Table 71 Attributes of <Report> in the User Management Report

Attribute Name	Description	Data Type and Length
Name	Name of the report. This element always contains the text <code>User Listing</code> .	String (100)
ReportDate	Date and time when the report was run.	DateTime (25)
Version	Version number of the report. The current version number is 1.0.	Numeric (10)
xmlns	XML namespace for the DTD: <code>https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd</code> .	String (100)

Table 72 Child Element of <Report> in the User Management Report

Element Name	Description
<Users>	Information about each user. See " <Users> " on page 92.

Example <Report> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd">
<Report Name="User Listing"
      Version="1.0"
      xmlns="https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd"
      ReportDate="2007-09-21 05:31 GMT">
</Report>
```

<Users>

The <Users> element contains all of the users from a report date.

Syntax

```
<Users>
  (User) *
</Users>
```

Table 73 Child Element of <Users> in the User Management Report

Element Name	Description
<User>	Information about a user. See “<User>” on page 93.

Example <Users> Element

```
<Users>
  <User>
    ...
  </User>
</Users>
```

<User>

The <User> element contains information about a user.

Syntax

```
<User username CDATA #REQUIRED
      merchantid CDATA #REQUIRED
      firstname CDATA #REQUIRED
      lastname CDATA #REQUIRED
      email CDATA #IMPLIED
      datecreated CDATA #REQUIRED
      lastaccess CDATA #REQUIRED
      status CDATA #REQUIRED
      role CDATA #REQUIRED>
  (Permissions)
</User>
```

Table 74 Attributes of <User> in the User Management Report

Attribute Name	Description	Data Type and Length
username	Unique identifier for the user.	String (50)
merchantid	CyberSource merchant ID used for the transactions in the report.	String (30)
firstname	User's first name.	String (60)
lastname	User's last name.	String (60)
email	Optional email address of the user.	String (255)

Table 74 Attributes of <User> in the User Management Report (Continued)

Attribute Name	Description	Data Type and Length
datecreated	Date when the user was created.	DateTime (25)
lastaccess	Date when the user most recently logged in the Business Center .	DateTime (25)
status	Activity status of the user: <ul style="list-style-type: none">• enabled: user can perform tasks according to permissions granted.• disabled: user cannot log in the Business Center.	String
role	Named collection of single permissions that describe the tasks assigned to a user, such as admin or custom.	String

Table 75 Child Element of <User> in the User Management Report

Element Name	Description
<Permissions>	Information about the permissions granted to a user. See " <Permissions> " on page 94.

Example <User> Element

```
<User username="infodev_user"
  merchantid="infodev"
  firstname="Jane"
  lastname="Doe"
  email=""
  datecreated="2007-03-29 07:47 GMT"
  lastaccess="2007-09-21 04:26 GMT"
  status="Enabled"
  role="Custom">
  <Permissions>
</Permissions>
</User>
```

<Permissions>

The <Permissions> element contains information about the permissions granted to the user.

Syntax

```
<Permissions>
  (Permission) *
</Permissions>
```

Table 76 Child Element of <Permissions> in the User Management Report

Element Name	Description
<Permission>	Each permission granted to the user. See “ <Permission> ” on page 96.

Example <Permissions> Element

```
<Permissions>
  <Permission>
    ...
  </Permission>
</Permissions>
```

<Permission>

The <Permission> element contains information about each permission granted to the user.

Syntax

```
<Permission EMPTY name CDATA #REQUIRED>  
</Permission>
```

Table 77 Attribute of <Permission> in the User Management Report

Attribute Name	Description	Data Type and Length
<Name>	Name of each permission granted to the user.	String

Example <Permission> Element

```
<Permission name="Virtual Terminal Transaction"/>  
<Permission name="Payment Authorization"/>
```


Chapter 4

CSV Reports

This chapter describes the format of these CyberSource CSV reports:

[Exported Search Results](#)

[Payment Batch Detail Report](#)

[Payment Events Report](#)

[Payment Submission Detail Report](#)

[Transaction Exception Detail Report](#)

[User Management Report](#)

Exported Search Results

This section describes the exported search results:

[First Line of the Report](#)

[Transaction Record](#)

First Line of the Report

The first line of the report describes the column headings with the name of each field. The data type and length of each field is string (100).

Example Second line of the report

```
Merchant ID,Date and Time,Request ID,Merchant Reference Number,Last Name,First  
Name,Email Address,Amount,Currency,Account Suffix,Applications
```

Transaction Record

Each transaction record includes information about a CyberSource payment transaction. For information about possible values for each field, see the implementation guide for the services that you use.

Example Transaction record. Each line of the report is described in the following table.

```
ubcvp1_3,Dec 01 2006 06:26:15 PM,1650191751800167904064,1165019175129,
YOUNG,SARAH,sample@sample.com,10.00,USD,1111,"Credit Card Authorization
(Accept),Decision Manager(Accept)"
```

Table 78 Fields in the Transaction Record

Position (Column)	Field Name	Description	Data Type and Length
1 (A)	merchantID	CyberSource merchant ID used for the transaction.	String (30)
2 (B)	Date and Time	Complete date and time of the transaction, for example: Aug 30 2006 11:15:17 AM	DateTime (25)
3 (C)	requestID	CyberSource's identifier for the transaction.	Numeric (26)
4 (D)	Merchant Reference Number	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)
5 (E)	Last Name	Last name of the billed customer.	String (60)
6 (F)	First Name	First name of the billed customer.	String (60)
7 (G)	Email Address	Email address of the billed customer.	String (255)
8 (H)	Amount	Amount of the transaction. For ics_credit and ics_ecp_credit transactions, the amount is negative.	Amount (19)
9 (I)	Currency	ISO currency code used for the transaction.	String (5)
10 (J)	Account Suffix	Last four digits of the customer's payment account number	String (4)
11 (K)	Applications	Comma-separated list of the services that you requested with the result for each service, for example: <ul style="list-style-type: none"> Credit Card Authorization(Accept),Credit Card Settlement(Accept) Tax Calculation(Accept),Credit Card Authorization(Accept),Credit Card Settlement(Accept),Advanced Fraud Screen(Accept) 	

Sample Record. Each record includes information about an order.

```
ubcvp1_3,Nov 27 2006 12:27:04 PM,1646520241230167904065,ubcvp1_3272706102704,,,
jane.doe@example.com,,,3333,Customer List Modification(Accept)
ubcvp1_3,Nov 10 2006 05:24:05 PM,1632013444870167904065,fraud_cleanup_tool_remove_
1163201344486,,,,,,IFS Update(Accept)
ubcvp1_3,Sep 27 2006 04:56:55
PM,1593944457280167904064,1159394445727,Doe,John,null@cybersource.com,1.00,USD,0299,"
Credit Card Authorization(Accept),Decision Manager(Accept)"
ubcvp1_3,Sep 08 2006 10:52:45 AM,1577307655110167904065,1157730593326,,,,,,
Subscription Creation(Reject)
```

Payment Batch Detail Report

The Payment Batch Detail Report contains these types of transactions:

- Bank transfer and bank transfer refund
- Credit card capture and credit
- Direct debit and direct debit refund
- Electronic check debit and electronic check credit
- PayPal transactions
- Bill Me Later transactions

The first two records in the report are header records. The rest of the records contain information about your payment transactions. The report includes only transactions that CyberSource has sent to the payment processor.

Note Transactions appear in the Payment Batch Detail Report before funds are transferred to or from your merchant bank account. To determine whether funds have been transferred, you must reconcile the Payment Batch Detail Report with your bank statements.

For more information about reconciling transactions, see the implementation guides for the services you are using.

[First Header Record](#)

[Second Header Record](#)

[Transaction Record](#)

First Header Record

The first header record describes the name and version of the report and indicates which dates are included in the report.

Example First Header Record

```
Payment Batch Detail Report,1.0,2001-08-15 to 2001-08-15,,,,,,,,
```

Table 79 Fields in the First Header Record in the Payment Batch Detail Report

Position	Field Name	Description	Data Type and Length
1 (A)	report_name	Name of the report. This field always contains the text <code>Payment Batch Detail Report</code> .	String (100)
2 (B)	version_number	Version number of the report. The current version number is 1.0.	Numeric (10)
3 (C)	date_range	Dates included in the report in the format <code>YYYY-MM-DD to YYYY-MM-DD</code> . The first date is the start date; the second date is the end date. For the Payment Batch Detail Report, both dates are identical.	String (100)

Second Header Record

The second header record indicates the name of each field in the report. The fields in the second header record follow these rules:

- The content of each field is the same as the field name.
- The data type and length of each field is String (100).

The list of field names in the second header record is in [Table 80](#) on page 101.

Example Second Header Record

```
batch_id,merchant_id,batch_date,request_id,merchant_ref_number,trans_ref_no,payment_
method,currency,amount,transaction_type
```

Transaction Record

Each transaction record includes information about a CyberSource payment transaction.

Example Transaction Record

```
987654321,CyberSource,2001-08-15,9979040000003515181891,3C1B4BC412EB00561AE1C19D5,SZJ
PTM07Y8O5,Visa,USD,100.00,ics_bill
```

Table 80 Fields in the Transaction Record in the Payment Batch Detail Report

Position	Field Name	Description	Data Type and Length
1	batch_id	CyberSource batch in which the transaction was sent.	Numeric (39)
2	merchant_id	CyberSource merchant ID used for the transaction.	String (30)
3	batch_date	Date when the batch was sent to the processor.	Date (10)
4	request_id	Identifier for the transaction.	Numeric (26)
5	merchant_ref_number	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)
6	trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID (Simple Order API) and to the <service>_trans_ref_no (SCMP API) reply fields.	String (60)
7	payment_method	Type of card or bank account. For the possible values, see Appendix E, " Types of Cards and Bank Accounts ," on page 171.	String (50)
8	currency	ISO currency code used for the transaction.	String (5)
9	amount	Amount of the transaction. For ics_credit and ics_ecp_credit transactions, the amount is negative.	Amount (19)
10	transaction_type	CyberSource payment application processed for the transaction.	String (50)

Payment Events Report

This report contains information about events that occur for:

- Bank transfers
- China payments and refunds
- Credit card transactions processed with the CyberSource Global Payment Service
- Direct debits
- Electronic check debits and credits
- PayPal transactions

Report Generation for the Global Payment Service. The report is generated daily Monday through Friday unless CyberSource does not receive a data file from the processor, receives the data file after the cut-off time, or receives an empty data file. Because the report is not generated on weekends, the report that you download on Mondays contains all your weekend transactions. Make sure your implementation can handle reports that contain transactions spanning multiple processing days.

The report is generated for the date when CyberSource processes the file, not for the date when the processor submits the file. Because of cut-off and processing times, transactions that you process on Day 1 will most likely appear on the report on Day 3.

If the generation of the report is delayed, you are notified. Because the report generated after a delay may span more than one day, make sure you can track the delayed reports.

When CyberSource needs to regenerate a report, the entire report is generated, not selected transactions. You are notified as soon as the new version of the report is available. Make sure your implementation can recognize and process only the transactions that were modified or added to the report.

Transaction Exceptions for the Global Payment Service. Although most reports contain transactions that you can match, your implementation also needs to recognize payment and refund exceptions. In some cases, you might need to search your system manually for the original request ID, which remains in the CyberSource system for six months.

- **Rejected payments and refunds**
Although the reply that you receive from CyberSource might indicate that a transaction was successful, the processor can occasionally reject a transaction. Rejected transactions do not appear on the Payment Events Report. However, Customer Support will notify you by email if rejections occur.
- **Delayed payments**
You need to be aware that payments can occasionally be delayed.
- **Unmatched payments and refunds**
Unmatched events occur when the processor generates an event that cannot be matched or when the event is older than six months. If CyberSource cannot match the payment or refund to a specific transaction, CyberSource generates a new request ID for the unmatched event. You may need to search manually for the original request in your system.
- **Corrections to payments and refunds**
When the amount of the original event is changed or the event is reversed, you need to update the original payment or refund.

Duplicate payments and refunds can appear in the same or different reports. You can ignore these events because they will match an existing request ID.

First Header Record

The first header record describes the name and version of the report and indicates which dates are included in the report.

Example First Header Record

```
Payment Events Report,1,2004-02-28,merchant_id,,,
```

Table 81 Fields in the First Header Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
1	report_name	Name of the report. This field always contains the text <code>Payment Events Report</code> .	String (100)
2	version_number	Version number of the report. The current version number is 1.0, which is shown in the Excel spreadsheet as 1.	Numeric (10)
3	report_date	Date included in the report. This field uses the format <code>YYYY-MM-DD</code> .	Date & time (10)
4	merchant_id	CyberSource merchant ID	String (30)

Second Header Record

The second header record indicates the name of each field in the report. For a list of field names in the second header record, see [Table 82](#) on page 104. In the fields of the second header record, the content is the same as the field name, and the data type and length is String (100).

Example Second Header Record

```
request_id,merchant_id,merchant_ref_number,payment_type,event_type,event_date,trans_ref_no,merchant_currency_code,merchant_amount,consumer_currency_code,consumer_amount,fee_currency_code,fee_amount,processor_message
```

Transaction Record

Each transaction record includes information about a CyberSource or PayPal payment transaction. For information about possible values for each field, see the Implementation Guide for the services you use. These guides are available in the [Support Center](#).

Example Transaction Record

```
1004223530000167905139,CyberSource,4828225690-3098813497360087,credit card,Payment,2/28/2004,54415,JPY,20000,JPY,20000,,, [DC]
```

Table 82 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
1	request_id	<p>Unique identifier generated by CyberSource for the transaction. If your payment processor is Global Collect, the value in this field may be 1 followed by 21 zeros in these cases:</p> <ul style="list-style-type: none"> Transaction older than six months: request ID no longer stored. Transaction information sent by processor: no valid request ID. 	Numeric (26)
2	merchant_id	CyberSource merchant ID used for the transaction.	String (30)
3	merchant_ref_number	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)
4	payment_type	<p>Method of payment used for the order. Possible values:</p> <ul style="list-style-type: none"> <code>bank transfer</code>: Bank transfer. For China payments and refunds, the <code>bank transfer</code> value indicates a Chinese bank card or PayEase eWallet transaction. <code>credit card</code>: Personal credit card. For China payments and refunds, the <code>credit card</code> value indicates an international credit card transaction. <code>corporate</code>: Corporate credit card <code>debit</code>: Debit card, such as a Maestro (UK Domestic) or Solo card <code>check</code>: Electronic check <code>PayPal Credit</code>: PayPal transaction <code>PayPal Debit</code>: PayPal transaction <p>If your processor is TeleCheck, the payment types are:</p> <ul style="list-style-type: none"> <code>Debit</code>: Debit card <code>Claim</code>: Bill or settlement <code>Credit</code>: Credit card <code>Void</code>: Voided transaction 	String (10)

Table 82 Fields in the Transaction Record in the Payment Events Report (Continued)

Position	Field Name	Description	Data Type and Length
5	event_type (credit card, bank transfer, or direct debit transactions)	<p>Type of event that occurred for the transaction:</p> <ul style="list-style-type: none"> Chargeback: The customer did not authorize the transaction. For details about the chargeback, see the processor_message value in the report. Correction: The payment or refund was corrected, or the bank was unable to credit the customer's account; the value is either positive or negative. Failed: The account was invalid or disabled. For details about the failure, see the processor_message value in the report. Other: The processor reported an unanticipated event. Payment: The payment was received by the processor's bank; the value is always positive. Refund: The payment was returned; the value is always negative. For details about the refund, see the processor_message value in the report. Reversal: A payment was reversed. For details about the reversal, see the processor_message value in the report. Settled: The transaction has been settled: the payment has been received, or the refund has been given to the customer. Settled Unmatched: A bank transfer payment has been received but cannot be matched to the original request. 	Alpha (20)
5	event_type (PayEase China Processing transactions)	<p>Type of event that occurred for the transaction. Possible values:</p> <ul style="list-style-type: none"> Chargeback: The original payment transaction is being disputed by the cardholder or the cardholder's bank. Payment Abnormal: The payment has been held up for regulatory or legal reasons. Payment Declined: The processor has refused the payment request. Payment Failed: The payment request failed. The reason is not specified. Payment Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled payment. 	Alpha (20)

Table 82 Fields in the Transaction Record in the Payment Events Report (Continued)

Position	Field Name	Description	Data Type and Length
		<ul style="list-style-type: none">• <code>Payment Initiated</code>: The payment request was received from the merchant.• <code>Payment Lost</code>: The processor does not acknowledge receiving the payment request.• <code>Payment Pending Proc</code>: The payment has not been completed. It is awaiting settlement by the processor.• <code>Payment Settled</code>: The payment has been confirmed by the processor and is expected to be funded.• <code>Refund Abnormal</code>: The refund has been held up for regulatory or legal reasons.• <code>Refund Declined</code>: The processor has refused the refund request.• <code>Refund Failed</code>: The refund request failed. The reason is not specified.• <code>Refund Funded</code>: The processor has submitted a transfer to the merchant's bank account as a result of a settled refund.• <code>Refund Pending Cyb</code>: The refund has not been completed. It is awaiting transmission by CyberSource.• <code>Refund Pending Proc</code>: The refund has not been completed. It is awaiting settlement by the processor.• <code>Refund Settled</code>: The refund has been confirmed by the processor and is expected to be funded.• <code>Unknown</code>: The processor does not acknowledge receiving the request.	

Table 82 Fields in the Transaction Record in the Payment Events Report (Continued)

Position	Field Name	Description	Data Type and Length
5	event_type (check transactions)	<p>Type of event that occurred for the check transaction. These values vary with the processor.</p> <p>Successful Events</p> <ul style="list-style-type: none"> Payment: Payment has been received. The value is always positive. Refund: A refund (credit) occurred. The value is always negative. Completed: The transaction was completed: <p><i>CyberSource ACH Service</i>—The event type is Payment after a debit request is received by the bank. CyberSource waits for three days. If the bank does not inform CyberSource about any problems with the funds transfer, the bank considers the check cleared. The event type listed in the report is Completed when the check clears. CyberSource does not guarantee that the check has truly cleared.</p> <p>Failed Events</p> <ul style="list-style-type: none"> Correction: A positive or negative correction occurred to a payment or refund. Declined: The account was invalid or disabled. For details about the decline, see the processor_message value in the report. Error: An error occurred. For details about the error, see the processor_message value in the report. Failed: The account was invalid or disabled. For details about the failure, see the processor_message value in the report. Final NSF: The final instance of insufficient funds occurred. First NSF: The bank will attempt to re-deposit the funds. NSF: The bank returned the check because of insufficient funds.Other: The processor reported an unanticipated event. Second NSF: The bank will attempt to re-deposit the funds for the second time. Stop Payment: The customer stopped the payment. Void: The check was successfully voided. 	Alpha (20)

Table 82 Fields in the Transaction Record in the Payment Events Report (Continued)

Position	Field Name	Description	Data Type and Length
5	event_type (PayPal transactions)	Type of event that occurred for the PayPal transaction. This field contains one of the following values: <ul style="list-style-type: none"> Batched: The PayPal transaction was completed, but the funds have not been transferred to your account. Canceled_reversal: You requested that the reversal requested by the customer be cancelled. Completed: The PayPal transaction (standard or pre-approved payment) was completed, and the funds have been transferred to your account. Denied: You denied the request. The reason is not specified. Failed: The request failed. The reason is not specified. MIPS: A billing agreement was created or modified. Pending: The PayPal transaction is not completed. The value will eventually change to Completed, Failed, or Denied. Refunded: You initiated a refund of the PayPal payment. Reversed: A payment was reversed due to a chargeback or other type of reversal. 	Alpha (20)
6	event_date	Date in GMT format that the event occurred. This field is empty for some event types, such as Declined . For PayPal transactions, the date is always present.	Date Time (25)
7	trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID (Simple Order API) and <service>_trans_ref_no (SCMP API) reply fields.	String (60)
8	merchant_currency_code	ISO currency code of the merchant's currency. For PayPal transactions, reported only if merchant_amount is greater than zero.	String (5)
9	merchant_amount	The amount deposited or withdrawn from the merchant's account for the event. For PayPal transactions, reported only if the Paypal account is set to automatically convert payment.	Amount (19)
10	consumer_currency_code	ISO currency code of the customer's currency.	String (5)

Table 82 Fields in the Transaction Record in the Payment Events Report (Continued)

Position	Field Name	Description	Data Type and Length
11	consumer_amount	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
12	fee_currency_code	ISO currency code of the assessed fee. For PayPal transactions, this fee does not apply, and the field is always empty.	String (5)
13	fee_amount	The processor's fee for the transaction.	Amount (19)
14	processor_message	<p>Additional information that may appear from the processor about the event, such as an error message or reason. For Global Collect direct debit reversals, this field contains a banking reversal code. See Appendix G, "Banking Codes in the Payment Events Report," on page 179.</p> <p>Possible values for PayPal transactions:</p> <ul style="list-style-type: none"> • <code>pending</code>: The payment status is pending. • For a PayPal credit or a PayPal reversal, this field contains one of these values: <ul style="list-style-type: none"> • <code>buyer_complaint</code>: The customer has placed a reversal about this transaction. • <code>chargeback</code>: The customer has initiated a chargeback. • <code>guarantee</code>: The customer triggered a money back guarantee. • <code>refund</code>: You have given the customer a refund. • <code>address</code>: The customer did not include a confirmed shipping address. You must manually accept or deny this payment. • <code>echeck</code>: The check has not yet cleared. • <code>intl</code>: You hold a non-U.S. account and do not have a withdrawal method. You must manually accept or deny this payment. • <code>multi_currency</code>: You do not have a balance in the currency sent. You must manually accept or deny this payment. • <code>other</code>: A <i>reversal</i> has occurred for a reason other than <code>buyer_complaint</code>, <code>chargeback</code>, <code>guarantee</code>, or <code>refund</code>. Alternately, the payment is <i>pending</i> for a reason other than <code>address</code>, <code>echeck</code>, <code>intl</code>, <code>multi_currency</code>, <code>unilateral</code>, <code>upgrade</code>, or <code>verify</code>. 	String (255)

Table 82 Fields in the Transaction Record in the Payment Events Report (Continued)

Position	Field Name	Description	Data Type and Length
		<ul style="list-style-type: none"> unilateral: The payment was made to an email address that is not yet registered or confirmed. upgrade: You have reached the monthly limit for transactions on your account, or the payment was made via credit card, and you do not have a Business or Premier PayPal account. verify: The payment is pending. You must verify your account before accepting this payment. 	

Payment Submission Detail Report

The CSV version of the Payment Submission Detail Report is identical to the CSV version of the Payment Batch Detail Report with the following exceptions:

- The Payment Submission Detail Report includes China payments and China refunds.
- The Payment Submission Detail Report includes the **payment_processor** field.

Important The CSV version of the Payment Submission Detail Report uses quotation marks around each of the report's values. The CSV versions of other reports do not use quotation marks around each value.

Example Second Header Record

```
batch_id,merchant_id,batch_date,request_id,merchant_ref_number,trans_ref_no,payment_method,currency,amount,transaction_type,payment_processor
```

Example Transaction Record

```
"987654321","CyberSource","2001-08-15","9979040000003515181891","3C1B4BC412EB00561AE1C19D5","SZJPTM07Y8O5","Visa","USD","100.00","ics_bill","smartfdc"
```

Table 83 Additional Field for Payment Submission Detail Report

Position	Field Name	Description	Data Type and Length
11	payment_processor	See Appendix D, " Payment Processors ," on page 167.	String (40)

Transaction Exception Detail Report

This report provides detailed information about transactions that were flagged by CyberSource or by the processor because of errors that were sent in the request of your follow-on transactions, such as captures and credits. When errors occur, you are notified in the Message Center with a message that remains for seven days. For example, you might see errors such as a capture amount greater than the authorized amount and missing or invalid fields.

After reviewing and correcting the errors, you can resend the requests and then update your system to avoid these errors in the future.

Important Error notifications received from card processors during authorization attempts will continue to be reported immediately.

With the Global Payment Services, all errors associated with the primary and follow-on requests associated will be included in this report. For more information, see the [Global Payment Services Planning and User's Guide](#).

First Header Record

The first line of the report describes the name and version of the report and indicates the dates included in the report.

Example First Header Record

```
Transaction Exception Detail Report,1.0,2006-05-01 to 2003-05-01,,,,,,,,,,,,,,,,,,,,,
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
```

Table 84 Fields in the First Header Record in the Transaction Exception Detail Report

Position	Field Name	Description	Data Type and Length
1	report_name	Name of the report. This field always contains the text <code>Transaction Exception Detail Report</code> .	String (100)
2	version_number	Version number of the report. The current version number is 1.0.	Numeric (10)
3	date_range	Dates that are included in the report. This field uses the format <code>YYYY-MM-DD to YYYY-MM-DD</code> . The first date is the start date; the second date is the end date.	String (100)
4-124	Empty	n/a	n/a

Second Header Record

The second line of the report indicates the name of each field in the report. The fields in follow these rules:

- The content of each field is the same as the field name.
- The data type and length of each field is String (100).

Example Second Header Record

```
row_descriptor,request_id,transaction_date,merchant_id,merchant_ref_
number,transaction_ref_number,transaction_type,payment_method, amount,currency_
code,payment_processor,original_request_id,action, reason_code,error_category,error_
message,account_suffix,customer_cc_expmo,customer_cc_expyr,bank_code,bank_account_
name,customer_firstname,customer_lastname,bill_address1,bill_address2,bill_city,bill_
state,bill_zip,bill_country,company_name,customer_email, customer_phone,ship_to_
first_name,ship_to_last_name,ship_to_address1, ship_to_address2,ship_to_city,ship_to_
state,ship_to_zip,ship_to_country
```

Transaction Record

Each transaction record includes information about a CyberSource payment transaction. For information about possible values for each field, see the Implementation Guide for the services that you use. These guides are available in the [Support Center](#).

Example Transaction Record

```
Request,0004223530000167905139,2006-05-01T07:42:03-07:00,exampleMerchant,3C515C71D48F
631,1140625304845,Direct Debit,,,30.00,GBP,sample processor,
1406235110599167904565,No action needed.,311,,,,,4234,10,2010,20-00-00, John
Smith,John,Doe,1295 Charleston,Mountain View,CA,94043,US,,,
jdoe@example.com,999-999-9999,,,,,,,,,,,,,,,,,,,,,
```

Table 85 Fields in the Transaction Record in the Transaction Exception Detail Report

Position	Field Name	Description	Data Type and Length
1	row_descriptor	Description of the data in this record. This field always contains the value <code>Request</code> .	String (20)
2	request_id	Identifier for the transaction.	Numeric (26)
3	transaction_date	Date on which the transaction was processed.	DateTime (25)
4	merchant_id	CyberSource merchant ID used for the transaction.	String (30)
5	merchant_ref_number	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)

Table 85 Fields in the Transaction Record in the Transaction Exception Detail Report (Continued)

Position	Field Name	Description	Data Type and Length
6	transaction_ref_number	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the (Simple Order API) <service>_reconciliationID and to the (SCMP API) <service>_trans_ref_no reply fields.	String (60)
7	transaction_type	Type of transaction, such as credit card capture, credit, or bank transfer.	String (30)
8	payment_method	Type of card or bank account. For the possible values, see Appendix E, " Types of Cards and Bank Accounts ," on page 171.	String (50)
9	amount	Amount specified in the request.	String (19)
10	currency_code	Optional ISO currency code used for the transaction.	String (5)
11	payment_processor	See Appendix D, " Payment Processors ," on page 167.	String (40)
12	original_request_id	Request ID of the original transaction. For example, if the request that has an error is a refund, this field contains the request ID of the original payment.	String (26)
13	action	Brief description of the action. Possible values: <ul style="list-style-type: none"> • ERROR • FAILED • CANCELLED 	String (15)
14	reason_code	Reason code for the error that occurred. This reason code is the same one that you receive in the reply or transaction receipt. See Appendix F, " Reason Codes in the Transaction Exception Detail Report ," on page 173.	Numeric (3)
15	processor_response_code	Code returned directly from the processor for the error that occurred.	String (60)
16	error_category	Type of error. Possible values: <ul style="list-style-type: none"> • Data Error • Failure • Processor Error • Settlement Error 	String (20)
17	error_message	Description of the error.	String (255)
18	account_suffix	Last four characters of the account number.	String (4)
19	customer_cc_expmo	If a credit card was used for the transaction, expiration month of the card (MM).	Numeric (2)

Table 85 Fields in the Transaction Record in the Transaction Exception Detail Report (Continued)

Position	Field Name	Description	Data Type and Length
20	customer_cc_expyr	If a credit card was used for the transaction, expiration year of the card (YYYY).	Numeric (4)
21	bank_code	If a bank account was used for the transaction, the bank code or sort code for the account.	String (15)
22	bank_account_name	Name of account holder.	String (60)
23	customer_firstname	First name of the billed customer.	String (60)
24	customer_lastname	Last name of the billed customer.	String (60)
25	bill_address1	First line of the billing address.	String (60)
26	bill_address2	Second line of the billing address.	String (60)
27	bill_city	City of the billing address.	String (50)
28	bill_state	State, province, or territory of the billing address.	String (20)
29	bill_zip	Postal code of the billing address.	String (10)
30	bill_country	ISO country code of the billing address.	String (2)
31	company_name	Company name of the billing address.	String (60)
32	customer_email	Email address of the billed customer.	String (255)
33	customer_phone	Phone number of the billed customer.	String (15)
34	ship_to_first_name	First name of the customer receiving the shipment.	String (60)
35	ship_to_last_name	Last name of the customer receiving the shipment.	String (60)
36	ship_to_address1	First line of the shipping address.	String (60)
37	ship_to_address2	Second line of the shipping address.	String (60)
38	ship_to_city	City of the shipping address.	String (60)
39	ship_to_state	State, province, or territory of the shipping address.	String (50)
40	ship_to_zip	Postal code of the shipping address.	String (10)
41	ship_to_country	ISO country code of the shipping address.	String (2)

User Management Report

This report provides information about the permissions and roles granted to users. To use the CSV format of this report, you need to have a program that processes pipe-delimited (|) data.

First Line of the Report

The first line of the report describes the name and version of the report and indicates which dates are included in the report.

Example Each part of this example (separated by commas) is described in the following table.

```
User Listing Report,Version 1.0,2007-09-14
```

Table 86 Fields in the First Line of the User Management Report

Position (Column)	Field Name	Description	Data Type (Length)
1 (A)	report_name	Name of the report. This field always contains the text <code>User Listing Report</code> .	String (100)
2 (B)	version_number	Version number of the report. The current version number is 1.0.	Numeric (10)
3 (C)	date	Date and time when the report was run.	DateTime (25)

Second Line of the Report

The second line of the report shows the column headings with the name of each field. The data type and length of each field is String (100).

Example Second line of the report

```
Username,Merchant ID,First Name,Last Name,Email,Date Created,LastAccess,Status,Role,Permissions
```

Table 87 Fields in the Transaction Record in the User Management Report

Position (Column)	Field Name	Description	Data Type and Length
1 (A)	Username	Unique identifier for the user.	String
2 (B)	Merchant ID	CyberSource merchant ID used for the transaction.	String (30)
3 (C)	First Name	User's first name.	String (60)
4 (D)	Last Name	User's last name.	String (60)
5 (E)	Email	Optional email address of the user	String (255)
6 (F)	Date Created	Date when the user was created.	DateTime (25)

Table 87 Fields in the Transaction Record in the User Management Report (Continued)

Position (Column)	Field Name	Description	Data Type and Length
7 (G)	LastAccess	Date when the user most recently logged in the Business Center.	DateTime (25)
8 (H)	Status	Activity status of the user: <ul style="list-style-type: none"> enabled: user can perform tasks according to permissions granted. disabled: user cannot log in the Business Center. 	String
9 (I)	Role	Named collection of single permissions that describe the tasks assigned to a user, such as <code>admin</code> or <code>custom</code> .	String
10 (J)	Permissions	Pipe-separated list of all permissions granted to the user, for example: Customer Profile View Customer Profile Management One Time Payment Subscription View Subscription Management Virtual Terminal Settings View ...	String

Sample Record

Each record includes information about a user.

```
User Listing Report,Version 1.0,2007-09-14
Username,Merchant ID,First Name,Last Name,Email,Date Created,LastAccess,Status,Role,
Permissions
infodev_user,infodev,Jane,Doe,,2007-03-29 07:47 GMT,2007-09-21 11:44 GMT,Enabled,
Custom,Virtual Terminal Transaction|Payment Authorization
infodev_user_2,infodev,John,Doe,,2007-03-29 07:47 GMT,2007-09-21 08:00 GMT,Enabled,
Report Download,Report Download
```

Appendix A

XML Report DTDs

This appendix provides the document type definitions (DTDs) for CyberSource XML reports:

[Payment Batch Detail Report](#)

[Payment Events Report](#)

[Payment Submission Detail Report](#)

[Single Transaction Report](#)

[Transaction Exception Detail Report](#)

[User Management Report](#)

Payment Batch Detail Report

```
<!ELEMENT Report (Batches)>
<!ATTLIST Report Name CDATA #REQUIRED
               Version NMTOKEN #REQUIRED
               xmlns CDATA #REQUIRED
               MerchantID CDATA #REQUIRED
               ReportStartDate CDATA #REQUIRED
               ReportEndDate CDATA #REQUIRED>
<!ELEMENT Batches (Batch)*>
<!ELEMENT Batch (Requests)>
<!ATTLIST Batch BatchID CDATA #REQUIRED
               BatchDate CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (TransactionReferenceNumber, PaymentMethod,
                  CurrencyCode, Amount, Application)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT Application (#PCDATA)>
```

Payment Events Report

```
<!ELEMENT Report (Requests)>
<!ATTLIST Report Name CDATA #REQUIRED
                Version NMTOKEN #REQUIRED
                xmlns CDATA #REQUIRED
                MerchantID NMTOKEN #REQUIRED
                ReportStartDate NMTOKEN #REQUIRED
                ReportEndDate NMTOKEN #REQUIRED>
<!ELEMENT Requests (Request*)>
<!ELEMENT Request (BankTransfer*, CreditCard*, DirectDebit*,
                  Check*, PayPal*)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>

<!ELEMENT BankTransfer (TransactionReferenceNumber, MerchantCurrencyCode,
                       MerchantAmount, ConsumerCurrencyCode,
                       ConsumerAmount, ProcessorMessage?,
                       Exception?, BoletoNumber?)>
<!ATTLIST BankTransfer Event CDATA #REQUIRED
                       EventDate NMTOKEN #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT MerchantCurrencyCode (#PCDATA)>
<!ELEMENT MerchantAmount (#PCDATA)>
<!ELEMENT ConsumerCurrencyCode (#PCDATA)>
<!ELEMENT ConsumerAmount (#PCDATA)>
<!ELEMENT ProcessorMessage (#PCDATA)>
<!ELEMENT Exception (#PCDATA)>
<!ELEMENT BoletoNumber (#PCDATA)>

<!ELEMENT DirectDebit (TransactionReferenceNumber, MerchantCurrencyCode,
                      MerchantAmount, ConsumerCurrencyCode,
                      ConsumerAmount, ProcessorMessage?)>
<!ATTLIST DirectDebit Event CDATA #REQUIRED
                      EventDate NMTOKEN #REQUIRED>

<!ELEMENT CreditCard (TransactionReferenceNumber, MerchantCurrencyCode,
                      MerchantAmount, ConsumerCurrencyCode,
                      ConsumerAmount, ProcessorMessage?)>
<!ATTLIST CreditCard Event CDATA #REQUIRED
                      EventDate NMTOKEN #REQUIRED>

<!ELEMENT Check (TransactionReferenceNumber, MerchantCurrencyCode,
                 MerchantAmount, ConsumerCurrencyCode, ConsumerAmount,
                 FeeCurrencyCode, FeeAmount, ProcessorMessage?)>
<!ATTLIST Check Event CDATA #REQUIRED
                 EventDate NMTOKEN #REQUIRED>
<!ELEMENT FeeCurrencyCode (#PCDATA)>
<!ELEMENT FeeAmount (#PCDATA)>
```

```

<!ELEMENT PayPal (TransactionReferenceNumber, MerchantCurrencyCode?,
                  MerchantAmount, ConsumerCurrencyCode, ConsumerAmount,
                  FeeCurrencyCode, FeeAmount, ProcessorMessage?)>
<!ATTLIST PayPal Event CDATA #REQUIRED
                  EventDate NMTOKEN #REQUIRED>

```

Payment Submission Detail Report

```

<!ELEMENT Report (Batches)>
<!ATTLIST Report Name CDATA #REQUIRED
                  Version NMTOKEN #REQUIRED
                  xmlns CDATA #REQUIRED
                  MerchantID CDATA #REQUIRED
                  ReportStartDate CDATA #REQUIRED
                  ReportEndDate CDATA #REQUIRED>
<!ELEMENT Batches (Batch)*>
<!ELEMENT Batch (Requests)>
<!ATTLIST Batch BatchID CDATA #REQUIRED
                  BatchDate CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (TransactionReferenceNumber, PaymentMethod,
                  CurrencyCode, Amount, Application, PaymentProcessor, TargetAmount?,
                  TargetCurrency?, ExchangeRate?, ExchangeRateDate?, DCCIndicator?,
                  BoletoNumber?, NumberOfInstallments?)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT Application (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT TargetAmount (#PCDATA)>
<!ELEMENT TargetCurrency (#PCDATA)>
<!ELEMENT ExchangeRate (#PCDATA)>
<!ELEMENT ExchangeRateDate (#PCDATA)>
<!ELEMENT DCCIndicator (#PCDATA)>
<!ELEMENT BoletoNumber (#PCDATA)>
<!ELEMENT NumberOfInstallments (#PCDATA)>

```

Single Transaction Report

Version 1.1

```
<!ELEMENT Report (Requests)>
<!ATTLIST Report MerchantID CDATA #REQUIRED
                  Name CDATA #REQUIRED
                  ReportStartDate CDATA #REQUIRED
                  ReportEndDate CDATA #REQUIRED
                  Version NMTOKEN #REQUIRED
                  xmlns CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>

<!ELEMENT Request (BillTo, ShipTo?, Shipping?, PaymentMethod,
                  LineItems?, ApplicationReplies, PaymentData?,
                  MerchantDefinedData?, RiskData?, ProfileList?)>
<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
                  RequestDate CDATA #REQUIRED
                  RequestID CDATA #REQUIRED
                  SubscriptionID CDATA #IMPLIED
                  Source CDATA #IMPLIED
                  Comments CDATA #IMPLIED>

<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
                  Address1?, Address2?, City, State?, Zip?,
                  CompanyName?, Email, Country, Title?, Phone,
                  IPAddress?, Hostname?, Username?, CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT Username (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>

<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
                  State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>
<!ELEMENT Method (#PCDATA)>
```



```

<!ELEMENT Carrier (#PCDATA)>

<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (AccountSuffix, ExpirationMonth, ExpirationYear,
                StartMonth?, StartYear?, IssueNumber?, CardType)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT StartMonth (#PCDATA)>
<!ELEMENT StartYear (#PCDATA)>
<!ELEMENT IssueNumber (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT Check (AccountSuffix, CheckNumber)>
<!ELEMENT CheckNumber (#PCDATA)>

<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (FulfillmentType, Quantity?, UnitPrice, TaxAmount?,
                    MerchantProductSKU?, ProductName?, ProductCode?)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT FulfillmentType (#PCDATA)>
<!ELEMENT Quantity (#PCDATA)>
<!ELEMENT UnitPrice (#PCDATA)>
<!ELEMENT TaxAmount (#PCDATA)>
<!ELEMENT MerchantProductSKU (#PCDATA)>
<!ELEMENT ProductCode (#PCDATA)>
<!ELEMENT ProductName (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (RCode, RFlag, RMsg?)>
<!ATTLIST ApplicationReply Name CDATA #REQUIRED>
<!ELEMENT RCode (#PCDATA)>
<!ELEMENT RFlag (#PCDATA)>
<!ELEMENT RMsg (#PCDATA)>

<!ELEMENT PaymentData (PaymentRequestID, PaymentProcessor, Amount,
                        CurrencyCode, TotalTaxAmount?,
                        AuthorizationType?, AuthorizationCode?,
                        AVSResult?, AVSResultMapped?, CVResult?,
                        ProcessorResponseCode?),
                        PayerAuthenticationInfo?)>
<!ELEMENT PaymentRequestID (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT TotalTaxAmount (#PCDATA)>
<!ELEMENT AuthorizationType (#PCDATA)>
<!ELEMENT AuthorizationCode (#PCDATA)>
<!ELEMENT AVSResult (#PCDATA)>
<!ELEMENT AVSResultMapped (#PCDATA)>
<!ELEMENT CVResult (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#PCDATA)>
<!ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!ELEMENT ECI (#PCDATA)>

```

```
<!ELEMENT AAV_CAVV (#PCDATA)>
<!ELEMENT XID (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
                                field5?, field6?, field7?, field8?,
                                field9?, field10?, field11?, field12?,
                                field13?, field14?, field15?, field16?,
                                field17?, field18?, field19?, field20?)>

<!ELEMENT field1 (#PCDATA)>
<!ATTLIST field1 name CDATA #IMPLIED>
<!ELEMENT field2 (#PCDATA)>
<!ATTLIST field2 name CDATA #IMPLIED>
<!ELEMENT field3 (#PCDATA)>
<!ATTLIST field3 name CDATA #IMPLIED>
<!ELEMENT field4 (#PCDATA)>
<!ATTLIST field4 name CDATA #IMPLIED>
<!ELEMENT field5 (#PCDATA)>
<!ATTLIST field5 name CDATA #IMPLIED>
<!ELEMENT field6 (#PCDATA)>
<!ATTLIST field6 name CDATA #IMPLIED>
<!ELEMENT field7 (#PCDATA)>
<!ATTLIST field7 name CDATA #IMPLIED>
<!ELEMENT field8 (#PCDATA)>
<!ATTLIST field8 name CDATA #IMPLIED>
<!ELEMENT field9 (#PCDATA)>
<!ATTLIST field9 name CDATA #IMPLIED>
<!ELEMENT field10 (#PCDATA)>
<!ATTLIST field10 name CDATA #IMPLIED>
<!ELEMENT field11 (#PCDATA)>
<!ATTLIST field11 name CDATA #IMPLIED>
<!ELEMENT field12 (#PCDATA)>
<!ATTLIST field12 name CDATA #IMPLIED>
<!ELEMENT field13 (#PCDATA)>
<!ATTLIST field13 name CDATA #IMPLIED>
<!ELEMENT field14 (#PCDATA)>
<!ATTLIST field14 name CDATA #IMPLIED>
<!ELEMENT field15 (#PCDATA)>
<!ATTLIST field15 name CDATA #IMPLIED>
<!ELEMENT field16 (#PCDATA)>
<!ATTLIST field16 name CDATA #IMPLIED>
<!ELEMENT field17 (#PCDATA)>
<!ATTLIST field17 name CDATA #IMPLIED>
<!ELEMENT field18 (#PCDATA)>
<!ATTLIST field18 name CDATA #IMPLIED>
<!ELEMENT field19 (#PCDATA)>
<!ATTLIST field19 name CDATA #IMPLIED>
<!ELEMENT field20 (#PCDATA)>
<!ATTLIST field20 name CDATA #IMPLIED>

<!ELEMENT RiskData (Factors?, HostSeverity?, Score?, TimeLocal?,
                    ConsumerPasswordProvided?, LostPassword?,
                    RepeatCustomer?, CookiesAccepted?,
                    ConsumerLoyalty?, ConsumerPromotions?, GiftWrap?,
```

```

ReturnsAccepted?, ProductRisk?,
AppliedThreshold?, AppliedTimeHedge,
AppliedVelocityHedge, AppliedHostHedge,
AppliedCategoryGift, AppliedCategoryTime,
AppliedAVS?, AppliedCV?)>
<!ELEMENT Factors (#PCDATA)>
<!ELEMENT HostSeverity (#PCDATA)>
<!ELEMENT Score (#PCDATA)>
<!ELEMENT TimeLocal (#PCDATA)>
<!ELEMENT ConsumerPasswordProvided (#PCDATA)>
<!ELEMENT LostPassword (#PCDATA)>
<!ELEMENT RepeatCustomer (#PCDATA)>
<!ELEMENT CookiesAccepted (#PCDATA)>
<!ELEMENT ConsumerLoyalty (#PCDATA)>
<!ELEMENT ConsumerPromotions (#PCDATA)>
<!ELEMENT GiftWrap (#PCDATA)>
<!ELEMENT ReturnsAccepted (#PCDATA)>
<!ELEMENT ProductRisk (#PCDATA)>
<!ELEMENT AppliedThreshold (#PCDATA)>
<!ELEMENT AppliedTimeHedge (#PCDATA)>
<!ELEMENT AppliedVelocityHedge (#PCDATA)>
<!ELEMENT AppliedHostHedge (#PCDATA)>
<!ELEMENT AppliedCategoryGift (#PCDATA)>
<!ELEMENT AppliedCategoryTime (#PCDATA)>
<!ELEMENT AppliedAVS (#PCDATA)>
<!ELEMENT AppliedCV (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName, RuleDecision)>
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>

```

Version 1.2

```

<!ELEMENT Report (Requests)>
<!ATTLIST Report MerchantID CDATA #REQUIRED
Name CDATA #REQUIRED
ReportStartDate CDATA #REQUIRED
ReportEndDate CDATA #REQUIRED
Version NMTOKEN #REQUIRED
xmlns CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo?, ShipTo?, Shipping?, PaymentMethod, LineItems?,
ApplicationReplies, PaymentData?, MerchantDefinedData?, RiskData?,
ProfileList?)>
<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
RequestDate CDATA #REQUIRED
RequestID CDATA #REQUIRED

```

```
SubscriptionID CDATA #IMPLIED
Source CDATA #IMPLIED
User CDATA #IMPLIED
Comments CDATA #IMPLIED
TransactionReferenceNumber CDATA #IMPLIED>
<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
Address1?, Address2?, City, State?, Zip?, CompanyName?, Email, Country,
Title?, Phone, IPAddress?, Hostname?, UserName?, CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT UserName (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>
<!ELEMENT Method (#PCDATA)>
<!ELEMENT Carrier (#PCDATA)>
<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (AccountSuffix, ExpirationMonth, ExpirationYear,
StartMonth?, StartYear?, IssueNumber?, CardType)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT StartMonth (#PCDATA)>
<!ELEMENT StartYear (#PCDATA)>
<!ELEMENT IssueNumber (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT Check (AccountSuffix, CheckNumber)>
<!ELEMENT CheckNumber (#PCDATA)>
<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (FulfillmentType, Quantity?, UnitPrice, TaxAmount?,
MerchantProductSKU?, ProductName?, ProductCode?)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT FulfillmentType (#PCDATA)>
<!ELEMENT Quantity (#PCDATA)>
<!ELEMENT UnitPrice (#PCDATA)>
<!ELEMENT TaxAmount (#PCDATA)>
<!ELEMENT MerchantProductSKU (#PCDATA)>
```

```

<!ELEMENT ProductCode (#PCDATA)>
<!ELEMENT ProductName (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (RCode, RFlag, RMsg?)>
<!ATTLIST ApplicationReply Name CDATA #REQUIRED>
<!ELEMENT RCode (#PCDATA)>
<!ELEMENT RFlag (#PCDATA)>
<!ELEMENT RMsg (#PCDATA)>
<!ELEMENT PaymentData (PaymentRequestID?, PaymentProcessor?, Amount?,
CurrencyCode?, TotalTaxAmount?, AuthorizationType?, AuthorizationCode?,
AVSResult?, AVSResultMapped?, CVResult?, ProcessorResponseCode?,
PayerAuthenticationInfo?, EventType?)>
<!ELEMENT PaymentRequestID (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT TotalTaxAmount (#PCDATA)>
<!ELEMENT AuthorizationType (#PCDATA)>
<!ELEMENT AuthorizationCode (#PCDATA)>
<!ELEMENT AVSResult (#PCDATA)>
<!ELEMENT AVSResultMapped (#PCDATA)>
<!ELEMENT CVResult (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#PCDATA)>
<!ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!ELEMENT ECI (#PCDATA)>
<!ELEMENT AAV_CAVV (#PCDATA)>
<!ELEMENT XID (#PCDATA)>
<!ELEMENT EventType (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
                                field5?, field6?, field7?, field8?,
                                field9?, field10?, field11?, field12?,
                                field13?, field14?, field15?, field16?,
                                field17?, field18?, field19?, field20?)>

<!ELEMENT field1 (#PCDATA)>
<!ATTLIST field1 name CDATA #IMPLIED>
<!ELEMENT field2 (#PCDATA)>
<!ATTLIST field2 name CDATA #IMPLIED>
<!ELEMENT field3 (#PCDATA)>
<!ATTLIST field3 name CDATA #IMPLIED>
<!ELEMENT field4 (#PCDATA)>
<!ATTLIST field4 name CDATA #IMPLIED>
<!ELEMENT field5 (#PCDATA)>
<!ATTLIST field5 name CDATA #IMPLIED>
<!ELEMENT field6 (#PCDATA)>
<!ATTLIST field6 name CDATA #IMPLIED>
<!ELEMENT field7 (#PCDATA)>
<!ATTLIST field7 name CDATA #IMPLIED>
<!ELEMENT field8 (#PCDATA)>
<!ATTLIST field8 name CDATA #IMPLIED>
<!ELEMENT field9 (#PCDATA)>
<!ATTLIST field9 name CDATA #IMPLIED>
<!ELEMENT field10 (#PCDATA)>

```

```
<!ATTLIST field10 name CDATA #IMPLIED>
<!ELEMENT field11 (#PCDATA)>
<!ATTLIST field11 name CDATA #IMPLIED>
<!ELEMENT field12 (#PCDATA)>
<!ATTLIST field12 name CDATA #IMPLIED>
<!ELEMENT field13 (#PCDATA)>
<!ATTLIST field13 name CDATA #IMPLIED>
<!ELEMENT field14 (#PCDATA)>
<!ATTLIST field14 name CDATA #IMPLIED>
<!ELEMENT field15 (#PCDATA)>
<!ATTLIST field15 name CDATA #IMPLIED>
<!ELEMENT field16 (#PCDATA)>
<!ATTLIST field16 name CDATA #IMPLIED>
<!ELEMENT field17 (#PCDATA)>
<!ATTLIST field17 name CDATA #IMPLIED>
<!ELEMENT field18 (#PCDATA)>
<!ATTLIST field18 name CDATA #IMPLIED>
<!ELEMENT field19 (#PCDATA)>
<!ATTLIST field19 name CDATA #IMPLIED>
<!ELEMENT field20 (#PCDATA)>
<!ATTLIST field20 name CDATA #IMPLIED>
<!ELEMENT RiskData (Factors?, HostSeverity?, Score?, TimeLocal?,
ConsumerPasswordProvided?, LostPassword?, RepeatCustomer?,
CookiesAccepted?, ConsumerLoyalty?, ConsumerPromotions?, GiftWrap?,
ReturnsAccepted?, ProductRisk?, AppliedThreshold?, AppliedTimeHedge,
AppliedVelocityHedge, AppliedHostHedge, AppliedCategoryGift,
AppliedCategoryTime, AppliedAVS?, AppliedCV?)>
<!ELEMENT Factors (#PCDATA)>
<!ELEMENT HostSeverity (#PCDATA)>
<!ELEMENT Score (#PCDATA)>
<!ELEMENT TimeLocal (#PCDATA)>
<!ELEMENT ConsumerPasswordProvided (#PCDATA)>
<!ELEMENT LostPassword (#PCDATA)>
<!ELEMENT RepeatCustomer (#PCDATA)>
<!ELEMENT CookiesAccepted (#PCDATA)>
<!ELEMENT ConsumerLoyalty (#PCDATA)>
<!ELEMENT ConsumerPromotions (#PCDATA)>
<!ELEMENT GiftWrap (#PCDATA)>
<!ELEMENT ReturnsAccepted (#PCDATA)>
<!ELEMENT ProductRisk (#PCDATA)>
<!ELEMENT AppliedThreshold (#PCDATA)>
<!ELEMENT AppliedTimeHedge (#PCDATA)>
<!ELEMENT AppliedVelocityHedge (#PCDATA)>
<!ELEMENT AppliedHostHedge (#PCDATA)>
<!ELEMENT AppliedCategoryGift (#PCDATA)>
<!ELEMENT AppliedCategoryTime (#PCDATA)>
<!ELEMENT AppliedAVS (#PCDATA)>
<!ELEMENT AppliedCV (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
```

```

<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName,RuleDecision)>
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>

```

Version 1.3

```

<!ELEMENT Report (Requests)>
<!ATTLIST Report MerchantID CDATA #REQUIRED
                  Name CDATA #REQUIRED
                  ReportStartDate CDATA #REQUIRED
                  ReportEndDate CDATA #REQUIRED
                  Version NMTOKEN #REQUIRED
                  xmlns CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo, ShipTo?, Shipping?, PaymentMethod, LineItems?,
ApplicationReplies, PaymentData?, MerchantDefinedData?, RiskData?,
ProfileList?)>
<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
                  RequestDate CDATA #REQUIRED
                  RequestID CDATA #REQUIRED
                  SubscriptionID CDATA #IMPLIED
                  Source CDATA #IMPLIED
                  User CDATA #IMPLIED
                  Comments CDATA #IMPLIED
                  TransactionReferenceNumber CDATA #IMPLIED
                  PredecessorRequestID CDATA #IMPLIED>
<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
Address1?, Address2?, City, State?, Zip?, CompanyName?, Email, Country,
Title?, Phone, IPAddress?, Hostname?, UserName?, CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT UserName (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>

```

```
<!--ELEMENT Method (#PCDATA)>
<!--ELEMENT Carrier (#PCDATA)>
<!--ELEMENT PaymentMethod (Card | Check)>
<!--ELEMENT Card (AccountSuffix, ExpirationMonth, ExpirationYear,
StartMonth?, StartYear?, IssueNumber?, CardType)>
<!--ELEMENT AccountSuffix (#PCDATA)>
<!--ELEMENT ExpirationMonth (#PCDATA)>
<!--ELEMENT ExpirationYear (#PCDATA)>
<!--ELEMENT StartMonth (#PCDATA)>
<!--ELEMENT StartYear (#PCDATA)>
<!--ELEMENT IssueNumber (#PCDATA)>
<!--ELEMENT CardType (#PCDATA)>
<!--ELEMENT Check (AccountSuffix, CheckNumber)>
<!--ELEMENT CheckNumber (#PCDATA)>
<!--ELEMENT LineItems (LineItem)*>
<!--ELEMENT LineItem (FulfillmentType, Quantity?, UnitPrice, TaxAmount?,
MerchantProductSKU?, ProductName?, ProductCode?)>
<!--ATTLIST LineItem Number CDATA #REQUIRED>
<!--ELEMENT FulfillmentType (#PCDATA)>
<!--ELEMENT Quantity (#PCDATA)>
<!--ELEMENT UnitPrice (#PCDATA)>
<!--ELEMENT TaxAmount (#PCDATA)>
<!--ELEMENT MerchantProductSKU (#PCDATA)>
<!--ELEMENT ProductCode (#PCDATA)>
<!--ELEMENT ProductName (#PCDATA)>
<!--ELEMENT ApplicationReplies (ApplicationReply)*>
<!--ELEMENT ApplicationReply (RCode, RFlag, RMsg?)>
<!--ATTLIST ApplicationReply Name CDATA #REQUIRED>
<!--ELEMENT RCode (#PCDATA)>
<!--ELEMENT RFlag (#PCDATA)>
<!--ELEMENT RMsg (#PCDATA)>
<!--ELEMENT PaymentData (PaymentRequestID?, PaymentProcessor?, Amount?,
CurrencyCode?, TotalTaxAmount?, AuthorizationType?, AuthorizationCode?,
AVSResult?, AVSResultMapped?, CVResult?, ProcessorResponseCode?,
PayerAuthenticationInfo?, EventType?)>
<!--ELEMENT PaymentRequestID (#PCDATA)>
<!--ELEMENT PaymentProcessor (#PCDATA)>
<!--ELEMENT Amount (#PCDATA)>
<!--ELEMENT CurrencyCode (#PCDATA)>
<!--ELEMENT TotalTaxAmount (#PCDATA)>
<!--ELEMENT AuthorizationType (#PCDATA)>
<!--ELEMENT AuthorizationCode (#PCDATA)>
<!--ELEMENT AVSResult (#PCDATA)>
<!--ELEMENT AVSResultMapped (#PCDATA)>
<!--ELEMENT CVResult (#PCDATA)>
<!--ELEMENT ProcessorResponseCode (#PCDATA)>
<!--ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!--ELEMENT ECI (#PCDATA)>
<!--ELEMENT AAV_CAVV (#PCDATA)>
<!--ELEMENT XID (#PCDATA)>
<!--ELEMENT EventType (#PCDATA)>
<!--ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
```



```

field5?, field6?, field7?, field8?,
field9?, field10?, field11?, field12?,
field13?, field14?, field15?, field16?,
field17?, field18?, field19?, field20?)>
<!ELEMENT field1 (#PCDATA)>
<!ATTLIST field1 name CDATA #IMPLIED>
<!ELEMENT field2 (#PCDATA)>
<!ATTLIST field2 name CDATA #IMPLIED>
<!ELEMENT field3 (#PCDATA)>
<!ATTLIST field3 name CDATA #IMPLIED>
<!ELEMENT field4 (#PCDATA)>
<!ATTLIST field4 name CDATA #IMPLIED>
<!ELEMENT field5 (#PCDATA)>
<!ATTLIST field5 name CDATA #IMPLIED>
<!ELEMENT field6 (#PCDATA)>
<!ATTLIST field6 name CDATA #IMPLIED>
<!ELEMENT field7 (#PCDATA)>
<!ATTLIST field7 name CDATA #IMPLIED>
<!ELEMENT field8 (#PCDATA)>
<!ATTLIST field8 name CDATA #IMPLIED>
<!ELEMENT field9 (#PCDATA)>
<!ATTLIST field9 name CDATA #IMPLIED>
<!ELEMENT field10 (#PCDATA)>
<!ATTLIST field10 name CDATA #IMPLIED>
<!ELEMENT field11 (#PCDATA)>
<!ATTLIST field11 name CDATA #IMPLIED>
<!ELEMENT field12 (#PCDATA)>
<!ATTLIST field12 name CDATA #IMPLIED>
<!ELEMENT field13 (#PCDATA)>
<!ATTLIST field13 name CDATA #IMPLIED>
<!ELEMENT field14 (#PCDATA)>
<!ATTLIST field14 name CDATA #IMPLIED>
<!ELEMENT field15 (#PCDATA)>
<!ATTLIST field15 name CDATA #IMPLIED>
<!ELEMENT field16 (#PCDATA)>
<!ATTLIST field16 name CDATA #IMPLIED>
<!ELEMENT field17 (#PCDATA)>
<!ATTLIST field17 name CDATA #IMPLIED>
<!ELEMENT field18 (#PCDATA)>
<!ATTLIST field18 name CDATA #IMPLIED>
<!ELEMENT field19 (#PCDATA)>
<!ATTLIST field19 name CDATA #IMPLIED>
<!ELEMENT field20 (#PCDATA)>
<!ATTLIST field20 name CDATA #IMPLIED>
<!ELEMENT RiskData (Factors?, HostSeverity?, Score?, TimeLocal?,
ConsumerPasswordProvided?, LostPassword?, RepeatCustomer?,
CookiesAccepted?, ConsumerLoyalty?, ConsumerPromotions?, GiftWrap?,
ReturnsAccepted?, ProductRisk?, AppliedThreshold?, AppliedTimeHedge,
AppliedVelocityHedge, AppliedHostHedge, AppliedCategoryGift,
AppliedCategoryTime, AppliedAVS?, AppliedCV?)>
<!ELEMENT Factors (#PCDATA)>
<!ELEMENT HostSeverity (#PCDATA)>

```

```
<!ELEMENT Score (#PCDATA)>
<!ELEMENT TimeLocal (#PCDATA)>
<!ELEMENT ConsumerPasswordProvided (#PCDATA)>
<!ELEMENT LostPassword (#PCDATA)>
<!ELEMENT RepeatCustomer (#PCDATA)>
<!ELEMENT CookiesAccepted (#PCDATA)>
<!ELEMENT ConsumerLoyalty (#PCDATA)>
<!ELEMENT ConsumerPromotions (#PCDATA)>
<!ELEMENT GiftWrap (#PCDATA)>
<!ELEMENT ReturnsAccepted (#PCDATA)>
<!ELEMENT ProductRisk (#PCDATA)>
<!ELEMENT AppliedThreshold (#PCDATA)>
<!ELEMENT AppliedTimeHedge (#PCDATA)>
<!ELEMENT AppliedVelocityHedge (#PCDATA)>
<!ELEMENT AppliedHostHedge (#PCDATA)>
<!ELEMENT AppliedCategoryGift (#PCDATA)>
<!ELEMENT AppliedCategoryTime (#PCDATA)>
<!ELEMENT AppliedAVS (#PCDATA)>
<!ELEMENT AppliedCV (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName,RuleDecision)>
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>
```

Version 1.4

```
<!ELEMENT Report (Requests)>
<!ATTLIST Report MerchantID CDATA #REQUIRED
                  Name CDATA #REQUIRED
                  ReportStartDate CDATA #REQUIRED
                  ReportEndDate CDATA #REQUIRED
                  Version NMTOKEN #REQUIRED
                  xmlns CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo, ShipTo?, Shipping?, PaymentMethod, LineItems?,
ApplicationReplies, PaymentData?, MerchantDefinedData?, RiskData?,
ProfileList?)>
<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
                  RequestDate CDATA #REQUIRED
                  RequestID CDATA #REQUIRED
                  SubscriptionID CDATA #IMPLIED
                  Source CDATA #IMPLIED
                  User CDATA #IMPLIED
                  Comments CDATA #IMPLIED
                  TransactionReferenceNumber CDATA #IMPLIED
                  PredecessorRequestID CDATA #IMPLIED>
```

```
<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
Address1?, Address2?, City, State?, Zip?, CompanyName?, Email, Country,
Title?, Phone, IPAddress?, Hostname?, UserName?, CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT UserName (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>
<!ELEMENT Method (#PCDATA)>
<!ELEMENT Carrier (#PCDATA)>
<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (AccountSuffix, ExpirationMonth, ExpirationYear,
StartMonth?, StartYear?, IssueNumber?, CardType, BoletoNumber?)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT StartMonth (#PCDATA)>
<!ELEMENT StartYear (#PCDATA)>
<!ELEMENT IssueNumber (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT BoletoNumber (#PCDATA)>
<!ELEMENT Check (AccountSuffix, CheckNumber)>
<!ELEMENT CheckNumber (#PCDATA)>
<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (FulfillmentType, Quantity?, UnitPrice, TaxAmount?,
MerchantProductSKU?, ProductName?, ProductCode?)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT FulfillmentType (#PCDATA)>
<!ELEMENT Quantity (#PCDATA)>
<!ELEMENT UnitPrice (#PCDATA)>
<!ELEMENT TaxAmount (#PCDATA)>
<!ELEMENT MerchantProductSKU (#PCDATA)>
<!ELEMENT ProductCode (#PCDATA)>
<!ELEMENT ProductName (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (RCode, RFlag, RMsg?)>
```

```
<!ATTLIST ApplicationReply Name CDATA #REQUIRED>
<!ELEMENT RCode (#PCDATA)>
<!ELEMENT RFlag (#PCDATA)>
<!ELEMENT RMsg (#PCDATA)>
<!ELEMENT PaymentData (PaymentRequestID?, PaymentProcessor?, Amount?,
CurrencyCode?, TotalTaxAmount?, AuthorizationType?, AuthorizationCode?,
AVSResult?, AVSResultMapped?, CVResult?, ProcessorResponseCode?,
PayerAuthenticationInfo?, EventType?, NumberOfInstallments?)>
<!ELEMENT PaymentRequestID (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT TotalTaxAmount (#PCDATA)>
<!ELEMENT AuthorizationType (#PCDATA)>
<!ELEMENT AuthorizationCode (#PCDATA)>
<!ELEMENT AVSResult (#PCDATA)>
<!ELEMENT AVSResultMapped (#PCDATA)>
<!ELEMENT CVResult (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#PCDATA)>
<!ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!ELEMENT ECI (#PCDATA)>
<!ELEMENT AAV_CAVV (#PCDATA)>
<!ELEMENT XID (#PCDATA)>
<!ELEMENT EventType (#PCDATA)>
<!ELEMENT NumberOfInstallments (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
                                field5?, field6?, field7?, field8?,
                                field9?, field10?, field11?, field12?,
                                field13?, field14?, field15?, field16?,
                                field17?, field18?, field19?, field20?)>

<!ELEMENT field1 (#PCDATA)>
<!ATTLIST field1 name CDATA #IMPLIED>
<!ELEMENT field2 (#PCDATA)>
<!ATTLIST field2 name CDATA #IMPLIED>
<!ELEMENT field3 (#PCDATA)>
<!ATTLIST field3 name CDATA #IMPLIED>
<!ELEMENT field4 (#PCDATA)>
<!ATTLIST field4 name CDATA #IMPLIED>
<!ELEMENT field5 (#PCDATA)>
<!ATTLIST field5 name CDATA #IMPLIED>
<!ELEMENT field6 (#PCDATA)>
<!ATTLIST field6 name CDATA #IMPLIED>
<!ELEMENT field7 (#PCDATA)>
<!ATTLIST field7 name CDATA #IMPLIED>
<!ELEMENT field8 (#PCDATA)>
<!ATTLIST field8 name CDATA #IMPLIED>
<!ELEMENT field9 (#PCDATA)>
<!ATTLIST field9 name CDATA #IMPLIED>
<!ELEMENT field10 (#PCDATA)>
<!ATTLIST field10 name CDATA #IMPLIED>
<!ELEMENT field11 (#PCDATA)>
<!ATTLIST field11 name CDATA #IMPLIED>
```

```
<!ELEMENT field12 (#PCDATA)>
<!ATTLIST field12 name CDATA #IMPLIED>
<!ELEMENT field13 (#PCDATA)>
<!ATTLIST field13 name CDATA #IMPLIED>
<!ELEMENT field14 (#PCDATA)>
<!ATTLIST field14 name CDATA #IMPLIED>
<!ELEMENT field15 (#PCDATA)>
<!ATTLIST field15 name CDATA #IMPLIED>
<!ELEMENT field16 (#PCDATA)>
<!ATTLIST field16 name CDATA #IMPLIED>
<!ELEMENT field17 (#PCDATA)>
<!ATTLIST field17 name CDATA #IMPLIED>
<!ELEMENT field18 (#PCDATA)>
<!ATTLIST field18 name CDATA #IMPLIED>
<!ELEMENT field19 (#PCDATA)>
<!ATTLIST field19 name CDATA #IMPLIED>
<!ELEMENT field20 (#PCDATA)>
<!ATTLIST field20 name CDATA #IMPLIED>
<!ELEMENT RiskData (Factors?, HostSeverity?, Score?, TimeLocal?,
ConsumerPasswordProvided?, LostPassword?, RepeatCustomer?,
CookiesAccepted?, ConsumerLoyalty?, ConsumerPromotions?, GiftWrap?,
ReturnsAccepted?, ProductRisk?, AppliedThreshold?, AppliedTimeHedge,
AppliedVelocityHedge, AppliedHostHedge, AppliedCategoryGift,
AppliedCategoryTime, AppliedAVS?, AppliedCV?)>
<!ELEMENT Factors (#PCDATA)>
<!ELEMENT HostSeverity (#PCDATA)>
<!ELEMENT Score (#PCDATA)>
<!ELEMENT TimeLocal (#PCDATA)>
<!ELEMENT ConsumerPasswordProvided (#PCDATA)>
<!ELEMENT LostPassword (#PCDATA)>
<!ELEMENT RepeatCustomer (#PCDATA)>
<!ELEMENT CookiesAccepted (#PCDATA)>
<!ELEMENT ConsumerLoyalty (#PCDATA)>
<!ELEMENT ConsumerPromotions (#PCDATA)>
<!ELEMENT GiftWrap (#PCDATA)>
<!ELEMENT ReturnsAccepted (#PCDATA)>
<!ELEMENT ProductRisk (#PCDATA)>
<!ELEMENT AppliedThreshold (#PCDATA)>
<!ELEMENT AppliedTimeHedge (#PCDATA)>
<!ELEMENT AppliedVelocityHedge (#PCDATA)>
<!ELEMENT AppliedHostHedge (#PCDATA)>
<!ELEMENT AppliedCategoryGift (#PCDATA)>
<!ELEMENT AppliedCategoryTime (#PCDATA)>
<!ELEMENT AppliedAVS (#PCDATA)>
<!ELEMENT AppliedCV (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName,RuleDecision)>
```

```
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>
```

Version 1.5

```
<!ELEMENT Report (Requests)>
<!ATTLIST Report MerchantID CDATA #REQUIRED
    Name CDATA #REQUIRED
    ReportStartDate CDATA #REQUIRED
    ReportEndDate CDATA #REQUIRED
    Version NMTOKEN #REQUIRED
    xmlns CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo, ShipTo?, Shipping?, PaymentMethod, LineItems?,
ApplicationReplies, PaymentData?, MerchantDefinedData?, RiskData?,
ProfileList?)>
<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
    RequestDate CDATA #REQUIRED
    RequestID CDATA #REQUIRED
    SubscriptionID CDATA #IMPLIED
    Source CDATA #IMPLIED
    User CDATA #IMPLIED
    Comments CDATA #IMPLIED
    TransactionReferenceNumber CDATA #IMPLIED
    PredecessorRequestID CDATA #IMPLIED>
<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
Address1?, Address2?, City, State?, Zip?, CompanyName?, Email, Country,
Title?, Phone, IPAddress?, Hostname?, Username?, CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT Username (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>
<!ELEMENT Method (#PCDATA)>
<!ELEMENT Carrier (#PCDATA)>
<!ELEMENT PaymentMethod (Card | Check)>
```

```

<!ELEMENT Card (AccountSuffix, ExpirationMonth, ExpirationYear,
StartMonth?, StartYear?, IssueNumber?, CardType, BolettoNumber?)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT StartMonth (#PCDATA)>
<!ELEMENT StartYear (#PCDATA)>
<!ELEMENT IssueNumber (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT BolettoNumber (#PCDATA)>
<!ELEMENT Check (AccountSuffix, CheckNumber)>
<!ELEMENT CheckNumber (#PCDATA)>
<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (FulfillmentType, Quantity?, UnitPrice, TaxAmount?,
MerchantProductSKU?, ProductName?, ProductCode?)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT FulfillmentType (#PCDATA)>
<!ELEMENT Quantity (#PCDATA)>
<!ELEMENT UnitPrice (#PCDATA)>
<!ELEMENT TaxAmount (#PCDATA)>
<!ELEMENT MerchantProductSKU (#PCDATA)>
<!ELEMENT ProductCode (#PCDATA)>
<!ELEMENT ProductName (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (RCode, RFlag, RMsg?)>
<!ATTLIST ApplicationReply Name CDATA #REQUIRED>
<!ELEMENT RCode (#PCDATA)>
<!ELEMENT RFlag (#PCDATA)>
<!ELEMENT RMsg (#PCDATA)>
<!ELEMENT PaymentData (PaymentRequestID?, PaymentProcessor?, Amount?,
CurrencyCode?, TotalTaxAmount?, AuthorizationType?, AuthorizationCode?,
AVSResult?, AVSResultMapped?, CVResult?, ProcessorResponseCode?,
PayerAuthenticationInfo?, EventType?, NumberOfInstallments?, ACHResult?,
ACHResultMapped?)>
<!ELEMENT PaymentRequestID (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT TotalTaxAmount (#PCDATA)>
<!ELEMENT AuthorizationType (#PCDATA)>
<!ELEMENT AuthorizationCode (#PCDATA)>
<!ELEMENT AVSResult (#PCDATA)>
<!ELEMENT AVSResultMapped (#PCDATA)>
<!ELEMENT CVResult (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#PCDATA)>
<!ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!ELEMENT ECI (#PCDATA)>
<!ELEMENT AAV_CAVV (#PCDATA)>
<!ELEMENT XID (#PCDATA)>
<!ELEMENT EventType (#PCDATA)>
<!ELEMENT NumberOfInstallments (#PCDATA)>
<!ELEMENT ACHResult (#PCDATA)>

```

```
<!ELEMENT ACHResultMapped (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
                                field5?, field6?, field7?, field8?,
                                field9?, field10?, field11?, field12?,
                                field13?, field14?, field15?, field16?,
                                field17?, field18?, field19?, field20?)>

<!ELEMENT field1 (#PCDATA)>
<!ATTLIST field1 name CDATA #IMPLIED>
<!ELEMENT field2 (#PCDATA)>
<!ATTLIST field2 name CDATA #IMPLIED>
<!ELEMENT field3 (#PCDATA)>
<!ATTLIST field3 name CDATA #IMPLIED>
<!ELEMENT field4 (#PCDATA)>
<!ATTLIST field4 name CDATA #IMPLIED>
<!ELEMENT field5 (#PCDATA)>
<!ATTLIST field5 name CDATA #IMPLIED>
<!ELEMENT field6 (#PCDATA)>
<!ATTLIST field6 name CDATA #IMPLIED>
<!ELEMENT field7 (#PCDATA)>
<!ATTLIST field7 name CDATA #IMPLIED>
<!ELEMENT field8 (#PCDATA)>
<!ATTLIST field8 name CDATA #IMPLIED>
<!ELEMENT field9 (#PCDATA)>
<!ATTLIST field9 name CDATA #IMPLIED>
<!ELEMENT field10 (#PCDATA)>
<!ATTLIST field10 name CDATA #IMPLIED>
<!ELEMENT field11 (#PCDATA)>
<!ATTLIST field11 name CDATA #IMPLIED>
<!ELEMENT field12 (#PCDATA)>
<!ATTLIST field12 name CDATA #IMPLIED>
<!ELEMENT field13 (#PCDATA)>
<!ATTLIST field13 name CDATA #IMPLIED>
<!ELEMENT field14 (#PCDATA)>
<!ATTLIST field14 name CDATA #IMPLIED>
<!ELEMENT field15 (#PCDATA)>
<!ATTLIST field15 name CDATA #IMPLIED>
<!ELEMENT field16 (#PCDATA)>
<!ATTLIST field16 name CDATA #IMPLIED>
<!ELEMENT field17 (#PCDATA)>
<!ATTLIST field17 name CDATA #IMPLIED>
<!ELEMENT field18 (#PCDATA)>
<!ATTLIST field18 name CDATA #IMPLIED>
<!ELEMENT field19 (#PCDATA)>
<!ATTLIST field19 name CDATA #IMPLIED>
<!ELEMENT field20 (#PCDATA)>
<!ATTLIST field20 name CDATA #IMPLIED>
<!ELEMENT RiskData (Factors?, HostSeverity?, Score?, TimeLocal?,
ConsumerPasswordProvided?, LostPassword?, RepeatCustomer?,
CookiesAccepted?, ConsumerLoyalty?, ConsumerPromotions?, GiftWrap?,
ReturnsAccepted?, ProductRisk?, AppliedThreshold?, AppliedTimeHedge,
AppliedVelocityHedge, AppliedHostHedge, AppliedCategoryGift,
AppliedCategoryTime, AppliedAVS?, AppliedCV?)>
```



```

<!ELEMENT Factors (#PCDATA)>
<!ELEMENT HostSeverity (#PCDATA)>
<!ELEMENT Score (#PCDATA)>
<!ELEMENT TimeLocal (#PCDATA)>
<!ELEMENT ConsumerPasswordProvided (#PCDATA)>
<!ELEMENT LostPassword (#PCDATA)>
<!ELEMENT RepeatCustomer (#PCDATA)>
<!ELEMENT CookiesAccepted (#PCDATA)>
<!ELEMENT ConsumerLoyalty (#PCDATA)>
<!ELEMENT ConsumerPromotions (#PCDATA)>
<!ELEMENT GiftWrap (#PCDATA)>
<!ELEMENT ReturnsAccepted (#PCDATA)>
<!ELEMENT ProductRisk (#PCDATA)>
<!ELEMENT AppliedThreshold (#PCDATA)>
<!ELEMENT AppliedTimeHedge (#PCDATA)>
<!ELEMENT AppliedVelocityHedge (#PCDATA)>
<!ELEMENT AppliedHostHedge (#PCDATA)>
<!ELEMENT AppliedCategoryGift (#PCDATA)>
<!ELEMENT AppliedCategoryTime (#PCDATA)>
<!ELEMENT AppliedAVS (#PCDATA)>
<!ELEMENT AppliedCV (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName,RuleDecision)>
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>

```

Version 1.6

The new elements are [<BinAccountType>](#), [<BinCountry>](#), [<BinIssuer>](#), [<BinScheme>](#), [<GrandTotal>](#), [<InfoCodes>](#), [<IPCity>](#), [<IPCountry>](#), [<IPRoutingMethod>](#), [<IPState>](#), and [<TravelData>](#).

```

<!ELEMENT Report (Requests)>
<!ATTLIST Report MerchantID CDATA #REQUIRED
                Name CDATA #REQUIRED
                ReportStartDate CDATA #REQUIRED
                ReportEndDate CDATA #REQUIRED
                Version NMTOKEN #REQUIRED
                xmlns CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo?, ShipTo?, Shipping?, PaymentMethod, LineItems?,
ApplicationReplies, PaymentData?, MerchantDefinedData?, RiskData?,
ProfileList?, TravelData?)>
<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
                RequestDate CDATA #REQUIRED
                RequestID CDATA #REQUIRED

```

```
SubscriptionID CDATA #IMPLIED
Source CDATA #IMPLIED
User CDATA #IMPLIED
Comments CDATA #IMPLIED
TransactionReferenceNumber CDATA #IMPLIED
PredecessorRequestID CDATA #IMPLIED>
<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
Address1?, Address2?, City, State?, Zip?, CompanyName?, Email, Country,
Title?, Phone, IPAddress?, Hostname?, UserName?, CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT UserName (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>
<!ELEMENT Method (#PCDATA)>
<!ELEMENT Carrier (#PCDATA)>
<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (AccountSuffix, ExpirationMonth, ExpirationYear,
StartMonth?, StartYear?, IssueNumber?, CardType, BoletoNumber?)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT StartMonth (#PCDATA)>
<!ELEMENT StartYear (#PCDATA)>
<!ELEMENT IssueNumber (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT BoletoNumber (#PCDATA)>
<!ELEMENT Check (AccountSuffix, CheckNumber)>
<!ELEMENT CheckNumber (#PCDATA)>
<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (FulfillmentType, Quantity?, UnitPrice, TaxAmount?,
MerchantProductSKU?, ProductName?, ProductCode?)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT FulfillmentType (#PCDATA)>
<!ELEMENT Quantity (#PCDATA)>
<!ELEMENT UnitPrice (#PCDATA)>
```

```

<!ELEMENT TaxAmount (#PCDATA)>
<!ELEMENT MerchantProductSKU (#PCDATA)>
<!ELEMENT ProductCode (#PCDATA)>
<!ELEMENT ProductName (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (RCode, RFlag, RMsg?)>
<!ATTLIST ApplicationReply Name CDATA #REQUIRED>
<!ELEMENT RCode (#PCDATA)>
<!ELEMENT RFlag (#PCDATA)>
<!ELEMENT RMsg (#PCDATA)>
<!ELEMENT PaymentData (PaymentRequestID?, PaymentProcessor?, Amount?,
CurrencyCode?, TotalTaxAmount?, AuthorizationType?, AuthorizationCode?,
AVSResult?, AVSResultMapped?, CVResult?, ProcessorResponseCode?,
PayerAuthenticationInfo?, EventType?, NumberOfInstallments?,
ACHVerificationResult?, ACHVerificationResultMapped?, GrandTotal?)>
<!ELEMENT PaymentRequestID (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT TotalTaxAmount (#PCDATA)>
<!ELEMENT AuthorizationType (#PCDATA)>
<!ELEMENT AuthorizationCode (#PCDATA)>
<!ELEMENT AVSResult (#PCDATA)>
<!ELEMENT AVSResultMapped (#PCDATA)>
<!ELEMENT CVResult (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#PCDATA)>
<!ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!ELEMENT ECI (#PCDATA)>
<!ELEMENT AAV_CAVV (#PCDATA)>
<!ELEMENT XID (#PCDATA)>
<!ELEMENT EventType (#PCDATA)>
<!ELEMENT NumberOfInstallments (#PCDATA)>
<!ELEMENT ACHVerificationResult (#PCDATA)>
<!ELEMENT ACHVerificationResultMapped (#PCDATA)>
<!ELEMENT GrandTotal (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
field5?, field6?, field7?, field8?, field9?, field10?, field11?, field12?,
field13?, field14?, field15?, field16?, field17?, field18?, field19?,
field20?)>
<!ELEMENT field1 (#PCDATA)>
<!ATTLIST field1 name CDATA #IMPLIED>
<!ELEMENT field2 (#PCDATA)>
<!ATTLIST field2 name CDATA #IMPLIED>
<!ELEMENT field3 (#PCDATA)>
<!ATTLIST field3 name CDATA #IMPLIED>
<!ELEMENT field4 (#PCDATA)>
<!ATTLIST field4 name CDATA #IMPLIED>
<!ELEMENT field5 (#PCDATA)>
<!ATTLIST field5 name CDATA #IMPLIED>
<!ELEMENT field6 (#PCDATA)>
<!ATTLIST field6 name CDATA #IMPLIED>
<!ELEMENT field7 (#PCDATA)>

```

```
<!ATTLIST field7 name CDATA #IMPLIED>
<!ELEMENT field8 (#PCDATA)>
<!ATTLIST field8 name CDATA #IMPLIED>
<!ELEMENT field9 (#PCDATA)>
<!ATTLIST field9 name CDATA #IMPLIED>
<!ELEMENT field10 (#PCDATA)>
<!ATTLIST field10 name CDATA #IMPLIED>
<!ELEMENT field11 (#PCDATA)>
<!ATTLIST field11 name CDATA #IMPLIED>
<!ELEMENT field12 (#PCDATA)>
<!ATTLIST field12 name CDATA #IMPLIED>
<!ELEMENT field13 (#PCDATA)>
<!ATTLIST field13 name CDATA #IMPLIED>
<!ELEMENT field14 (#PCDATA)>
<!ATTLIST field14 name CDATA #IMPLIED>
<!ELEMENT field15 (#PCDATA)>
<!ATTLIST field15 name CDATA #IMPLIED>
<!ELEMENT field16 (#PCDATA)>
<!ATTLIST field16 name CDATA #IMPLIED>
<!ELEMENT field17 (#PCDATA)>
<!ATTLIST field17 name CDATA #IMPLIED>
<!ELEMENT field18 (#PCDATA)>
<!ATTLIST field18 name CDATA #IMPLIED>
<!ELEMENT field19 (#PCDATA)>
<!ATTLIST field19 name CDATA #IMPLIED>
<!ELEMENT field20 (#PCDATA)>
<!ATTLIST field20 name CDATA #IMPLIED>
<!ELEMENT RiskData (Factors?, HostSeverity?, Score?, TimeLocal?,
ConsumerPasswordProvided?, LostPassword?, RepeatCustomer?,
CookiesAccepted?, ConsumerLoyalty?, ConsumerPromotions?, GiftWrap?,
ReturnsAccepted?, ProductRisk?, AppliedThreshold?, AppliedTimeHedge,
AppliedVelocityHedge, AppliedHostHedge, AppliedCategoryGift,
AppliedCategoryTime, AppliedAVS?, AppliedCV?, BinAccountType?,
BinScheme?, BinIssuer?, BinCountry?, IPCity?, IPCOUNTRY?,
IPRoutingMethod?, IPState?, InfoCodes?)>
<!ELEMENT Factors (#PCDATA)>
<!ELEMENT HostSeverity (#PCDATA)>
<!ELEMENT Score (#PCDATA)>
<!ELEMENT TimeLocal (#PCDATA)>
<!ELEMENT ConsumerPasswordProvided (#PCDATA)>
<!ELEMENT LostPassword (#PCDATA)>
<!ELEMENT RepeatCustomer (#PCDATA)>
<!ELEMENT CookiesAccepted (#PCDATA)>
<!ELEMENT ConsumerLoyalty (#PCDATA)>
<!ELEMENT ConsumerPromotions (#PCDATA)>
<!ELEMENT GiftWrap (#PCDATA)>
<!ELEMENT ReturnsAccepted (#PCDATA)>
<!ELEMENT ProductRisk (#PCDATA)>
<!ELEMENT AppliedThreshold (#PCDATA)>
<!ELEMENT AppliedTimeHedge (#PCDATA)>
<!ELEMENT AppliedVelocityHedge (#PCDATA)>
<!ELEMENT AppliedHostHedge (#PCDATA)>
```

```

<!ELEMENT AppliedCategoryGift (#PCDATA)>
<!ELEMENT AppliedCategoryTime (#PCDATA)>
<!ELEMENT AppliedAVS (#PCDATA)>
<!ELEMENT AppliedCV (#PCDATA)>
<!!ELEMENT BinAccountType (#PCDATA)>
<!!ELEMENT BinScheme (#PCDATA)>
<!!ELEMENT BinIssuer (#PCDATA)>
<!!ELEMENT BinCountry (#PCDATA)>
<!!ELEMENT IPCity (#PCDATA)>
<!!ELEMENT IPCountry (#PCDATA)>
<!!ELEMENT IPRoutingMethod (#PCDATA)>
<!!ELEMENT IPState (#PCDATA)>
<!!ELEMENT InfoCodes (InfoCode)+>
<!!ELEMENT InfoCode (CodeType, CodeValue)>
<!!ELEMENT CodeValue (#PCDATA)>
<!!ELEMENT CodeType (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName, RuleDecision)>
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>
<!!ELEMENT TravelData (TripInfo, PassengerInfo?)>
<!!ELEMENT TripInfo (CompleteRoute?, JourneyType?, DepartureDateTime?)>
<!!ELEMENT CompleteRoute (#PCDATA)>
<!!ELEMENT JourneyType (#PCDATA)>
<!!ELEMENT DepartureDateTime (#PCDATA)>
<!!ELEMENT PassengerInfo (Passenger)*>
<!!ELEMENT Passenger (PassengerFirstName?, PassengerLastName?,
PassengerID?, PassengerStatus?, PassengerType?, PassengerPhone?,
PassengerEmail?)>
<!!ATTLIST Passenger Number CDATA #REQUIRED>
<!!ELEMENT PassengerFirstName (#PCDATA)>
<!!ELEMENT PassengerLastName (#PCDATA)>
<!!ELEMENT PassengerID (#PCDATA)>
<!!ELEMENT PassengerStatus (#PCDATA)>
<!!ELEMENT PassengerType (#PCDATA)>
<!!ELEMENT PassengerPhone (#PCDATA)>
<!!ELEMENT PassengerEmail (#PCDATA)>

```

Transaction Exception Detail Report

```
<!ELEMENT Report (Requests)>
<!ATTLIST Report Name CDATA #REQUIRED
                Version NMToken #REQUIRED
                xmlns CDATA #REQUIRED
                MerchantID CDATA #REQUIRED
                ReportStartDate CDATA #REQUIRED
                ReportEndDate CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BasicInformation, PaymentData, PaymentMethod,
ErrorInformation, BillTo, ShipTo?)>
<!ELEMENT BasicInformation (RequestID, TransactionDate,
MerchantReferenceNumber, TransactionReferenceNumber, TransactionType,
OriginalRequestID)>
<!ELEMENT RequestID (#PCDATA)>
<!ELEMENT TransactionDate (#PCDATA)>
<!ELEMENT MerchantReferenceNumber (#PCDATA)>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT TransactionType (#PCDATA)>
<!ELEMENT OriginalRequestID (#PCDATA)>
<!ELEMENT PaymentData (Amount, CurrencyCode?)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT PaymentMethod (AccountSuffix?, BankCode?, BankAccountName?,
ExpirationMonth?, ExpirationYear?, CardType?)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT BankCode (#PCDATA)>
<!ELEMENT BankAccountName (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT ErrorInformation (PaymentProcessor?, Action?, ErrorCategory?,
ErrorMessage?, ReasonCode?)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Action (#PCDATA)>
<!ELEMENT ErrorCategory (#PCDATA)>
<!ELEMENT ErrorMessage (#PCDATA)>
<!ELEMENT ReasonCode (#PCDATA)>
<!ELEMENT BillTo (FirstName, LastName, Address1, Address2?, City, State?,
PostalCode, Country, CompanyName?, Email, Phone)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT PostalCode (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
```

```
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,  
State?, PostalCode?, Country?)>
```

User Management Report

```
<!ELEMENT Report (Users)>  
<!ATTLIST Report Name CDATA #REQUIRED  
ReportDate CDATA #REQUIRED  
Version NMTOKEN #REQUIRED  
xmlns CDATA #REQUIRED>  
<!ELEMENT Users (User)*>  
<!ELEMENT User (Permissions)>  
<!ATTLIST User username CDATA #REQUIRED  
merchantid CDATA #REQUIRED  
firstname CDATA #REQUIRED  
lastname CDATA #REQUIRED  
email CDATA #IMPLIED  
datecreated CDATA #REQUIRED  
lastaccess CDATA #REQUIRED  
status CDATA #REQUIRED  
role CDATA #REQUIRED >  
<!ELEMENT Permissions (Permission)*>  
<!ELEMENT Permission EMPTY>  
<!ATTLIST Permission name CDATA #REQUIRED>
```


Appendix B

Sample XML Reports

This appendix provides sample reports in XML format:

[Payment Batch Detail Report](#)

[Payment Events Report](#)

[Payment Submission Detail Report](#)

[Single Transaction Report](#)

[Transaction Exception Detail Report](#)

[User Management Report](#)

Payment Batch Detail Report

This sample contains two capture transactions and one credit transaction.

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE Report SYSTEM
    "https://ebc.cybersource.com/ebc/reports/dtd/pbdr.dtd">
<Report Name="Payment Batch Detail" Version="1.0"
    xmlns="https://ebc.cybersource.com/ebc/reports/dtd/pbdr.dtd"
    MerchantID="CyberSource"
    ReportStartDate="2003-05-01T07:00:00-07:00"
    ReportEndDate="2003-05-02T07:00:00-07:00">
  <Batches>
    <Batch BatchID="123456" BatchDate="2003-05-01">
      <Requests>
        <Request RequestID="0004172180000167905139"
          MerchantReferenceNumber="45CBBDE3378A553">
          <TransactionReferenceNumber>5652882910
        </TransactionReferenceNumber>
        <PaymentMethod>Visa</PaymentMethod>
        <CurrencyCode>USD</CurrencyCode>
        <Amount>100.00</Amount>
        <Application>ics_bill</Application>
      </Request>
      <Request RequestID="0004173790000167905139"
        MerchantReferenceNumber="5DADC3D2F4B7118">
        <TransactionReferenceNumber>5629152830
```

```
        </TransactionReferenceNumber>
        <PaymentMethod>Visa</PaymentMethod>
        <CurrencyCode>USD</CurrencyCode>
        <Amount>100.00</Amount>
        <Application>ics_credit</Application>
    </Request>
    <Request RequestID="0004174690000167905139"
        MerchantReferenceNumber="CBBF93898A39519">
        <TransactionReferenceNumber>5653068690
        </TransactionReferenceNumber>
        <PaymentMethod>Visa</PaymentMethod>
        <CurrencyCode>USD</CurrencyCode>
        <Amount>100.00</Amount>
        <Application>ics_bill</Application>
    </Request>
</Requests>
</Batch>
</Batches>
</Report>
```

Payment Events Report

This sample contains one bank transfer event and one check event.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
    "https://ebc.cybersource.com/ebc/reports/dtd/per.dtd">
<Report Name="Payment Events" Version="1.0"
    xmlns="https://ebc.cybersource.com/ebc/reports/dtd/per.dtd"
    MerchantID="CyberSource"
    ReportStartDate="2003-04-26T07:00:00-07:00"
    ReportEndDate="2003-04-27T07:00:00-07:00">
    <Requests>
        <Request RequestID="0004223530000167905139"
            MerchantReferenceNumber="3C515C71D48F631">
            <BankTransfer Event="Payment"
                EventDate="2003-04-19T00:00-07:00">
                <TransactionReferenceNumber>565288291
                </TransactionReferenceNumber>
                <MerchantCurrencyCode>EUR</MerchantCurrencyCode>
                <MerchantAmount>250.00</MerchantAmount>
                <ConsumerCurrencyCode>EUR</ConsumerCurrencyCode>
                <ConsumerAmount>250.00</ConsumerAmount>
            </BankTransfer>
        </Request>
        <Request RequestID="0004223530000167904956"
            MerchantReferenceNumber="4D587J04H33S492">
            <Check Event="Payment"
                EventDate="2003-04-18T09:00-07:00">
                <TransactionReferenceNumber>583423981
                </TransactionReferenceNumber>
```

```

        <MerchantCurrencyCode>USD</MerchantCurrencyCode>
        <MerchantAmount>100.00</MerchantAmount>
        <ConsumerCurrencyCode>USD</ConsumerCurrencyCode>
        <ConsumerAmount>100.00</ConsumerAmount>
        <FeeCurrencyCode>USD</FeeCurrencyCode>
        <FeeAmount>1.00</FeeAmount>
    </Check>
</Request>
</Requests>
</Report>

```

Payment Submission Detail Report

Three Transactions and DCC Data

This sample contains two capture transactions and one credit transaction. The first capture transaction includes DCC data.

```

<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE Report SYSTEM
    "https://ebc.cybersource.com/ebc/reports/dtd/psdr.dtd">
<Report Name="Payment Batch Detail" Version="1.0"
    xmlns="https://ebc.cybersource.com/ebc/reports/dtd/psdr.dtd"
    MerchantID="CyberSource"
    ReportStartDate="2007-10-01T07:00:00-07:00"
    ReportEndDate="2007-10-02T07:00:00-07:00">
    <Batches>
        <Batch BatchID="123456" BatchDate="2007-10-01">
            <Requests>
                <Request RequestID="0004172180000167905139"
                    MerchantReferenceNumber="45CBBDE3378A553">
                    <TransactionReferenceNumber>5652882910
                    </TransactionReferenceNumber>
                    <PaymentMethod>Visa</PaymentMethod>
                    <CurrencyCode>USD</CurrencyCode>
                    <Amount>100.00</Amount>
                    <Application>ics_bill</Application>
                    <PaymentProcessor>FDMS South</PaymentProcessor>
                    <TargetAmount>120.00</TargetAmount>
                    <TargetCurrency>EUR</TargetCurrency>
                    <ExchangeRate>1.2</ExchangeRate>
                    <ExchangeRateDate>20071001 16:00</ExchangeRateDate>
                    <DCCIndicator>1</DCCIndicator>
                </Request>
                <Request RequestID="0004173790000167905139"
                    MerchantReferenceNumber="5DADC3D2F4B7118">
                    <TransactionReferenceNumber>5629152830
                    </TransactionReferenceNumber>
                    <PaymentMethod>Visa</PaymentMethod>

```

```
        <CurrencyCode>USD</CurrencyCode>
        <Amount>100.00</Amount>
        <Application>ics_credit</Application>
        <PaymentProcessor>FDMS South</PaymentProcessor>
    </Request>
    <Request RequestID="0004174690000167905139"
        MerchantReferenceNumber="CBBF93898A39519">
        <TransactionReferenceNumber>5653068690
        </TransactionReferenceNumber>
        <PaymentMethod>Visa</PaymentMethod>
        <CurrencyCode>USD</CurrencyCode>
        <Amount>100.00</Amount>
        <Application>ics_bill</Application>
        <PaymentProcessor>FDMS South</PaymentProcessor>
    </Request>
</Requests>
</Batch>
</Batches>
</Report>
```

Transaction with CyberSource Latin American Processing

This sample contains one capture transaction that includes the NumberOfInstallments value.

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE Report SYSTEM
    "https://ebc.cybersource.com/ebc/reports/dtd/psdr.dtd">
<Report Name="Payment Batch Detail" Version="1.0"
    xmlns="https://ebc.cybersource.com/ebc/reports/dtd/psdr.dtd"
    MerchantID="CyberSource"
    ReportStartDate="2007-10-01T07:00:00-07:00"
    ReportEndDate="2007-10-02T07:00:00-07:00">
    <Batches>
        <Batch BatchID="123456" BatchDate="2007-10-01">
            <Requests>
                <Request RequestID="0004174690000167905139"
                    MerchantReferenceNumber="CBBF93898A39519">
                    <TransactionReferenceNumber>5653068690
                    </TransactionReferenceNumber>
                    <PaymentMethod>Visa</PaymentMethod>
                    <CurrencyCode>BRL</CurrencyCode>
                    <Amount>100.00</Amount>
                    <Application>ics_bill</Application>
                    <PaymentProcessor>braspag</PaymentProcessor>
                    <NumberOfInstallments>3</NumberOfInstallments>
                </Request>
            </Requests>
        </Batch>
    </Batches>
</Report>
```

Single Transaction Report

Versions 1.1, 1.2, 1.3

This sample contains a successful credit card payment.

- **Dark red** indicates values that are included only in versions 1.2 or greater.
- **Green** indicates values that are included only in versions 1.3 or greater.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
    "https://ebctest.cybersource.com/ebctest/reports/dtd/
    tdr_1_3.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/
    tdr_1_3.dtd"
    Name="Transaction Detail"
    Version="1.3" MerchantID="testMerchant"
    ReportStartDate="2008-09-10 21:46:41.765-08:00"
    ReportEndDate="2008-09-10 21:46:41.765-08:00">
  <Requests>
    <Request MerchantReferenceNumber="33038191"
      RequestDate="2008-09-10T14:00:08-08:00"
      RequestID="2210804330010167904567"
      SubscriptionID=""
      Source="SCMP API"
      User="merchant123"
      TransactionReferenceNumber="0001094522"
      PredecessorRequestID="7904567221330010160804">

    <BillTo>
      <FirstName>JANE</FirstName>
      <LastName>Smith</LastName>
      <Address1>1295 Charleston Rd</Address1>
      <Address2>Suite 2</Address2>
      <City>Mountain View</City>
      <State>CA</State>
      <Zip>06513</Zip>
      <Email>null@cybersource.com</Email>
      <Country>US</Country>
    </BillTo>
    <ShipTo>
      <FirstName>JANE</FirstName>
      <LastName>SMITH</LastName>
      <Address1>1295 Charleston Rd</Address1>
      <Address2>Suite 2</Address2>
      <City>Mountain View</City>
      <State>CA</State>
      <Zip>94043</Zip>
      <Country>US</Country>
    </ShipTo>
```

```
<PaymentMethod>
  <Card>
    <AccountSuffix>1111</AccountSuffix>
    <ExpirationMonth>11</ExpirationMonth>
    <ExpirationYear>2011</ExpirationYear>
    <CardType>Visa</CardType>
  </Card>
</PaymentMethod>
<LineItems>
  <LineItem Number="0">
    <FulfillmentType />
    <Quantity>1</Quantity>
    <UnitPrice>1.56</UnitPrice>
    <TaxAmount>0.25</TaxAmount>
    <MerchantProductSKU>testdl</MerchantProductSKU>
    <ProductName>PName1</ProductName>
    <ProductCode>electronic_software</ProductCode>
  </LineItem>
</LineItems>
<ApplicationReplies>
  <ApplicationReply Name="ics_bill">
    <RCode>1</RCode>
    <RFlag>SOK</RFlag>
    <RMsg>Request was processed successfully.</RMsg>
  </ApplicationReply>
</ApplicationReplies>
<PaymentData>
  <PaymentProcessor>vital</PaymentProcessor>
  <Amount>1.81</Amount>
  <CurrencyCode>eur</CurrencyCode>
  <TotalTaxAmount>0.25</TotalTaxAmount>
  <EventType>TRANSMITTED</EventType>
</PaymentData>
</Request>
</Requests>
</Report>
```

Version 1.2 for a China Payment

This sample contains a successful China payment.

Dark red indicates values that are included only in versions 1.2 or greater.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
  "https://ebc.cybersource.com/ebc/reports/dtd/tdr_1_2.dtd">
<Report Name="Transaction Detail"
  Version="1.2"
  xmlns="https://ebc.cybersource.com/ebc/reports/dtd/
tdr_1_2.dtd"
  MerchantID="CyberSource"
```

```
        ReportStartDate="2008-04-01T07:00:00-07:00"
        ReportEndDate="2008-04-02T07:00:00-07:00">
<Requests>
  <Request RequestID="0004223530000167905139"
    RequestDate="2008-05-01T07:42:03-07:00"
    MerchantReferenceNumber="3C515C71D48F631"
    Comments="rush order"
    TransactionReferenceNumber="20080110_1684_370597149">
<BillTo>
  <FirstName>John</FirstName>
  <LastName>Doe</LastName>
  <MiddleName>A</MiddleName>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <Zip>94043</Zip>
  <CompanyName>CyberSource</CompanyName>
  <Email>example@example.com</Email>
  <Country>US</Country>
  <Phone>650-965-6000</Phone>
  <IPAddress>127.0.0.1</IPAddress>
  <HostName>hostname.cybersource.com</HostName>
  <UserName>jdoe</UserName>
  <CustomerID>jdoe94043</CustomerID>
</BillTo>
<ShipTo>
  <FirstName>John</FirstName>
  <LastName>Doe</LastName>
  <MiddleName>A</MiddleName>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <Zip>94043</Zip>
  <CompanyName>CyberSource</CompanyName>
  <Email>example@example.com</Email>
  <Country>US</Country>
  <Phone>650-965-6000</Phone>
</ShipTo>
<PaymentMethod>
  <Card>
    <AccountSuffix>1111</AccountSuffix>
    <ExpirationMonth>12</ExpirationMonth>
    <ExpirationYear>2009</ExpirationYear>
    <CardType>Visa</CardType>
  </Card>
</PaymentMethod>
<LineItems>
  <LineItem Number="0">
    <FulfillmentType>PH</FulfillmentType>
    <Quantity>1</Quantity>
    <UnitPrice>50.00</UnitPrice>
    <TaxAmount>1.86</TaxAmount>
```

```
<MerchantProductSKU>PROD001</MerchantProductSKU>
<ProductName>Sample Product One</ProductName>
</LineItem>
<LineItem Number="1">
  <FulfillmentType>DI</FulfillmentType>
  <Quantity>1</Quantity>
  <UnitPrice>35.81</UnitPrice>
  <TaxAmount>1.29</TaxAmount>
  <MerchantProductSKU>PROD002</MerchantProductSKU>
  <ProductName>Sample Product Two</ProductName>
  <ProductCode>electronic_software</ProductCode>
</LineItem>
</LineItems>
<ApplicationReplies>
  <ApplicationReply Name="ics_china_payment">
    <RCode>1</RCode>
    <RFlag>SOK</RFlag>
    <RMsg>ok</RMsg>
  </ApplicationReply>
</ApplicationReplies>
<PaymentData>
  <PaymentRequestID>0004899920000167905139</PaymentRequestID>
  <PaymentProcessor>payeasecn</PaymentProcessor>
  <Amount>88.96</Amount>
  <CurrencyCode>USD</CurrencyCode>
  <TotalTaxAmount>3.15</TotalTaxAmount>
  <ProcessorResponseCode>100</ProcessorResponseCode>
  <EventType>Payment Settled</EventType>
</PaymentData>
</Request>
</Requests>
</Report>
```

Version 1.4 for a Credit Card

This sample contains a successful credit card payment with CyberSource Latin American Processing:

- **Dark red** indicates values that are included only in versions 1.2 or greater.
- **Green** indicates values that are included only in versions 1.3 or greater.
- **Purple** indicates values that are included only in versions 1.4 or greater.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
  "https://ebctest.cybersource.com/ebctest/reports/dtd/
tldr_1_4.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/
tldr_1_4.dtd"
  Name="Transaction Detail"
  Version="1.4" MerchantID="testMerchant"
```



```

        ReportStartDate="2008-09-10 21:46:41.765-08:00"
        ReportEndDate="2008-09-10 21:46:41.765-08:00">
<Requests>
  <Request MerchantReferenceNumber="33038191"
    RequestDate="2008-09-10T14:00:08-08:00"
    RequestID="2210804330010167904567"
    SubscriptionID=""
    Source="SCMP API"
    User="merchant123"
    TransactionReferenceNumber="0001094522">
<BillTo>
  <FirstName>JANE</FirstName>
  <LastName>Smith</LastName>
  <Address1>1295 Charleston Rd</Address1>
  <Address2>Suite 2</Address2>
  <City>Mountain View</City>
  <State>CA</State>
  <Zip>06513</Zip>
  <Email>null@cybersource.com</Email>
  <Country>US</Country>
</BillTo>
<ShipTo>
  <FirstName>JANE</FirstName>
  <LastName>SMITH</LastName>
  <Address1>1295 Charleston Rd</Address1>
  <Address2>Suite 2</Address2>
  <City>Mountain View</City>
  <State>CA</State>
  <Zip>94043</Zip>
  <Country>US</Country>
</ShipTo>
<PaymentMethod>
  <Card>
    <AccountSuffix>1111</AccountSuffix>
    <ExpirationMonth>11</ExpirationMonth>
    <ExpirationYear>2011</ExpirationYear>
    <CardType>Visa</CardType>
  </Card>
</PaymentMethod>
<LineItems>
  <LineItem Number="0">
    <FulfillmentType />
    <Quantity>1</Quantity>
    <UnitPrice>1.56</UnitPrice>
    <TaxAmount>0.25</TaxAmount>
    <MerchantProductSKU>testdl</MerchantProductSKU>
    <ProductName>PName1</ProductName>
    <ProductCode>electronic_software</ProductCode>
  </LineItem>
</LineItems>
<ApplicationReplies>
  <ApplicationReply Name="ics_bill">

```

```
<RCode>1</RCode>
<RFlag>SOK</RFlag>
<RMsg>Request was processed successfully.</RMsg>
</ApplicationReply>
</ApplicationReplies>
<PaymentData>
  <PaymentProcessor>braspag</PaymentProcessor>
  <Amount>1.81</Amount>
  <CurrencyCode>BRL</CurrencyCode>
  <TotalTaxAmount>0.25</TotalTaxAmount>
  <EventType>TRANSMITTED</EventType>
  <NumberOfInstallments>3</NumberOfInstallments>
</PaymentData>
</Request>
</Requests>
</Report>
```

Version 1.4 for a Boletó Bancário

This sample contains a successful Boletó Bancário payment:

- **Burgundy** indicates values that are included only in versions 1.2 or greater.
- **Green** indicates values that are included only in versions 1.3 or greater.
- **Purple** indicates values that are included only in versions 1.4 or greater.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
  "https://ebctest.cybersource.com/ebctest/reports/dtd/
tldr_1_4.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/
tldr_1_4.dtd"
  Name="Transaction Detail"
  Version="1.4" MerchantID="testMerchant"
  ReportStartDate="2008-09-10 21:46:41.765-08:00"
  ReportEndDate="2008-09-10 21:46:41.765-08:00">
  <Requests>
    <Request MerchantReferenceNumber="33038191"
      RequestDate="2008-09-10T14:00:08-08:00"
      RequestID="2210804330010167904567"
      SubscriptionID=""
      Source="SCMP API"
      User="merchant123"
      TransactionReferenceNumber="0001094522">
    <BillTo>
      <FirstName>JANE</FirstName>
      <LastName>Smith</LastName>
      <Address1>1295 Charleston Rd</Address1>
      <Address2>Suite 2</Address2>
      <City>Mountain View</City>
      <State>CA</State>
```

```

        <Zip>06513</Zip>
        <Email>>null@cybersource.com</Email>
        <Country>US</Country>
    </BillTo>
    <ShipTo>
        <FirstName>JANE</FirstName>
        <LastName>SMITH</LastName>
        <Address1>1295 Charleston Rd</Address1>
        <Address2>Suite 2</Address2>
        <City>Mountain View</City>
        <State>CA</State>
        <Zip>94043</Zip>
        <Country>US</Country>
    </ShipTo>
    <PaymentMethod>
        <Card>
            <AccountSuffix />
            <ExpirationMonth />
            <ExpirationYear />
            <CardType>Brazil Bank Transfer</CardType>
            <BoletoNumber>12345</BoletoNumber>
        </Card>
    </PaymentMethod>
    <LineItems>
        <LineItem Number="0">
            <FulfillmentType />
            <Quantity>1</Quantity>
            <UnitPrice>1.56</UnitPrice>
            <TaxAmount>0.25</TaxAmount>
            <MerchantProductSKU>testdl</MerchantProductSKU>
            <ProductName>PName1</ProductName>
            <ProductCode>electronic_software</ProductCode>
        </LineItem>
    </LineItems>
    <ApplicationReplies>
        <ApplicationReply Name="ics_boleto_payment">
            <RCode>1</RCode>
            <RFlag>SOK</RFlag>
            <RMsg>Request was processed successfully.</RMsg>
        </ApplicationReply>
    </ApplicationReplies>
    <PaymentData>
        <PaymentProcessor>braspag</PaymentProcessor>
        <Amount>1.81</Amount>
        <CurrencyCode>BRL</CurrencyCode>
        <TotalTaxAmount>0.25</TotalTaxAmount>
        <EventType>Fulfilled</EventType>
    </PaymentData>
</Request>
</Requests>
</Report>

```

Version 1.5

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
"http://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_5.dtd">

<Report
xmlns="http://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_5.dtd"
Name="Transaction Detail" Version="1.5" MerchantID="ok_go"
ReportStartDate="2009-01-27 23:00:39.536-08:00" ReportEndDate="2009-01-27
23:00:39.536-08:00">  <Requests>
  <Request MerchantReferenceNumber="ok_go_ecp_1"
RequestDate="2009-01-20T17:27:58-08:00"
RequestID="2325012771670170394202" SubscriptionID="" Source="Case
Management API" User="test_merchant_1"
TransactionReferenceNumber="2031800">
    <BillTo>
      <FirstName>Jane</FirstName>
      <LastName>Doe</LastName>
      <Address1>1295 Charleston Rd.</Address1>
      <City>Mountain View</City>
      <State>CA</State>
      <Zip>94043</Zip>
      <CompanyName>OK Go</CompanyName>
      <Email>jdoo@example.com</Email>
      <Country>US</Country>
      <Phone>6509656000</Phone>
    </BillTo>
    <ShipTo>
      <Phone>6509656000</Phone>
    </ShipTo>
    <PaymentMethod>
      <Check>
        <AccountSuffix>1234</AccountSuffix>
        <CheckNumber>99000</CheckNumber>
      </Check>
    </PaymentMethod>
    <LineItems>
      <LineItem Number="0">
        <FulfillmentType />
        <Quantity>1</Quantity>
        <UnitPrice>1.00</UnitPrice>
        <TaxAmount>0.00</TaxAmount>
        <ProductCode>default</ProductCode>
      </LineItem>
    </LineItems>
    <ApplicationReplies>
      <ApplicationReply Name="ics_ecp_debit">
        <RCode>1</RCode>
        <RFlag>SOK</RFlag>
        <RMsg>Request was processed successfully.</RMsg>
      </ApplicationReply>
```

```

    </ApplicationReplies>
    <PaymentData>
      <PaymentProcessor>wellsfargoach</PaymentProcessor>
      <Amount>1.00</Amount>
      <CurrencyCode>USD</CurrencyCode>
      <TotalTaxAmount>0.00</TotalTaxAmount>
      <EventType>PENDING</EventType>
      <ACHResult>06</ACHResult>
      <ACHResultMapped>03</ACHResultMapped>
    </PaymentData>
  </Request>
</Requests>
</Report>

```

Version 1.6

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM
"http://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_6.dtd">
<Report
  xmlns="http://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_6.dtd"
  Name="Transaction Detail"
  Version="1.6"
  MerchantID="ok_go"
  ReportStartDate="2009-05-26T18:30:00-08:00"
  ReportEndDate="2009-05-27T18:30:00-08:00">
  <Requests>
    <Request RequestID="2434465504100167904567"
      RequestDate="2009-05-27T17:49:10+05:30"
      MerchantReferenceNumber="1234"
      Source="SCMP API"
      User=""
      SubscriptionID=""
      TransactionReferenceNumber="00013791KV8BZF3P">
      <BillTo>
        <FirstName>sample</FirstName>
        <LastName>merchant</LastName>
        <Address1>11 Lico Ave</Address1>
        <City>Big City</City>
        <State>CA</State>
        <Zip>99999</Zip>
        <Email>smerchant@example.com</Email>
        <Country>US</Country>
        <Phone></Phone>
      </BillTo>
      <ShipTo>
        <City>xyz</City>
        <Zip>95117</Zip>
      </ShipTo>
      <PaymentMethod>
        <Card>
          <AccountSuffix>7392</AccountSuffix>

```

```
<ExpirationMonth>12</ExpirationMonth>
<ExpirationYear>2009</ExpirationYear>
<CardType>Visa</CardType>
</Card>
</PaymentMethod>
<LineItems>
  <LineItem Number="0">
    <FulfillmentType>P</FulfillmentType>
    <Quantity>1</Quantity>
    <UnitPrice>2.00</UnitPrice>
    <TaxAmount>0.00</TaxAmount>
    <ProductCode>default</ProductCode>
  </LineItem>
</LineItems>
<ApplicationReplies>
  <ApplicationReply Name="ics_auth">
    <RCode>1</RCode>
    <RFlag>SOK</RFlag>
    <RMsg>Request was processed successfully.</RMsg>
  </ApplicationReply>
  <ApplicationReply Name="ics_decision">
    <RCode>0</RCode>
    <RFlag>DREVIEW</RFlag>
    <RMsg>Decision is REVIEW.</RMsg>
  </ApplicationReply>
  <ApplicationReply Name="ics_decision_early">
    <RCode>1</RCode>
    <RFlag />
  </ApplicationReply>
  <ApplicationReply Name="ics_score">
    <RCode>1</RCode>
    <RFlag>DScore</RFlag>
    <RMsg>Score exceeds threshold. Score = 84</RMsg>
  </ApplicationReply>
</ApplicationReplies>
<PaymentData>
  <PaymentRequestID>2434465504100167904567</PaymentRequestID>
  <PaymentProcessor>smartpay</PaymentProcessor>
  <Amount>2.00</Amount>
  <CurrencyCode>USD</CurrencyCode>
  <TotalTaxAmount>0.00</TotalTaxAmount>
  <AuthorizationType>0</AuthorizationType>
  <AuthorizationCode>888888</AuthorizationCode>
  <AVSResult>I1</AVSResult>
  <AVSResultMapped>X</AVSResultMapped>
  <GrandTotal>2.00</GrandTotal>
  <ACHVerificationResult>100</ACHVerificationResult>
</PaymentData>
<MerchantDefinedData>
  <field1 name="mdd1">ca</field1>
</MerchantDefinedData>
<RiskData>
```

```

<Factors>C,Y,Z</Factors>
<HostSeverity>1</HostSeverity>
<Score>84</Score>
<TimeLocal>2009-05-27T10:49:10</TimeLocal>
<AppliedThreshold>20</AppliedThreshold>
<AppliedTimeHedge>normal</AppliedTimeHedge>
<AppliedVelocityHedge>high</AppliedVelocityHedge>
<AppliedHostHedge>normal</AppliedHostHedge>
<AppliedCategoryGift>n</AppliedCategoryGift>
<AppliedCategoryTime></AppliedCategoryTime>
<AppliedAVS>X</AppliedAVS>
<BinAccountType>CN</BinAccountType>
<BinScheme>Visa Credit</BinScheme>
<BinIssuer>Sample issuer</BinIssuer>
<BinCountry>us</BinCountry>
<InfoCodes>
  <InfoCode>
    <CodeType>address</CodeType>
    <CodeValue>MM-C,MM-Z</CodeValue>
  </InfoCode>
  <InfoCode>
    <CodeType>velocity</CodeType>
    <CodeValue>VEL-CC</CodeValue>
  </InfoCode>
</InfoCodes>
</RiskData>
<ProfileList>
  <Profile Name="Default Profile">
    <ProfileMode>Active</ProfileMode>
    <ProfileDecision>ACCEPT</ProfileDecision>
    <RuleList>
      <Rule>
        <RuleName>sample rule name</RuleName>
        <RuleDecision>IGNORE</RuleDecision>
      </Rule>
    </RuleList>
  </Profile>
</ProfileList>
<TravelData>
  <TripInfo>
    <CompleteRoute>AB-CD:EF-GH</CompleteRoute>
    <JourneyType>round trip</JourneyType>
    <DepartureDateTime>sample date & time</DepartureDateTime>
  </TripInfo>
  <PassengerInfo>
    <Passenger Number="0">
      <PassengerFirstName>jane</PassengerFirstName>
      <PassengerLastName>doe</PassengerLastName>
      <PassengerID>Sing-001</PassengerID>
    </Passenger>
    <Passenger Number="1">
      <PassengerFirstName>john</PassengerFirstName>

```

```
        <PassengerLastName>doe</PassengerLastName>
        <PassengerID>sing-002</PassengerID>
        <PassengerStatus>Adult</PassengerStatus>
        <PassengerType>Gold</PassengerType>
        <PassengerPhone>9995551212</PassengerPhone>
        <PassengerEmail>jdoe@example.com</PassengerEmail>
    </Passenger>
</PassengerInfo>
</TravelData>
</Request>
</Requests>
</Report>
```

Transaction Exception Detail Report

This sample contains a credit card capture and a direct debit refund.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM
    "https://ebc.cybersource.com/ebc/reports/dtd/tedr.dtd">
<Report Name="Transaction Exception Detail"
    Version="1.0"
    xmlns="https://ebc.cybersource.com/reports/dtd/tedr.dtd"
    MerchantID="sample"
    ReportStartDate="2006-06-14T05:00:00-05:00"
    ReportEndDate="2006-06-15T05:00:00-05:00">
  <Requests>
    <Request>
      <BasicInformation>
        <RequestID>1503246240000167904565</RequestID>
        <TransactionDate>2006-06-14 22:37:26.0</TransactionDate>
        <MerchantReferenceNumber>01928374</MerchantReferenceNumber>
        <TransactionReferenceNumber />
        <TransactionType>credit card capture</TransactionType>
        <OriginalRequestID>1503246240000167904565</OriginalRequestID>
      </BasicInformation>
      <PaymentData>
        <Amount>4.00</Amount>
        <CurrencyCode>USD</CurrencyCode>
      </PaymentData>
      <PaymentMethod>
        <AccountSuffix>1501</AccountSuffix>
        <ExpirationMonth>10</ExpirationMonth>
        <ExpirationYear>2010</ExpirationYear>
        <CardType>Visa</CardType>
      </PaymentMethod>
      <ErrorInformation>
        <PaymentProcessor>sample_processor</PaymentProcessor>
        <Action>ERROR</Action>
        <ErrorCategory>Settlement Error</ErrorCategory>
      </ErrorInformation>
    </Request>
  </Requests>
</Report>
```



```

        <ReasonCode/>
    </ErrorInformation>
    <BillTo>
        <FirstName>John</FirstName>
        <LastName>Doe</LastName>
        <Address1>1295 Charleston</Address1>
        <City>Mountain View</City>
        <State>CA</State>
        <PostalCode>99999</PostalCode>
        <Country>US</Country>
        <Email>jdoe@example.com</Email>
        <Phone>0227198940</Phone>
    </BillTo>
</Request>
<Request>
    <BasicInformation>
        <RequestID>1503230620000167904565</RequestID>
        <TransactionDate>2006-06-14 22:11:25.0</TransactionDate>
        <MerchantReferenceNumber>01928374</MerchantReferenceNumber>
        <TransactionReferenceNumber>RA94P11D0VZWV5
            </TransactionReferenceNumber>
        <TransactionType>direct debit refund</TransactionType>
        <OriginalRequestID>1503230620000167904565</OriginalRequestID>
    </BasicInformation>
    <PaymentData>
        <Amount>-4.00</Amount>
        <CurrencyCode>EUR</CurrencyCode>
    </PaymentData>
    <PaymentMethod>
        <AccountSuffix>0001</AccountSuffix>
        <BankCode>70070010</BankCode>
        <BankAccountName>CyberSource</BankAccountName>
    </PaymentMethod>
    <ErrorInformation>
        <PaymentProcessor>cybersource</PaymentProcessor>
        <Action>FAILED</Action>
        <ErrorCategory>Failure</ErrorCategory>
        <ErrorMessage>The direct debit has not yet been settled.
            </ErrorMessage>
        <ReasonCode>312</ReasonCode>
    </ErrorInformation>
    <BillTo>
        <FirstName>Johann</FirstName>
        <LastName>Schmidt</LastName>
        <Address1>Schwetzinger Strasse 135</Address1>
        <City>Muenchen</City>
        <State>N/A</State>
        <PostalCode>33333</PostalCode>
        <Country>DE</Country>
        <Email>johann@example.com</Email>
        <Phone>0222834538</Phone>
    </BillTo>

```

```
</Request>
</Requests>
</Report>
```

User Management Report

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM
"https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd">
<Report Name="User Listing"
  Version="1.0"
  xmlns="https://ebc.cybersource.com/ebc/reports/dtd/ul.dtd"
  ReportDate="2007-09-21 05:31 GMT">
<Users>
  <User username="infodev_user"
    merchantid="infodev"
    firstname="Jane"
    lastname="Doe"
    email=""
    datecreated="2007-03-29 07:47 GMT"
    lastaccess="2007-09-21 04:26 GMT"
    status="Enabled"
    role="Custom">
    <Permissions>
      <Permission name="Virtual Terminal Transaction"/>
      <Permission name="Payment Authorization"/>
    </Permissions>
  </User>
</Users>
</Report>
```

Appendix C

Sample CSV Reports

This appendix provides sample reports in CSV format:

[Payment Batch Detail Report](#)
[Payment Events Report](#)
[Payment Submission Detail Report](#)
[Transaction Exception Detail Report](#)
[User Management Report](#)

Payment Batch Detail Report

This sample contains two capture transactions and one credit transaction.

```
Payment Batch Detail Report,1.0,2003-05-01 to 2003-05-01,,,,,,
batch_id,merchant_id,batch_date,request_id,merchant_ref_number,trans_ref_
no,payment_method,currency,amount,transaction_type
123456,CyberSource,2003-05-01,0004172180000167905139,45CBBDE3378A553,5652
882910,Visa,USD,100.00,ics_bill
123456,CyberSource,2003-05-01,0004173790000167905139,5DADC3D2F4B7118,5629
152830,Visa,USD,-100.00,ics_credit
123456,CyberSource,2003-05-01,0004174690000167905139,CBBF93898A39519,5653
068690,Visa,USD,100.00,ics_bill
```

Payment Events Report

This sample contains these events:

- Three credit card events: a payment, a failed transaction, and a refund
- One bank transfer
- One check

```
Payment Events Report,1,2/28/2004,merchant_id,,,
1004223530000167905139,CyberSource,4828225690-3098813497360087,credit
card,Payment,2/28/2004,54415,JPY,20000,JPY,20000,,, [DC]
```

```
7004225530045163405877,CyberSource,1862337088-6423810158341592,credit
card,Failed,2/28/2004,55247,JPY,20000,JPY,20000,,, [DC]
4173905000419009050013,CyberSource,1877734460-6234665442211693,credit
card,Refund,2/28/2004,54920,JPY,-11208,JPY,-11208,,,
0004223530000167905139,CyberSource,1922378932-345155716486631,bank
transfer,Payment,2/28/2004,59385,EUR,250.00,EUR,250.00,,,
0004223530000167904956,CyberSource,1983423981-435874045334492,check,
Payment,2/28/2004,58342,USD,100.00,USD,100.00,USD,1.00,
```

Payment Submission Detail Report

This sample contains two capture transactions and one credit transaction.

Important The CSV version of the Payment Submission Detail Report uses quotation marks around each of the report's values.

```
Payment Submission Detail Report,1.0,2003-05-01 to 2003-05-01,,,,,,,,,
batch_id,merchant_id,batch_date,request_id,merchant_ref_number,trans_ref_
no,payment_method,currency,amount,transaction_type,payment_processor
"123456","CyberSource","2003-05-01","0004172180000167905139","45CBBDE3378
A553","5652882910","Visa","USD","100.00","ics_bill","FDMS South"
"123456","CyberSource","2003-05-01","0004173790000167905139","5DADC3D2F4B
7118","5629152830","Visa","USD","-100.00","ics_credit","FDMS South"
"123456","CyberSource","2003-05-01","0004174690000167905139","CBBF93898A3
9519","5653068690","Visa","USD","100.00","ics_bill","FDMS South"
```

Transaction Exception Detail Report

This sample contains two errors in which the direct debit had already been processed.

```
Transaction Exception Detail Report,1.0,2006-05-03 to
2006-05-03,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
,,,,,,,,,,,,,
row_descriptor,request_id,transaction_date,merchant_id,customer_id,mercha
nt_ref_number,transaction_ref_number,transaction_type,payment_type,paymen
t_method,amount,currency_code,payment_processor,original_request_id,actio
n,reason_code,error_message,processor_message,account_suffix,customer_cc_
expmo,customer_cc_expyr,bank_code,bank_account_name,customer_firstname,cu
stomer_lastname,bill_address1,bill_address2,bill_city,bill_state,bill_zip
,bill_country,company_name,customer_email,customer_phone,ship_to_first_na
me,ship_to_last_name,ship_to_address1,ship_to_address2,ship_to_city,ship_
to_state,ship_to_zip,ship_to_country
Request,1466816420000167904565,2006-05-03T11:40:44-05:00,gdtest2,,,QYEM5E
8UK7Z9RX,Refund,DD,,,-15,eur,cybersource,1466811700000167904565,ERROR,
313,You have already refunded 100% of the direct debit.,3201,,,12345,
DIRECT_DEBIT TESTING,Rekha,KASTRUP,WILLY-MESSERSCHMITZ-STRASSE
```

```
9,,Netherlands,N/A,50126,at,,GERTRUDE@CYBERSOURCE.COM,227198940,
Madeleine,Tison,143,BOULEVARD ANATOLE,SAINT-DENIS CEDEX,,93285,fr
Request,1466924940000167904565,2006-05-03T14:41:35-05:00,gdtest2,,,QYGR0Y
BCK6TG71,Refund,DD,, -4.25,eur,cybersource,1466922580000167904565,ERROR,31
3,You have already refunded 100% of the direct debit.,3 00,,,123,Direct_
Debit Testing,Lodewijk,le Grand,Postbus 125,,Wageningen,N/A,6700 AC,nl,
lodewijk@cybersource.com,31348428926,Aude,Manet,143, boulevard Anatole,
Saint-Denis Cedex 93285,fr
```

User Management Report

```
User Listing Report,Version 1.0,2007-09-14
Username,Merchant ID,First Name,Last Name,Email,Date
Created,LastAccess,Status,Role, Permissions
infodev_user,infodev,Jane,Doe,,2007-03-29 07:47 GMT,2007-09-21 11:44
GMT,Enabled, Custom,Virtual Terminal Transaction|Payment Authorization
infodev_user_2,infodev,John,Doe,,2007-03-29 07:47 GMT,2007-09-21 08:00
GMT,Enabled, Report Download,Report Download
```


Appendix D

Payment Processors

Many reports include a payment processor value:

- In XML reports, the name of the element is usually `<PaymentProcessor>`.
- In CSV reports, the name of the field is usually **payment_processor**.

In most reports, the payment processor value is a raw value from the CyberSource software. A few reports use a mapped payment processor value.

Raw Values for Payment Processor Fields

- `amexbrighton`: American Express Brighton
- `amexbrighton2`: American Express Brighton
- `amexdirect`: American Express Direct
- `amexphoenix`: American Express Phoenix
- `atos`: Atos
- `barclays`: Barclays
- `barclays2`: Barclays
- `bmlldirect`: BML Direct
- `bofaach`: Bank of America ACH—This processor is part of the CyberSource ACH Service
- `braspag`: CyberSource Latin American Processing
- `cardnet`: LloydsTSB Cardnet
- `ccs`: CCS (CAFIS)
- `citiindia`: Citibank India
- `citimb`: CitiBank Meerbusch
- `fdccompass`: FDC Compass

- `fdcgermany`: FDC Germany
- `fdcsouth`: FDMS South
- `fdiaus`: FDI Australia
- `fdiglobal`: FDI Global
- `gemoneyuk`: GE Capital
- `globalcollect`: CyberSource Global Payment Service
- `gpn`: GPN
- `hbos`: HBoS
- `hsbc`: HSBC
- `lynk`: Lynk
- `migs`: Asia-Mideast Processing
- `natwest`: Streamline
- `omniire`: OmniPay-Ireland
- `omnipayfdi`: Lloyds-OmniPay
- `payeasecn`: PayEase China Processing
- `rbsworldpay`: RBS WorldPay Atlanta
- `smartfdc`: FDMS Nashville
- `smartpay`: Chase Paymentech Solutions
- `streamline2`: Streamline
- `telecheck`: TeleCheck
- `uatp`: UATP
- `vital`: TSYS Acquiring Solutions
- `wellsfargoach`: Wells Fargo ACH—This processor is part of the CyberSource ACH Service

Mapped Values for Payment Processor Fields

- AMEX Brighton UK
- AMEX Phoenix US
- Bank of America ACH—This processor is part of the CyberSource ACH Service
- Barclays UK
- CCS
- CitiBank Meerbusch
- FDC Compass
- FDMS Nashville
- FDMS South
- Global Payment Service
- PayEase
- Paymentech—This processor is now called Chase Paymentech Solutions
- RBS WorldPay Atlanta
- Streamline UK
- TeleCheck
- Vital—This processor is now called TSYS Acquiring Solutions.
- Wells Fargo ACH—This processor is part of the CyberSource ACH Service

Appendix E

Types of Cards and Bank Accounts

Many reports include an element or field that provides the type of card or bank account:

- In XML reports, the name of the element is usually `<PaymentMethod>` or `<CardType>`.
- In CSV reports, the name of the field is usually `payment_method`.

Values for Types of Cards and Bank Accounts

- American Express
- Bank Transfer
- Brazil Bank Transfer
- Carta Si
- Carte Blanche
- Carte Bleue
- Checking
- Corporate Checking
- Dankort
- Delta
- Diners Club
- Direct Debit
- Discover
- EnRoute
- GE Money
- JAL
- JCB

- Laser
- Maestro (International)
- MasterCard
- MBNA-LOAN
- Paymentech Bill Me Later
- PayPal
- Savings
- Solo
- Maestro (UK Domestic)
- UATP
- UNKNOWN card
- Visa
- Visa Electron

If CyberSource processes a private label card for you, this field can also contain the name of your private label card.

Appendix F

Reason Codes in the Transaction Exception Detail Report

The following table describes the reason codes that can be included in the Transaction Exception Detail Report. The codes are in the `reason_code` field in the CSV version of the report and in the `<ReasonCode>` element in the XML version of the report. The reason codes that you receive depend on the information returned by your processor. You can use the mapping to the reply flag if you use the SCMP API.

Table 88 Reason Codes in the Transaction Exception Detail Report

Reason Code	Reply Flag	Description
101	DMISSINGFIELD	The request is missing one or more required fields. Possible action: If you are using the Simple Order API, see the reply fields missingField_0...N for which fields are missing. Resend the request with the complete information.
102	DINVALIDDATA	One or more fields in the request contains invalid data. Possible action: If you are using the Simple Order API, see the reply fields invalidField_0...N for the invalid fields. If you are using the Hosted Order Page, you can receive this reason code for invalid (InvalidField_0...N) and missing (MissingField_0...N) fields. Resend the request with the correct information.
104	DDUPLICATE	The transaction is declined because the merchant reference number sent matches the merchant reference number of another transaction sent in the last 15 minutes. Possible action: Ensure that the merchant reference number is unique.
150	ESYSTEM	Error: General system failure. See the documentation for your CyberSource client for information about how to handle retries in the case of system errors.
151	ETIMEOUT	Error: The request was received but there was a server time-out. This error does not include time-outs between the client and the server. Possible action: To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Enterprise Business Center. See the documentation for your CyberSource client for information about how to handle retries in the case of system errors.

Table 88 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code	Reply Flag	Description
202	DCARDEXPIRED	Expired card. You might also receive this if the expiration date you provided does not match the date the issuing bank has on file. Note The ccCreditService does not check the expiration date; instead, it passes the request to the payment processor. If the payment processor allows issuance of credits to expired cards, CyberSource does not limit this functionality. Possible action: Request a different card or other form of payment.
203	DCARDREFUSED	The card was declined. No other information was provided by the issuing bank. Possible action: Request a different card or other form of payment.
204	DCARDREFUSED	The account has insufficient funds. Possible action: Request a different card or other form of payment.
205	DCARDREFUSED	The card was stolen or lost. Possible action: Review the customer's information and determine if you want to request a different card from the customer.
207	DCARDREFUSED	The issuing bank was unavailable. Possible action: Wait a few minutes and resend the request.
208	DCARDREFUSED	The card is inactive or not authorized for card-not-present transactions. Possible action: Request a different card or other form of payment.
209	DCARDREFUSED	American Express Card Identification Digits (CID) did not match. Possible action: Request a different card or other form of payment.
210	DCARDREFUSED	The credit limit for the card has been reached. Possible action: Request a different card or other form of payment.
223	DPAYMENTREFUSED	A request was made to credit an order for which there is no corresponding, unused payment record. Occurs if no previously successful pay Pal Button Create Service or pay Pal Pre approved Payment Service request exists, or if the previously successful payment has already been used by another payPalCreditService request. Possible action: Verify that have not already credited this payment, or verify that you are crediting the correct payment.
231	DINVALIDCARD	Invalid account number. Possible action: Request a different card or other form of payment.
233	DINVALIDDATA	The processor declined the request based on an issue with the request itself. Possible action: Request a different card or other form of payment.

Table 88 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code	Reply Flag	Description
235	DINVALIDDATA	The requested amount exceeds the originally authorized amount. Occurs, for example, if you try to capture an amount larger than the original authorization amount. Possible action: Issue a new authorization and capture request for the new amount.
236	DINVALIDDATA	Processor failure. Possible action: Wait a few minutes and resend the request.
237	DINVALIDDATA	The authorization has already been reversed. Possible action: No action required.
238	DINVALIDDATA	The authorization has already been captured. Possible action: No action required.
239	DINVALIDDATA	The requested transaction amount must match the previous transaction amount. Possible action: Correct the amount and resend the request.
240	DINVALIDDATA	The card type sent is invalid or does not correlate with the credit card number. Possible action: Confirm that the card type correlates with the credit card number specified in the request, and resend the request.
241	DINVALIDDATA	The request ID is invalid for the follow-on request. Possible action: Verify the request ID is valid and resend the request.
242	DNOAUTH	You requested a capture, but there is no corresponding, unused authorization record. Occurs if there was not a previously successful authorization request or if the previously successful authorization has already been used by another capture request. Possible action: Request a new authorization, and if successful, proceed with the capture.
243	DINVALIDDATA	The transaction has already been settled or reversed. Possible action: No action required.
244	DINVALIDACCOUNT	The bank account number did not pass the validation check. Applies to bank transfer refunds with banks in France, Germany, and the United Kingdom; and direct debits and direct debit refunds with banks in Germany. Possible action: Verify with the customer that the account number is correct; if it was incorrect, request the service again with the corrected information.
246	DNOTVOIDABLE	The capture or credit is not voidable because the capture or credit information has already been submitted to your processor, or you requested a void for a type of transaction that cannot be voided. Possible action: No action required.
247	DINVALIDDATA	You requested a credit for a capture that was previously voided. Possible action: No action required.

Table 88 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code	Reply Flag	Description
250	ETIMEOUT	Error: The request was received, but a time-out occurred at the payment processor. Possible action: To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center.
253	DNOVALIDATE	The directDebitService_validateRequestID that you provided has already been used in another request for the Direct Debit Service. Possible action: Request the Direct Debit Validate Service again and use the new request ID that you receive.
301	DINVALIDDATA	The mandate ID that you provided is invalid. This reason code applies only to direct debits in the United Kingdom. Suggested action: Verify that you provided the correct mandate ID and send the request again.
302	DINVALIDDATA	No valid mandate exists because it has expired, or the customer's bank rejected or canceled it. This reason code applies only to direct debits in the United Kingdom. Suggested action: Obtain a valid mandate from the customer, and process the direct debit after the appropriate 5-day waiting period.
303	DINVALIDDATA	You must wait at least 5 business days after requesting the mandate before processing the first direct debit. This reason code applies only to direct debits in the United Kingdom. Suggested action: Wait until the 5 business days have completed, and process the first direct debit.
304	DINVALIDDATA	The bank account number that you provided does not match the account number on file for this mandate. This reason code applies only to direct debits in the United Kingdom. Suggested action: Verify that the mandate ID and corresponding bank account number are correct, and request the direct debit again.
311	DINVALIDDATA	The direct debit has already been reversed. Therefore, you may not request a refund. Suggested action: No action required.
312	DINVALIDDATA	The direct debit has not yet been settled. Therefore, you may not yet request a refund. Suggested action: Wait until the customer's payment has been received, and request the refund. Look for confirmation of payment in the Payment Events Report. For more information about the report, see the Global Payment Service Planning and User's Guide .
313	DINVALIDDATA	You have already refunded 100% of the direct debit. Therefore, you may not request a refund for this direct debit. Suggested action: No action required.
321	DINVALIDDATA	The bank transfer has not yet been settled. Therefore, you may not yet request a refund. Suggested action: Wait until the customer's payment has been received, and request the refund. Look for confirmation of payment in the Payment Events Report. For more information about the report, see the Global Payment Service Planning and User's Guide .

Table 88 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code	Reply Flag	Description
322	DINVALIDDATA	You have already refunded 100% of the bank transfer. Therefore, you may not request a refund for this bank transfer. Suggested action: No action required.
341	DINVALIDDATA	You have exceeded the maximum daily refund amount allowed. Suggested action: Resend your request the following day.
342	DINVALIDDATA	An error occurred during settlement. Suggested action: Verify the information in your request and resend the order.

Appendix G

Banking Codes in the Payment Events Report

CyberSource includes banking codes in the processor message field in the Payment Events Report. For direct debit reversals, Global Collect processors return a banking reversal code. For electronic check debit reversals, CyberSource ACH Service returns a banking reason code.

[Table 89](#) describes the possible values for the Global Collect banking reversal codes.

[Table 90](#) describes the possible values for the CyberSource ACH Service banking return reason codes.

For more information, see these sections:

Payment Events Report

XML format on [page 30](#)

CSV format on [page 101](#)

Global Collect direct debit reversals

Direct debits chapter in the [Global Payment Service Planning and User's Guide](#)

Table 89 Global Collect Banking Reversal Codes

Code	Description
1	Invalid account identification. The account ID is not formatted according to the country-specific format requirements, or the account does not exist anymore, or the account has been closed.
3	Invalid account type. The debit account exists but is not suited for direct debits. The debtor must issue a new authorization for a suitable account.
4	Blocked or closed account. The debit account is blocked for direct debits.
5	Authorization missing. The debit bank does not have a valid authorization.
6	Authorization cancelled. The authorization was withdrawn.
7	Insufficient funds. The direct debit payment was not processed because of insufficient funds.
8	Direct debit disputed. The direct debit payment was reversed at the request of the account holder.
9	Refused by bank. The direct debit payment was rejected by the bank. The bank did not provide any information about why the payment was rejected.

Table 89 Global Collect Banking Reversal Codes (Continued)

Code	Description
10	Name/number do not match. The account number and named account holder do not match.
11	No details given. If you have any questions, please contact your account manager.
85	Invalid or empty account.
86	Invalid or empty check digit.
X	The banking reversal code starts with an "X" if your bank became aware of the direct debit reversal before settlement. When this happens, neither the direct debit nor the reversal appears in the Remittance Report. You might be charged a returned item fee for the reversal.

This table describes the possible values for the CyberSource ACH Service return reason codes.

Table 90 CyberSource ACH Service Return Reason Codes

Code	Description
R01	NSF. Insufficient funds.
R02	Declined. Account closed.
R03	Declined. No account/unable to locate account.
R04	Declined. Invalid account number.
R05	Stop Payment. Unauthorized debit to consumer account using corporate SEC code.
R06	Declined. Returned per ODFI's request.
R07	Stop Payment. Authorization revoked by Customer.
R08	Stop Payment. Payment stopped.
R09	NSF. Uncollected funds.
R10	Stop Payment. Customer advises not authorized, notice not provided, improper source document, or amount of entry not accurately obtained from source document.
R11	Declined. Check truncation entry returned. Message appended from receiver's bank.
R12	Declined. Account sold to another DFI.
R13	Declined. Invalid ACH routing number.
R14	Declined. Representative payee deceased or unable to continue in that capacity.
R15	Declined. Beneficiary or account holder (other than a representative payee) deceased.
R16	Declined. Account frozen.
R17	Declined. Message appended from receiver's bank.

Table 90 CyberSource ACH Service Return Reason Codes

Code	Description
R18	Error. Improper effective entry date.
R19	Error. Amount field error: a prenote's amount is not zero, or a nonprenote item's amount is zero; amount is greater than \$25,000.
R20	Stop Payment. Non-Transaction Account.
R21	Error. Invalid company identification.
R22	Error. Invalid individual ID number.
R23	Declined. Credit entry refused by receiver.
R24	Error. Duplicate entry.
R25	Error. Addenda record error.
R26	Error. Mandatory field error.
R27	Error. Trace number error.
R28	Error. Routing number check digit error.
R29	Stop Payment. Corporate customer advises not authorized.
R30	Declined. RDFI not participant in check truncation program.
R31	Declined. Permissible return entry.
R32	Declined. RDFI non-settlement.
R33	Declined. Return of XCK entry.
R34	Declined. Limited participation DFI.
R35	Declined. Return of improper debit entry.
R36	Declined. Return of improper credit entry.
R37	Declined. Source document presented for payment.
R38	Stop Payment. Stop payment on source document.
R39	Declined. Improper source document.
R40	Declined. Return of ENR entry by federal government agency.
R41	Error. Invalid transaction code.
R42	Error. Routing or transit number check digit error.
R43	Error. Invalid account number.
R44	Error. Invalid individual ID number.
R45	Error. Invalid individual name or company name.

Table 90 CyberSource ACH Service Return Reason Codes

Code	Description
R46	Error. Invalid representative payee indicator.
R47	Error. Duplicate enrollment.
R50	Declined. State law affecting RCK acceptance.
R51	Declined. Item is ineligible, notice not provided, signature not genuine, or item altered.
R52	Stop Payment. Stop Payment on Item.
R53	Declined. Item and ACH entry presented for payment.
R62	Error. Incorrect trace number.
R63	Error. Incorrect dollar amount.
R64	Error. Incorrect individual identification.
R65	Error. Incorrect transaction code.
R66	Error. Incorrect company identification.
R71	Declined. Misrouted dishonored return.
R72	Declined. Untimely dishonored return.
R73	Declined. Timely original return.
R74	Declined. Corrected return.
R75	Declined. Original return not a duplicate.
R76	Declined. No errors found.
R80	Error. Cross-Border Payment Coding Error.
R81	Declined. Non-Participant in Cross-Border Program.
R82	Error. Invalid Foreign Receiving DFI Identification.
R83	Error. Foreign Receiving DFI Unable to Settle.
R84	Declined. Cross-border entry not processed by originating gateway operator.
R94	Declined. Administrative return item was processed and resubmitted as a photocopy.
R95	Declined. Administrative return item was processed and resubmitted as MICR-Split.
R97	Declined. Administrative return item was processed and resubmitted with corrected dollar amount.
R98	Declined. Indicates a returned PAC (pre-authorized check).
R99	Declined. Indicates a returned PAC (pre-authorized check).

Appendix H

Score Information Codes

The following tables list the possible values for the information codes. The value of the <CodeType> element is in parentheses.

[Address Information Codes \(address\)](#)

[Internet Information Codes \(internet\)](#)

[Customer Lists Information Codes \(hotlist\)](#)

[Phone Information Codes \(phone\)](#)

[Global Velocity Information Codes \(velocity\)](#)

[Suspicious Data Information Codes \(suspicious\)](#)

[Excessive Identity Changes \(identity\)](#)

Address Information Codes (address)

Codes	Description
COR-BA	The billing address has corrected elements or can be normalized.
COR-SA	The shipping address has corrected elements or can be normalized.
INTL-BA	The billing country is outside of the U.S.
INTL-SA	The shipping country is outside of the U.S.
MIL-USA	The address is a U.S. military address.
MM-A	The billing and shipping addresses use different street addresses.
MM-BIN	The card BIN (the first six digits of the number) does not match the country.
MM-C	The billing and shipping addresses use different cities.
MM-CO	The billing and shipping addresses use different countries.
MM-ST	The billing and shipping addresses use different states.

Codes	Description
MM-Z	The billing and shipping addresses use different postal codes.
UNV-ADDR	The address is unverifiable.

Internet Information Codes (internet)

Codes	Description
FREE-EM	The customer's email address is from a free email provider.
INTL-IPCO	The country of the customer's IP address is outside of the U.S.
INV-EM	The customer's email address is invalid.
MM-EMBCO	The domain in the customer's email address is not consistent with the country in the billing address.
MM-IPBC	The customer's IP address is not consistent with the city in the billing address.
MM-IPBCO	The customer's IP address is not consistent with the country in the billing address.
MM-IPBST	The customer's IP address is not consistent with the state in the billing address. However, this information code may not be returned when the inconsistency is between immediately adjacent states.
MM-IPEM	The customer's email address is not consistent with the customer's IP address.
RISK-EM	The customer's email domain (for example, mail.example.com) is associated with higher risk.
UNV-NID	The customer's IP address is from an anonymous proxy. These entities completely hide the IP information.
UNV-RISK	The customer's physical location cannot be verified.
UNV-EMBCO	The country of the customer's email address does not match the country in the billing address.

Customer Lists Information Codes (hotlist)

Codes	Description
CON-POSNEG	The order triggered both a positive and negative list match. The result of the positive list match overrides that of the negative list match.
NEG-BA	The billing address is on the negative list.
NEG-BCO	The billing country is on the negative list.
NEG-BIN	The credit card BIN (the first six digits of the number) is on the negative list.

Codes	Description
NEG-BINCO	The country in which the credit card was issued is on the negative list.
NEG-BZC	The billing postal code is on the negative list.
NEG-CC	The credit card number is on the negative list.
NEG-EM	The email address is on the negative list.
NEG-EMCO	The country in which the email address is located is on the negative list.
NEG-EMDOM	The email domain (for example, <code>mail.example.com</code>) is on the negative list.
NEG-HIST	A transaction was found on the negative list.
NEG-ID	The customer's account ID is on the negative list.
NEG-IP	The IP address (for example, <code>10.1.27.63</code>) is on the negative list.
NEG-IP3	The network IP address (for example, <code>10.1.27</code>) is on the negative list. A network IP address includes up to 256 IP addresses.
NEG-IPCO	The country in which the IP address is located is on the negative list.
NEG-PEM	A passenger's email address is on the negative list.
NEG-PH	The phone number is on the negative list.
NEG-PID	A passenger's account ID is on the negative list.
NEG-PPH	A passenger's phone number is on the negative list.
NEG-SA	The shipping address is on the negative list.
NEG-SCO	The shipping country is on the negative list.
NEG-SZC	The shipping postal code is on the negative list.
POS-TEMP	The customer is on the temporary positive list.
POS-PERM	The customer is on the permanent positive list.

Phone Information Codes (phone)

Codes	Description
MM-ACBST	The customer's phone number is not consistent with the state in the billing address.
RISK-AC	The customer's area code is associated with higher risk.
RISK-PH	The U.S. or Canadian phone number is incomplete, or one or more parts of the phone number are risky.

Codes	Description
TF-AC	The phone number uses a toll-free area code.
UNV-AC	The area code is invalid.
UNV-OC	The area code and/or the telephone prefix are/is invalid.
UNV-PH	The phone number is invalid.

Global Velocity Information Codes (velocity)

Important The velocity information codes with the suffix -CC refer not only to credit cards but also to direct debit account numbers.

Codes	Description
VEL-ADDR	Different billing and/or shipping states (U.S. and Canada only) have been used several times with the credit card number and/or email address.
VEL-CC	Different account numbers have been used several times with the same name or email address.
VEL-NAME	Different names have been used several times with the credit card number and/or email address.
VELS-CC	The account number has been used several times during the short tracking interval.
VELI-CC	The account number has been used several times during the medium tracking interval.
VELL-CC	The account number has been used several times during the long tracking interval.
VELV-CC	The account number has been used several times during the very long tracking interval.
VELS-EM	The customer's email address has been used several times during the short tracking interval.
VELI-EM	The customer's email address has been used several times during the medium tracking interval.
VELL-EM	The customer's email address has been used several times during the long tracking interval.
VELV-EM	The customer's email address has been used several times during the very long tracking interval.
VELS-IP	The IP address has been used several times during the short tracking interval.
VELI-IP	The IP address has been used several times during the medium tracking interval.
VELL-IP	The IP address has been used several times during the long tracking interval.
VELV-IP	The IP address has been used several times during the very long tracking interval.
VELS-SA	The shipping address has been used several times during the short tracking interval.
VELI-SA	The shipping address has been used several times during the medium tracking interval.

Codes	Description
VELL-SA	The shipping address has been used several times during the long tracking interval.
VELV-SA	The shipping address has been used several times during the very long tracking interval.

Suspicious Data Information Codes (*suspicious*)

Codes	Description
INTL-BIN	The credit card was issued outside of the U.S.
MUL-EM	The customer has used more than four different email addresses.
NON-BC	The billing city is nonsensical.
NON-FN	The customer's first name is nonsensical.
NON-LN	The customer's last name is nonsensical.
OBS-BC	The billing city contains obscenities.
OBS-EM	The email address contains obscenities.
RISK-AVS	The combined AVS test result and normalized billing address are risky, such as if the AVS result indicates an exact match, but the normalized billing address is not deliverable.
RISK-BC	The billing city has repeated characters.
RISK-BIN	In the past, this payment card BIN has shown a high incidence of fraud.
RISK-FN	The customer's first and last names contain unlikely letter combinations.
RISK-LN	The customer's middle or last name contains unlikely letter combinations.
RISK-SD	The inconsistency in billing and shipping countries is risky.
RISK-TB	The day and time of the order associated with the billing address is risky.
RISK-TS	The day and time of the order associated with the shipping address is risky.

Excessive Identity Changes (identity)

These codes represent excessive identity changes. You receive an information code when more than two identity changes occur. You can see the information codes in the risk services section of the details page.

Same Digital Fingerprint

Codes	Description
MORPH-FB	The same device fingerprint has been used several times with multiple billing addresses.
MORPH-FC	The same device fingerprint has been used several times with multiple account numbers.
MORPH-FE	The same device fingerprint has been used several times with multiple email addresses.
MORPH-FI	The same device fingerprint has been used several times with multiple IP addresses.
MORPH-FP	The same device fingerprint has been used several times with multiple phone numbers.
MORPH-FS	The same device fingerprint has been used several times with multiple shipping addresses.
NEG-FP	The device fingerprint is on the negative list.
VELS-FP	The same device fingerprint has been used several times during the short tracking interval.
VELI-FP	The same device fingerprint has been used several times during the medium tracking interval.
VELL-FP	The same device fingerprint has been used several times during the long tracking interval.
VELV-FP	The same device fingerprint has been used several times during the very long tracking interval.

Multiple Customer Identities

Customer identity refers to one or more of these elements: account and phone numbers, and billing, shipping, fingerprint, email, and IP addresses.

Codes	Description
MORPH-B	The same billing address has been used several times with multiple customer identities.
MORPH-C	The same account number has been used several times with multiple customer identities.
MORPH-E	The same email address has been used several times with multiple customer identities.
MORPH-I	The same IP address has been used several times with multiple customer identities.
MORPH-P	The same phone number has been used several times with multiple customer identities.
MORPH-S	The same shipping address has been used several times with multiple customer identities.

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