# **CyberSource Reporting**

**Developer Guide** 

January 2017



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# Recent Revisions to This Document

Release	Changes
January 2017	<ul> <li>Added "Collection Report Appendix," page 182.</li> </ul>
August 2016	<ul> <li>Added new account types to Payment Events Report. See "<check>," page 53.</check></li> </ul>
July 2016	<ul> <li>Updated DTDs for Payment Events Report and Payment Batch Detail Report</li> </ul>
July 2015	■ This revision contains only editorial changes and no technical updates.
March 2015	<ul> <li>Updated CSV example for Payment Events Report.</li> </ul>
February 2015	<ul> <li>Updated information to reflect change from SSLv3 to TLS.</li> </ul>
October 2014	<ul> <li>Updated information for Payment Batch Detail Report.</li> </ul>
September 2014	<ul> <li>Updated DTDs for Payment Events Report and Transaction Exception Detail Report.</li> </ul>
January 2014	Added Subscription Detail Report.

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.	
	<b>Important</b> 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, dick **Add User**. To modify or delete a user, dick a user name in the table.

User Name	Role	Name	Email Address
ubcvp1 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	
<u>hmoham</u>	custom	Haneef	
<u>vdddsa</u>	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	
<u>'xxxxxxxxxx</u>	
<u>yxxxxxxxxx</u>	

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.



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.

# **Subscription Detail Report**

This report provides detailed information about on-demand customer profile transactions. It also includes information about your on-demand customer profiles. The Subscription Detail Report is available in XML and CSV formats. You can use a client API to programmatically download the report.

# **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.

# 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

#### 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



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.

# **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.

# **Notification of Change Report**

This report is a notice from a customer's bank indicating that an electronic check transaction included incorrect customer or payment information.

## **Reporting Formats**

The reported errors are available in three forms:

- Daily report in XML (page 35) or CSV (page 147) 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," page 21): 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 ondemand 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.



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," page 141 for the XML format or "User Management Report," page 179 for the CSV format.

# **Collection Appendix Report**

This report enables Ingenico merchants to map their funded transactions to CyberSource gateway transactions. This report is available in 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. 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"</pre>
        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"</pre>
                       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:



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)*
```



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></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.</choicetwo></choiceone>
(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.

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# 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 Transport Layer Security (TLS). Your client application must support HTTP/1.0 or HTTP/1.1 and TSL 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 <a href="http://www.ietf.org/rfc/fc2617.txt">http://www.ietf.org/rfc/fc2617.txt</a>.



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
<pre><server_name></server_name></pre>	Name of the server from which to download the report. Use one of these values:
	■ Test server: ebctest.cybersource.com/ebctest
	■ Production server: ebc.cybersource.com/ebc
YYYY	Four-digit year
MM	Two-digit month. For example, use 08 for August.
DD	Two-digit day. For example, use 01 for the first day of the month.
<merchant_id></merchant_id>	CyberSource merchant ID
<report_name></report_name>	Name of the report to download. Use one of these values:
	<ul><li>PaymentBatchDetailReport</li></ul>
	<ul><li>PaymentSubmissionDetailReport</li></ul>
	<ul><li>PaymentEventsReport</li></ul>
	<ul><li>TransactionExceptionDetailReport</li></ul>
<report_format></report_format>	Report format to download. Use one of these values:
	■ csv: Comma-separated values
	<ul><li>xml: Extensible Markup Language</li></ul>

# **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.



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 35 and Chapter 4, "CSV Reports," on page 147. 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.

# On-Demand Transaction Exception Detail Report



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.	Optional
		<b>Important</b> 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.	
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
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.

## **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:

- **Step 1** Right-click the report.
- Step 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.

**Step 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," page 255. The DTD is in Appendix A "Transaction Exception Detail Report," page 233.

# **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 64, the DTDs on page 200, and the samples on page 240.

## Formulating the Query

Request this report after running a transaction if the outcome of the transaction is in doubt. For example, in the case of a transaction timeout where no reply is received, this report can be used to get the true status of that transaction. 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

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

Parameter	Value	Required/ Optional
merchantReferen	Your merchant reference number.	Optional
ceNumber	Important The merchantReferenceNumber parameter must be used in conjunction with the targetDate parameter. If you choose this combination, do not send in the requestID parameter. If you do so, the query request will be ignored.	
targetDate	Date to include in report in the format YYYYMMDD.	Optional
type	transaction	Required
subtype	transactionDetail	Required
requestID	Number of the transaction that you want to see	Required
includeExtended Detail	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:	Optional
	<ul> <li>Predecessor: For follow-on capture requests, this includes details of the capture and the system- generated authorization.</li> </ul>	
	Related: This includes the details of the capture request, the system-generated authorization, and any related transactions, such as original authorization and capture.	
	<b>Note</b> This element is included only in versions 1.3 and greater.	
	For more information on split shipment, see <i>Credit Card Services Implementation Guide</i> .	
versionNumber	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.	Optional
	<b>Note</b> 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.	
	<pre>1.7 BalanceAmount, BalanceCurrencyCode,</pre>	

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

Parameter	Value		Required/ Optional
	1.6	BinAccountType, BinCountry, BinIssuer, BinScheme, GrandTotal, InfoCodes, IPCity, IPCountry, IPRoutingMethod, IPState, TravelData	
	1.5	ACHVerificationResult, ACHVerificationResultMapped	
	1.4	BoletoNumber, NumberOfInstallments	
	1.3	PredecessorRequestID, User, includeExtendedDetail	
	1.2	<pre>EventType, TransactionReferenceNumber</pre>	
	1.1	Default version	

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 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/Query" method="POST">
 merchantID
    <input type="text" name="merchantID" value="example">
   td>type
    <input type="text" name="type" value="transaction">
   subtype
    <input type="text" name="subtype" value="transactionDetail">
   requestID
    <input type="text" name="requestID" value="1613857572210138565732">
   versionNumber
    <input type="text" name="versionNumber" value="1.5">
   <input type="reset"> <input type="submit" value="Submit"></input>
  </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.

#### **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:

- Step 1 Right-click the report.
- Step 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.

**Step 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
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 <b>merchantID</b> is used to generate the report.
		<b>Important</b> To use this field, the user name must have the User Management permission.
Password	password	Password associated with the user name.

Table 6 Data for the On-Demand User Management Report (Continued)

Parameter	Field Name	Format
Users to be reported		
		<ul><li>all: Default value if the field is empty.</li></ul>
		<ul><li>Account ID (example: sampleMerchant_acct)</li></ul>
		<ul><li>Account user (example: sampleMerchant_ admin)</li></ul>
		<ul><li>Merchant ID (example: sampleMerchant)</li></ul>
		<ul><li>Merchant user (example: sampleMerchant)</li></ul>
		Table 7, page 30 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	sampleMercha nt_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	sampleMercha nt	all	All merchant users for sampleMerchant
		sampleMerchant_ acct	Not allowed
		sampleMerchant	All merchant users for sampleMerchant

Send the information in Table 6, page 29 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">
 merchantID
    <input type="text" name="merchantID" value="example">
   username
    <input type="text" name="username" value="userlisting">
   password
   <input type="text" name="password" value="securepassword">
   format
<input type="text" name="format" value="csv">
   <input type="reset"> <input type="submit" value="Submit"></input>
   </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"</pre>
        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"</pre>
          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:

- Step 1 Right-click the report.
- **Step 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.

**Step 3** Save the text file as an XML file.

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

# **Programmatically Downloading the Notification of Change Report**

A Notification of Change (NOC) is a notice from a customer's bank indicating that an electronic check transaction included incorrect customer or payment information. The customer's bank:

- Corrects the information.
- Posts the transaction to the customer's bank account.
- Notifies you that payment information needs to be updated.

Each NOC includes a code that specifies what needs to be changed. You are responsible for taking the appropriate action when you receive an NOC. For descriptions of the NOC codes, see Table 110, page 281.

You must correct all applicable records before submitting additional electronic check transactions for the customer. If you are using customer profiles, you must update the information in your customer profile records. CyberSource maintains a database of all NOC entries. Repeated attempts to resubmit an uncorrected transaction could result in a fine and possible sanctions from the National Automated Clearing House Association (NACHA).

The Notification of Change Report can be programmatically downloaded by writing an HTML form using the following code:

```
<form name="nocform" action="https://ebc.cybersource.com/ebc/Query"</pre>
method="POST">
Merchant ID:
<input title="Enter your merchant ID" type="text" name="merchantID"</pre>
size="12" maxlength="20" />
Export Type:
<input title="Enter either XML or CSV" type="text" id="exportType"</pre>
name="exportType" size="15" maxlength="20" />
Start Date:
<input title="YYYY-MM-DD" type="text" id="startDate" name="startDate"</pre>
size="12" maxlength="20" />
End Date:
<input title="YYYY-MM-DD" type="text" id="endDate" name="endDate"</pre>
size="12" maxlength="20" />
>
<input type="hidden" name="type" id="type" value="NOC" />
>
<input type="submit" id="submit" value="Submit" />
</form>
```

# **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.



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.

The syntax is:

<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 Payment Batch Detail.	String (100)
Version	Version number of the report. The current version number is 1 . 4.	Numeric (10)
xmlns	XML namespace for the report. The namespace for the current version is:	String (100)
	Test: https:// ebctest.cybersource.com/ebctest/ reports/dtd/pbdr_1_4.dtd.	
	<pre>Production: https:// ebc.cybersource.com/ebc/reports/ dtd/pbdr_1_4.dtd.</pre>	
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></batches>	Payment batches that are included in the report. For a list of child elements, see " <batches>".</batches>

### **Example** <Report > **Element**

### <Batches>

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

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

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

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

The syntax is:

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.

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

Table 12 Child Elements of <Requests>

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

### **Example** <Requests> **Element**

# <Request>

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

```
<Request RequestID=CDATA
         MerchantReferenceNumber=CDATA>
  (TransactionReferenceNumber)
  (TransactionId)
  (PaymentMethod)
  (CurrencyCode)
  (CustomerID)
  (Amount)
  (LineItems)
  (Application)
  (WalletType)
  (Channel)
  (ProcessorTID)
  (NetworkTransactionID)
  (EffectiveDate)
</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
<transactionreference Number&gt;</transactionreference 	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)
	This field corresponds to the <service>_reconciliationID (Simple Order API) and to the <service>_ trans_ref_no (SCMP API) reply fields.</service></service>	
<transactionid></transactionid>	Transaction identification (TID) that is used to identify and track a transaction throughout its life cycle. This value is returned only for American Express Direct. American Express generates this value.	String (36)
	To comply with the CAPN requirements, this value must be included in all subsequent follow-on requests, such as captures and follow-on credits. When you perform authorizations, captures, and credits through CyberSource, CyberSource passes this value from the authorization service to the subsequent services for you. However, when you perform authorizations through CyberSource and perform subsequent services through other financial institutions, you must ensure that your requests for captures and credits include this value.	
<paymentmethod></paymentmethod>	Type of card or bank account. For the possible values, see Appendix D, "Types of Cards and Bank Accounts," on page 262.	String (50)
<currencycode></currencycode>	ISO currency code used for the transaction.	String (5)
<customerid></customerid>	Customer ID number.	String (100)
<amount></amount>	Amount of the transaction.	Amount (19)
<lineitems></lineitems>	Information about line items in an order. For a list of child elements, see " <lineitems>"</lineitems>	String (100)
<application></application>	CyberSource payment application processed for the transaction.	String (50)
<wallettype></wallettype>	Type of wallet.	String (5)

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

Element Name	Description	Data Type and Length
<channel></channel>	The physical location of the payment at the moment of occurrence. For a list of child elements, see " <channel>"</channel>	N/A
<processortid></processortid>	Acuirerer order number.	Alphanumeric (50)
<pre><networktransaction id=""></networktransaction></pre>	Proof of sale number	String (20)
<effectivedate></effectivedate>	Date on which a transaction is processed.	DateTime (25)
	This field is only available to Wells Fargo merchants.	

### **Example** <Request> **Element**

```
<Request RequestID="0062929390000167905114"</pre>
         MerchantReferenceNumber="58EA07517FE5A71C016884DCB">
  <TransactionReferenceNumber>896d9191-9935-4268-8096-
dc84313b0e63</TransactionReferenceNumber>
  <TransactionId>cla0567676de49cc9e534b96e01e8465</TransactionId>
  <PaymentMethod>American Express/PaymentMethod>
  <CurrencyCode>USD</CurrencyCode>
  <CustomerId/>
  <Amount>794.00</Amount>
  <LineItems>
    <LineItem Number=0>
      <InvoiceNumber>INV-12345</InvoiceNumber>
    </LineItem>
  </LineItems>
  <Application>ics_bill</Application>
  <WalletType>Paypal</WalletType>
  <Channel>
    <Type>MOTO</Type>
    <SubType>Email</SubType>
  </Channel>
  <ProcessorTID>c1a0567676de49cc9e534b96e01e8465
  <NetworkTransactionID>111222/NetworkTransactionID>
  <EffectiveDate>2016-08-13T07:00:00-07:00</EffectiveDate>
</Request>
```

### <LineItems>

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

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

Table 15 Child Elements of <LineItems> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
LineItem	Information about a single line item in an order. For a list of child elements, see " <lineitem>"</lineitem>	0-99

### Example <LineItems> Element

```
<LineItems>
    <LineItem Number=0></LineItem>
    </LineItems>
```

### <LineItem>

The <LineItem> element contains information about a single item in an order.

### The syntax is:

```
<LineItem Number=CDATA
  (InvoiceNumber)
</LineItem>
```

Table 16 Attributes of <LineItem> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
Number	CyberSource batch in which the transaction was sent.	Numeric (39)

### Table 17 Child Elements of <LineItem> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
Invoice Number	Level III invoice number.	String (23)

### Example <LineItem> Element

### <Channel>

The <Channel> element contains information about the channel, or the physical location of the payment at the moment of occurrence. Examples include:

#### POS Retail

- POS Register
- POS Terminal
- mPOS
- Web eCommerce
  - Smart/IOT Device
  - Mobile web
  - Desktop web
  - Smart Device
- MOTO
  - Telephone
  - Mail
  - Email
- InApp
  - InApp Native
  - InApp Web

### The syntax is:

```
<Channel
  (Type)
  (SubType)
</Channel>
```

Table 18 Child Elements of <LineItem> in the Payment Batch Detail Report

Attribute Name	Description	Data Type and Length
Туре	Channel type of the payment for the transaction.	N/A
SubType	Subtype of the payment for the transaction.	N/A

### **Example** <Channel> **Element**

```
<Channel>
    <Type>MOTO</Type>
    <SubType>Email</SubType>
</Channel>
```

# **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.

Table 19 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 Payment Events.	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 . 3.	Numeric (10)

Table 19 Attributes of <Report> in the Payment Events Report (Continued)

Attribute Name	Description	Data Type and Length
xmlns	XML namespace for the report. The namespace for the current version is	String (100)
	<pre>Test: https:// ebctest.cybersource.com/ebctest/ reports/dtd/per_1_3.dtd</pre>	
	<pre>Production: https:// ebc.cybersource.com/ebc/reports/ dtd/per_1_3.dtd.</pre>	

Table 20 Child Elements of <Report> in the Payment Events Report

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

### **Example** <Report> **Element**

### <Requests>

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

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

Table 21 Child Elements of <Requests> in the Payment Events Report

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

### **Example** <Requests> **Element**

```
<Requests>
<Request RequestID="0004223530000167905139"

MerchantReferenceNumber="3C515C71D48F631">

...

</Request>
</Requests>
```

# <Request>

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

Table 22 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 Ingenico ePayments, the value inserted into this field can be 1 followed by 21 zeros in these cases:	Numeric (26)
	<ul> <li>The transaction is older than six months, and the request ID is no longer stored.</li> </ul>	
	<ul> <li>The transaction information sent by the processor, excluding a valid request ID.</li> </ul>	

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

Attribute Name	Description	Data Type and Length
TransactionDate	This is the original bill or credit transaction date.	DateTime (25)
MerchantReferenceNumber	Merchant-generated order reference or tracking number.	String (50)
Application	Describes the type of transaction.  Multiple applications can be associated with a request and are separated by a comma.	String (50)

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

Element Name	Description
<banktransfer></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>."</directdebit></creditcard></banktransfer>
<creditcard></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></creditcard></banktransfer>
<directdebit></directdebit>	Information about a direct debit transaction. For a list of child elements, see " <banktransfer>, <creditcard>, and <directdebit>."</directdebit></creditcard></banktransfer>
<check></check>	Information about a check transaction. For a list of child elements, see " <check>."</check>
<paypal></paypal>	Information about a PayPal transaction. For a list of child elements, see " <paypal>."</paypal>

### **Example** <Request> **Element**

# <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.

Table 24 Child Elements of <BankTransfer>, <CreditCard>, and <DirectDebit> in the Payment Events Report

Element Name	Description	Data Type and Length
<transactionreferencenumber></transactionreferencenumber>	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)
	This field corresponds to these reply fields: <service>_ reconciliationID (Simple Order API) and <service>_trans_ref_ no (SCMP API).</service></service>	
<merchantcurrencycode></merchantcurrencycode>	ISO currency code of the merchant's currency.	String (5)
<merchantamount></merchantamount>	The amount deposited or withdrawn from the merchant's account for the event.	Amount (19)
<consumercurrencycode></consumercurrencycode>	ISO currency code of the customer's currency.	String (5)
<consumeramount></consumeramount>	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
<processormessage></processormessage>	Additional information about the event from the processor, such as an error message or explanation.	String (255)
	For Ingenico ePayments direct debit reversals, this field contains a banking reversal code. For more information, see Appendix F, "Banking Codes in the Payment Events Report," on page 269.	

Table 24 Child Elements of <BankTransfer>, <CreditCard>, and <DirectDebit> in the Payment Events Report (Continued)

Element Name	Description	Data Type and Length
<exception></exception>	Additional information about an exception that occurred for the Boleto Bancário transaction. This field can contain one of these values:	String (12)
	<ul> <li>Overpaid: The amount paid was larger than the amount of the order.</li> </ul>	
	<ul> <li>Underpaid: The amount paid was smaller than the amount of the order.</li> </ul>	
	<ul> <li>Unmatched: The transaction information could not be matched to an order in the CyberSource database. If you receive this value, contact Customer Support.</li> </ul>	
<boletonumber></boletonumber>	Boleto Bancário payment number.	String (6)
<paymenttypedescription></paymenttypedescription>	Description of the payment type, such as Direct Debit.	String (50)
<customerid></customerid>	ID of the customer	Comercio Latino: String (20)
		All other processors: String (100)

### **Example** <BankTransfer> **Element**

### <Check>

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

#### The syntax is:



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 25 Attributes of <Check> in the Payment Events Report

Attribute Name	Description	Data Type and Length
Event	Type of event that occurred for the check transaction. These values vary with the processor.	String (20)
	Successful Events	
	<ul> <li>Submitted: Indicates a transaction with an effective date has been submitted.</li> </ul>	
	<ul> <li>Payment: Payment has been received. The value is always positive.</li> </ul>	
	<ul> <li>Refund: A refund (credit) occurred. The value is always negative.</li> </ul>	
	<ul><li>Completed: The transaction was completed.</li></ul>	
	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.	

Table 25 Attributes of <Check> in the Payment Events Report (Continued)

Attribute Name	Description	Data Type and Length
	Bank of America ACH Service: 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.	
	Failed Events	
	<ul> <li>Correction: A positive or negative correction occurred to a payment or refund.</li> </ul>	
	<ul> <li>Declined: The account was invalid or disabled. For details about the decline, see</li> <li>"<processormessage>."</processormessage></li> </ul>	
	<ul><li>Error: An error occurred. For details about the error, see "<processormessage>."</processormessage></li></ul>	
	<ul> <li>Failed: The account was invalid or disabled. For details about the failure, see</li> <li>"<processormessage>."</processormessage></li> </ul>	
	<ul> <li>Final NSF: The final instance of insufficient funds occurred.</li> </ul>	
	<ul><li>First NSF: The bank will attempt to re-deposit the funds.</li></ul>	
	<ul> <li>NSF: The bank returned the check because of insufficient funds.</li> </ul>	
	<ul> <li>Other: The processor reported an unanticipated event.</li> </ul>	
	<ul> <li>Second NSF: The bank will attempt to re-deposit the funds for the second time.</li> </ul>	
	Stop Payment: The customer stopped the payment.	
	<ul><li>Void: The check was successfully voided.</li></ul>	
EventDate	Date in GMT format that the event occurred. This field can be null for some event types, such as Declined.	DateTime (25)

Table 26 Child Elements of <Check> in the Payment Events Report

Element Name	Description	Data Type and Length
<pre><debitindicator></debitindicator></pre>	Type of transaction. Possible values:	String (50)
	<ul> <li>Checking Account Credit</li> </ul>	
	<ul> <li>Checking Account Prenote Credit</li> </ul>	
	<ul> <li>Checking Account Debit</li> </ul>	
	■ Checking Account Prenote Debit	
	<ul> <li>Savings Account Credit</li> </ul>	
	<ul> <li>Savings Account Prenote Credit</li> </ul>	
	<ul><li>Savings Account Debit</li></ul>	
	<ul> <li>Savings Account Prenote Debit</li> </ul>	
	The processor could return additional values that are not listed here so program your system to handle any value for this element.	
<transactionid></transactionid>	Tracking ID returned by the payment processor.	String (15)
<pre><transactionreference number=""></transactionreference></pre>	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)
	This field corresponds to these reply fields: <service>_reconciliationID (Simple Order API) and <service>_ trans_ref_no (SCMP API).</service></service>	
<pre><merchantcurrencycode></merchantcurrencycode></pre>	ISO currency code of the merchant's currency.	String (5)
<merchantamount></merchantamount>	The amount deposited or withdrawn from the merchant's account for the event.	Amount (19
<consumercurrencycode></consumercurrencycode>	ISO currency code of the customer's currency.	String (5)
<consumeramount></consumeramount>	The amount deposited or withdrawn from the customer's account for the event.	Amount (19
<feecurrencycode></feecurrencycode>	ISO currency code of the assessed fee.	String (5)
<feeamount></feeamount>	The processor's fee for the transaction.	Amount (19

Table 26 Child Elements of <Check> in the Payment Events Report (Continued)

Element Name	Description	Data Type and Length
<processormessage></processormessage>	Additional information from the processor about the event, such as an error message or explanation.	String (255)
<paymenttypedescription></paymenttypedescription>	Description of the payment type. Possible values:	String (50)
	C - Checking	
	S - Savings	
	<ul><li>X - Corporate</li></ul>	
	■ G - General Ledger	
<customerid></customerid>	ID of the customer	Comercio Latino: String (20)
		All other processors: String (100)

### Example <Check> Element

- <Check Event="Payment" EventDate="2003-02-16T00:00-07:00">
  - <DebitIndicator>Checking Account Debit/DebitIndicator>
  - <TransactionID>184264545034/TransactionID>
  - <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.

### The syntax is:

(ConsumerAmount)
(FeeCurrencyCode)
(FeeAmount)
(ProcessorMessage)?
(PaymentTypeDescription)
(CustomerId)
</PayPal>

Table 27 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:	Alpha (20)
	<ul> <li>Batched: The PayPal transaction was completed, but the funds have not been transferred to your account.</li> </ul>	
	<ul> <li>Canceled_reversal: You requested that the reversal requested by the customer be cancelled.</li> </ul>	
	<ul> <li>Completed: The PayPal transaction was completed, and the funds have been transferred to your account.</li> </ul>	
	<ul><li>Denied: You denied the request. The reason is not specified.</li></ul>	
	<ul> <li>Failed: The request failed. The reason is not specified.</li> </ul>	
	<ul> <li>MIPS: A billing agreement was created or modified.</li> </ul>	
	<ul> <li>Pending: The PayPal transaction is not completed.</li> <li>The value will eventually change to Completed,</li> <li>Failed, or Denied.</li> </ul>	
	<ul> <li>Refunded: You initiated a refund of the PayPal payment.</li> </ul>	
	<ul> <li>Reversed: A payment was reversed due to a chargeback or other type of reversal.</li> </ul>	
EventDate	Date of the event. This field is null for some event types, such as Declined. For PayPal transactions, the date is always present.	DateTime (25)

Table 28 Child Elements of <PayPal> in the Payment Events Report

Element Name	Description	Data Type and Length
<transactionreferencenumber></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.</service></service>	String (60)
<merchantcurrencycode></merchantcurrencycode>	ISO currency code of the merchant's currency. Reported only if MerchantAmount is greater than zero.	String (5)
<merchantamount></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></consumercurrencycode>	ISO currency code of the customer's currency.	String (5)
<consumeramount></consumeramount>	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
<feecurrencycode></feecurrencycode>	This element does not apply to PayPal Payments and is always empty.	NA
<feeamount></feeamount>	The processor's fee for the transaction.	Amount (19)

Table 28 Child Elements of <PayPal> in the Payment Events Report (Continued)

Element Name	Description	Data Type and Length
<processormessage></processormessage>	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:	String (255)
	<ul><li>pending: The payment status is pending.</li></ul>	
	<ul> <li>For a credit or a reversal, this field contains one of these values:</li> </ul>	
	<ul> <li>address: The customer did not include a confirmed shipping address. You must manually accept or deny this payment.</li> </ul>	
	<ul><li>buyer_complaint: The customer has placed a reversal about this transaction.</li></ul>	
	<ul><li>chargeback: The customer has initiated a chargeback.</li></ul>	
	<ul><li>echeck: The check has not yet cleared.</li></ul>	
	<ul><li>guarantee: The customer triggered a money back guarantee.</li></ul>	
	<ul> <li>intl: You hold a non-U.S. account and do not have a withdrawal method. You must manually accept or deny this payment.</li> </ul>	
	<ul> <li>multi_currency: You do not have a balance in the currency sent. You must manually accept or deny this payment.</li> </ul>	

Table 28 Child Elements of <PayPal> in the Payment Events Report (Continued)

Element Name	Description	Data Type and Length
	• other: A reversal has occurred for a reason other than buyer_complaint, chargeback, guarantee, or refund. Alternately, the payment is pending for a reason other than address, echeck, intl, multi_currency, unilateral, upgrade, or verify.	
	<ul> <li>refund: You have given the customer a refund.</li> </ul>	
	<ul> <li>unilateral: The payment was made to an email address that is not yet registered or confirmed.</li> </ul>	
	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.	
	<ul> <li>verify: The payment is pending. You must verify your account before accepting this payment.</li> </ul>	
<paymenttypedescription></paymenttypedescription>	Description of the payment type, such as PayPal.	String (50)
<customerid></customerid>	ID of the customer	Comercio Latino: String (20)
		All other processors: String (100)

#### **Example** <PayPal> Element

# **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.

(ExchangeRate?)
(ExchangeRateDate?)
(DCCIndicator?)
(BoletoNumber?)
(NumberOfInstallments?)
</Request>

Table 29 Additional Child Elements of <Request> in the Payment Submission Detail Report

Element Name	Description	Data Type and Length
The first five child elements are t the Payment Batch Detail Repor	he same as the child elements in the <reque t. See "<request>," page 39.</request></reque 	est> element in
<paymentmethod></paymentmethod>	Type of card or bank account. Values found only in the Payment Submission Detail Report:	String (50)
	<ul><li>Brazil Bank Transfer</li></ul>	
	<ul><li>China Bank Transfer</li></ul>	
	■ China eWallet	
	<ul><li>China Cash On Order</li></ul>	
	For the values that can be in the Payment Batch Detail Report and the Payment Submission Detail Report, see " <request>."</request>	
<paymentprocessor></paymentprocessor>	For the list of payment processors, see Processor Names.	String (40)
<targetamount></targetamount>	Converted amount.	String (15)
<targetcurrency></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></exchangerate>	Exchange rate. Includes a decimal point and up to 4 decimal places.	Amount (13)
<exchangeratedate></exchangeratedate>	Time stamp for the exchange rate in the format YYYYMMDD~HH:MM where ~ denotes a space.	String (14)
<dccindicator></dccindicator>	Flag that indicates if DCC is being used for the transaction. This field can contain one of these values:	String (1)
	■ 1: Converted—DCC is being used.	
	<ul><li>2: Non-convertible—DCC cannot be used.</li></ul>	
	<ul> <li>3: Declined—DCC could be used, but the customer declined it.</li> </ul>	

Table 29 Additional Child Elements of <Request> in the Payment Submission Detail Report (Continued)

Element Name	Description	Data Type and Length
<boletonumber></boletonumber>	Boleto Bancário payment number.	String (6)
<numberofinstallments></numberofinstallments>	Total number of installments when making payments in installments. For more information, see the <i>Credit Card Services Implementation Guide</i> .	Numeric (2)

### Example <Request > Element

<Request RequestID="0062929390000167905114"</pre>

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.

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

Table 30 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 Transaction Detail.	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 1.8.	Numeric (10)

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

Attribute Name	Description	Data Type and Length
xmlns	XML namespace for the report version that you requested:	String (100)
	Test	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_8.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_7.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_6.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_5.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_4.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_3.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_2.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_1.dtd	
	https://ebctest.cybersource.com/ ebctest/reports/dtd/tdr_1_0.dtd	

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

Element Name	Description
	Production
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_8.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_7.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_6.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_5.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_4.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_3.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_2.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_1.dtd
	https://ebc.cybersource.com/ebc/reports/dtd/ tdr_1_0.dtd
<requests></requests>	Contains all the requests in the report. For a list of child elements, see " <requests>."</requests>

### Example <Report > Element

### <Requests>

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

#### The syntax is:

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

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

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

### **Example** <Requests> **Element**

# <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 <code>User</code> and <code>PredecessorRequestID</code> attributes are available only in versions 1.3 and greater. The <code><TravelData></code> element is available only in versions 1.6 and greater.

```
<Request MerchantReferenceNumber=CDATA</pre>
         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 33 Attributes of <Request> in the Single Transaction Report

Attribute Name	Description	Data Type and Length
MerchantReferenceNumber	Merchant-generated order reference or tracking number.	String (50)
RequestDate	Date on which the transaction was processed.	DateTime (25)
RequestID	Unique identifier generated by CyberSource for the transaction.	Numeric (26)
SubscriptionID	Unique identifier that is returned to you when a subscription is created.	String (26)

Table 33 Attributes of <Request> in the Single Transaction Report (Continued)

Attribute Name	Description	Data Type and Length
Source	Client application used to send the transaction. This field can contain one of these values:	String (50)
	■ HOP	
	■ PIN-less Debit Validation	
	■ SCMP API	
	■ SOP	
	<ul><li>Subscription Add</li></ul>	
	■ UBC	
	■ UBC List Manager	
	■ UBC One Time Payment	
	■ UBC Subscription	
	■ UBC Subscription Edit	
	■ UBC Virtual Terminal	
User	User name in the Business Center of the person who performed the transaction.	String (36)
	<b>Note</b> This element is included only in versions 1.3 and greater.	
Comments	If present, brief description of the order or comment that was added to the order.	String (255)
TransactionReference Number	CyberSource-generated reference or tracking number for the transaction. You can use this value to reconcile your CyberSource reports with your processor reports.	String (60)
	<b>Note</b> This element is included only in versions 1.2 and greater.	
PredecessorRequestID	Unique identifier generated by CyberSource for the transaction against which the current request was applied.	Numeric (26)
	<b>Note</b> This element is included only in versions 1.3 and greater.	

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

Element Name	Description
<billto></billto>	Information about the billing address and purchaser for the order. For a list of child elements, see " <billto>."</billto>
<shipto></shipto>	Information about the shipping address and recipient for the order. For a list of child elements, see " <shipto>."</shipto>
<shipping></shipping>	Information about the shipping method and shipping carrier for the order. For a list of child elements, see " <shipping>."</shipping>
<paymentmethod></paymentmethod>	Information about the payment method for the order. For a list of child elements, see " <paymentmethod>."</paymentmethod>
<lineitems></lineitems>	Line items for the order. For a list of child elements, see " <lineitems>."</lineitems>
<applicationreplies></applicationreplies>	Reply information for all applications in the request. For a list of child elements, see " <applicationreplies>."</applicationreplies>
<paymentdata></paymentdata>	Detailed information about the result of a payment transaction. For a list of child elements, see " <paymentdata>."</paymentdata>
<pre><merchantdefineddata></merchantdefineddata></pre>	Optional information that you added to the order. For a list of child elements, see " <merchantdefineddata>."</merchantdefineddata>
<riskdata></riskdata>	Detailed information about the result of a risk transaction. For a list of child elements, see " <riskdata>."</riskdata>
<profilelist></profilelist>	Information about the profile used for the order. For a list of child elements, see " <profilelist>."</profilelist>
<traveldata></traveldata>	Detailed information about the travel data in the order. For a list of child elements, see " <traveldata>."</traveldata>

### **Example** <Request> **Element**

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

### <BillTo>

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

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

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

Element Name	Description	Data Type and Length
<firstname></firstname>	First name of the billed customer.	String (60)
<lastname></lastname>	Last name of the billed customer.	String (60)
<middlename></middlename>	Middle name of the billed customer.	String (60)
<namesuffix></namesuffix>	Suffix of the billed customer's name.	String (60)
<address1></address1>	First line of the billing address.	String (60)
<address2></address2>	Second line of the billing address.	String (60)
<city></city>	City of the billing address.	String (50)
<state></state>	State, province, or territory of the billing address.	String (20)
<zip></zip>	Postal code of the billing address.	String (10)
<companyname></companyname>	Company name of the billing address.	String (60)
<email></email>	Email address of the bill-to customer.	String (255)
<country></country>	ISO country code of the billing address.	String (2)
<title>&lt;/td&gt;&lt;td&gt;Title of the billed customer.&lt;/td&gt;&lt;td&gt;String (30)&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;Phone&gt;&lt;/td&gt;&lt;td&gt;Phone number of the billed customer.&lt;/td&gt;&lt;td&gt;String (15)&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;IPAddress&gt;&lt;/td&gt;&lt;td&gt;IP address of the billed customer.&lt;/td&gt;&lt;td&gt;String (15)&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;HostName&gt;&lt;/td&gt;&lt;td&gt;DNS-resolved host name from the customer's IP address.&lt;/td&gt;&lt;td&gt;String (255)&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;UserName&gt;&lt;/td&gt;&lt;td&gt;Reserved for future use.&lt;/td&gt;&lt;td&gt;String (50)&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;CustomerID&gt;&lt;/td&gt;&lt;td&gt;Optional customer's account ID, tracking number, reward number or other unique number.&lt;/td&gt;&lt;td&gt;String (50)&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>		

#### **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.

```
<ShipTo>
  (FirstName)?
  (LastName)?
  (Address1)?
  (Address2)?
  (City)?
  (State)?
  (Zip)?
  (CompanyName)?
  (Country)?
  (Phone)?
</ShipTo>
```

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

Element Name	Description	Data Type and Length
<firstname></firstname>	First name of the customer to whom the order is shipped.	String (60)
<lastname></lastname>	Last name of the customer to whom the order is shipped.	String (60)
<address1></address1>	First line of the shipping address.	String (60)
<address2></address2>	Second line of the shipping address.	String (60)
<city></city>	City of the shipping address.	String (60)

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

Element Name	Description	Data Type and Length
<state></state>	State, province, or territory of the shipping address.	String (50)
<zip></zip>	Postal code of the shipping address.	String (10)
<companyname></companyname>	Company name of the shipping address.	String (60)
<country></country>	ISO country code of the shipping address.	String (2)
<phone></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.

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

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

Element Name	Description	Data Type and Length
<method></method>	Reserved for future use.	String (10)
<carrier></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.

#### The syntax is:

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

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

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

#### **Example** <PaymentMethod> **Element**

# <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.

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

Table 39 Child Elements of <Card> in the Single Transaction Report

Element Name	Description	Data Type and Length
<accountsuffix></accountsuffix>	Last four digits of the customer's credit card number.	String (4)
<expirationmonth></expirationmonth>	Expiration month (MM) of the credit card.	String (2)
<expirationyear></expirationyear>	Expiration year (YYYY) of the credit card.	String (4)
<startmonth></startmonth>	Start month (MM) of the credit card. Used for Maestro (UK Domestic) cards.	String (2)
<startyear></startyear>	Start year (YYYY) of the credit card. Used for Maestro (UK Domestic) cards.	String (4)
<issuenumber></issuenumber>	Issue number of the credit card. Used for Maestro (UK Domestic) cards.	String (5)
<cardtype></cardtype>	Type of card or bank account. For the possible values, see Appendix D, "Types of Cards and Bank Accounts," on page 262.	String (50)
BoletoNumber	Boleto Bancário payment number.	String (6)
	<b>Note</b> This value is included only for versions 1.4 and greater.	

## 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.

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

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

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

## Example <Check> Element

# <LineItems>

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



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

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

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

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

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

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

# <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.

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

Table 42 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 43 Child Elements of <LineItem> in the Single Transaction Report

Element Name	Description	Data Type and Length
<fulfillmenttype></fulfillmenttype>	Information about the product code used for the line item. Possible values:	String (2)
	<ul><li>E: The product code is electronic_ software.</li></ul>	
	<ul><li>P: The product code is not electronic_software.</li></ul>	

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

Element Name	Description	Data Type and Length
<quantity></quantity>	Quantity of the product being purchased.	Numeric (10)
<unitprice></unitprice>	Per-item price of the product.	Amount (19)
<taxamount></taxamount>	Tax amount associated with this item.	Amount (19)
<pre><merchantproductsku></merchantproductsku></pre>	Product identifier code.	String (30)
<pre><productname></productname></pre>	Name of the product.	String (20)
<productcode></productcode>	Type of product that the offer contains. For detailed information about this field, see the <i>Credit Card Services Implementation Guide</i> . For a list of product codes used by the tax service, see the <i>Product Code User Guide</i> .	String (30)

#### **Example** <LineItem> Element

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

# <ApplicationReplies>

The  ${\tt ApplicationReplies}{\tt >}$  element contains reply information for all applications in the request.

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

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

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

#### **Example** <ApplicationReplies> **Element.**

This example shows replies for a request that included the **ics\_auth** and **ics\_score** applications.

# <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.

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

Table 45 Attributes of <a href="ApplicationReply">ApplicationReply</a> 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 46 Child Elements of <ApplicationReply> in the Single Transaction Report

Element Name	Description	Data Type and Length
<rcode></rcode>	One-digit code that indicates whether the application was successful.	Numeric (1)
<rflag></rflag>	One-word description of the result of the application.	String (50)

Table 46 Child Elements of <ApplicationReply> in the Single Transaction Report

Element Name	Description	Data Type and Length
<rmsg></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. The <BalanceAmount>, <BalanceCurrencyCode>, <RequestedAmount>, and <RequestedAmountCurrencyCode> elements are available only in version 1.7 and greater.

```
<PaymentData>
  (PaymentRequestID)
  (PaymentProcessor)
  (Amount)
  (CurrencyCode)
  (TotalTaxAmount)?
  (AuthorizationType)?
  (AuthorizationCode)?
  (AVSResult)?
  (AVSResultMapped)?
  (CVResult)?
  (ProcessorResponseCode)?
```

(PayerAuthenticationInfo)?
(EventType)?
(NumberOfInstallments?)
(ACHVerificationResult)?
(ACHVerificationResultMapped?)
(GrandTotal)?
(BalanceAmount)?
(BalanceCurrencyCode)?
(RequestedAmount)?
(RequestedAmountCurrencyCode)?
</PaymentData>

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

Element Name	Description	Data Type and Length
<paymentrequestid></paymentrequestid>	Original request ID for the purchase.	Numeric (26)
	<ul> <li>For authorizations and stand-alone credits, this element contains the request ID for the transaction.</li> </ul>	
	<ul> <li>For captures, this element contains the request ID for the corresponding authorization.</li> </ul>	
<paymentprocessor></paymentprocessor>	See Processor Names.	String (40)
<amount></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.</grandtotal>	Amount (19)
<currencycode></currencycode>	Currency used for the transaction.	String (5)
<totaltaxamount></totaltaxamount>	Total tax amount for all of the line items in the transaction.	Amount (19)
<authorizationtype></authorizationtype>	Type of authorization. Possible values:	String (1)
	<ul> <li>O: Online authorization. Successful authorization that was captured normally or was not captured at all.</li> </ul>	
	<ul> <li>V: Verbal authorization. Authorization captured with a verbal authorization code.</li> </ul>	
	If the authorization was not successful, or if the processor did not return an authorization code, this element is empty.	
<authorizationcode></authorizationcode>	Authorization code.	String (15)
<avsresult></avsresult>	Address verification result code returned directly from the processor.	String (10)

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

Element Name	Description	Data Type and Length
<avsresultmapped></avsresultmapped>	CyberSource standardized result of address verification. For a list of possible values, see the <i>Credit Card Services Implementation Guide</i> .	String (5)
<cvresult></cvresult>	Results of processing the card verification number. For a list of possible values, see the Credit Card Services Implementation Guide.	String (1)
<processorresponse Code&gt;</processorresponse 	Response code returned directly from the processor.	String (60)
<payerauthentica tionInfo&gt;</payerauthentica 	Results of the Payer Authentication service. For a list of child elements, see " <payerauthenticationinfo>."</payerauthenticationinfo>	

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

Element Name	Description	Data Type and Length
<eventtype></eventtype>	Type of event that occurred for the transaction. This element is included in versions 1.2 and greater.	
	China Payments and China Refunds	
	<ul> <li>Chargeback: The original payment transaction is being disputed by the cardholder or the cardholder's bank.</li> </ul>	
	<ul><li>Payment Abnormal: The payment has been held up for regulatory or legal reasons.</li></ul>	
	<ul><li>Payment Declined: The processor has refused the payment request.</li></ul>	
	<ul><li>Payment Failed: The payment request failed. The reason is not specified.</li></ul>	
	<ul> <li>Payment Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled payment.</li> </ul>	
	<ul><li>Payment Initiated: The payment request was received from the merchant.</li></ul>	
	<ul><li>Payment Lost: The processor does not acknowledge receiving the payment request.</li></ul>	
	<ul> <li>Payment Pending Proc: The payment has not been completed. It is awaiting settlement by the processor.</li> </ul>	
	<ul> <li>Payment Settled: The payment has been confirmed by the processor and is expected to be funded.</li> </ul>	
	<ul> <li>Refund Abnormal: The refund has been held up for regulatory or legal reasons.</li> </ul>	
	<ul> <li>Refund Declined: The processor has refused the refund request.</li> </ul>	
	<ul> <li>Refund Failed: The refund request failed. The reason is not specified.</li> </ul>	
	<ul> <li>Refund Pending Proc: The refund has not been completed. It is awaiting settlement by the processor.</li> </ul>	
	<ul> <li>Refund Settled: The refund has been confirmed by the processor and is expected to be funded.</li> </ul>	

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

Element Name	Description	Data Type and Length
	<ul> <li>Refund Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled refund.</li> </ul>	String (20)
	<ul> <li>Refund Pending Cyb: The refund has not been completed. It is awaiting transmission by CyberSource.</li> </ul>	
	<ul> <li>Unknown: The processor does not acknowledge receiving the request.</li> </ul>	
	Successful Events for Electronic Check Transactions	
	These values vary with the processor.	
	<ul><li>Payment: Payment has been received.</li><li>The value is always positive.</li></ul>	
	<ul> <li>Refund: A refund (credit) occurred. The value is always negative.</li> </ul>	
	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.	
	Boletos Bancários	
	<ul> <li>Fulfilled: The bank issuing the Boleto Bancário has received funds and has deposited them into your account.</li> </ul>	
	<ul> <li>Pending Fulfillment: The Boleto Bancário was issued but the customer has not submitted it yet or it is still in the Brazilian Clearing System.</li> </ul>	
	Failed Events for Electronic Check Transactions	
	These values vary with the processor.	

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

#### **Element Name**

#### **Description**

Data Type and Length

- 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 redeposit 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 redeposit the funds for the second time.
- Stop Payment: The customer stopped the payment.
- Void: The check was successfully voided.

#### Other Types of Transactions

- 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.

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

Element Name	Description	Data Type and Length
	<ul> <li>FAILED: The credit card (authorization, capture, or credit) or check debit request failed. The reason is not specified.</li> </ul>	
	<ul> <li>FUNDED: The direct debit reversal is complete.</li> </ul>	
	<ul> <li>MIPS: The PayPal billing agreement was created or modified.</li> </ul>	
	<ul> <li>PAYMENT: The payment has been received.</li> </ul>	
	■ 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.	
	<ul> <li>REFUNDED: You initiated a refund of the payment.</li> </ul>	
	<ul> <li>REVERSAL: The direct debit was reversed at the request of the customer.</li> </ul>	
	<ul> <li>REVERSAL FAILED: The PIN-less debit reversal request failed.</li> </ul>	
	<ul> <li>REVERSED: The PIN-less debit reversal request was successful.</li> </ul>	
	<ul> <li>REVERSING: The initial PIN-less debit request timed out. The subsequent reversal request is pending.</li> </ul>	
	<ul> <li>TRANSMITTED: The check debit request was processed successfully.</li> </ul>	
	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.	
<numberof installments=""></numberof>	Total number of installments. For more information, see the <i>Credit Card Services Implementation Guide</i> . This element is included only for versions 1.4 and greater.	Numeric(2)

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

Element Name	Description	Data Type and Length
<achverification result=""></achverification>	Raw result of the ACH Verification service. This element can contain one of these values:	String (2)
	<ul> <li>1: Accepted: Routing number is valid.</li> <li>Account number is valid.</li> </ul>	
	<ul> <li>2: Accepted: Routing number is valid.</li> <li>Account number is invalid; use corrected account number.</li> </ul>	
	<ul> <li>3: Accepted: Routing number is valid.</li> <li>Account number is valid.</li> </ul>	
	<ul> <li>4: Accepted: Routing number is valid.</li> <li>Account number structure not recognized;</li> <li>account may be valid.</li> </ul>	
	<ul> <li>5: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is valid.</li> </ul>	
	<ul> <li>6: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is invalid; use corrected account number.</li> </ul>	
	<ul> <li>7: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is valid.</li> </ul>	
	<ul> <li>8: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number structure not recognized; account may be valid.</li> </ul>	
	<ul> <li>9: Declined: Routing number is not usable for ACH; no corrected routing number available.</li> </ul>	
	■ 10: Declined: Routing number not found.	
	<ul><li>11: Declined: Invalid routing number.</li></ul>	

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

Element Name	Description	Data Type and Length
<ach <a="" href="#" representation="">ACHVerificationResultMapped&gt;</ach>	Mapped result of the ACH Verification service. This element can contain one of these values:	String (2)
	<ul> <li>00: Success: Routing and account numbers are OK.</li> </ul>	
	<ul> <li>01: Success: Routing number is OK; account number is corrected.</li> </ul>	
	<ul> <li>02: Success: Routing number is corrected; account number is OK.</li> </ul>	
	<ul> <li>03: Success: Routing and account numbers are corrected.</li> </ul>	
	<ul> <li>04: Declined: Routing number does not pass verification.</li> </ul>	
	<ul> <li>98: Unavailable: Unable to perform ACH verification.</li> </ul>	
	<ul> <li>99: Invalid: Response from ACH verification is invalid.</li> </ul>	
<grandtotal></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)
<balanceamount></balanceamount>	Remaining balance on the prepaid card.	Amount (19)
<balancecurrency Code&gt;</balancecurrency 	Currency of the remaining balance on the prepaid card.	String (5)
<requestedamount></requestedamount>	Amount you requested to be authorized.	Amount (19)
<requestedamount CurrencyCode&gt;</requestedamount 	Currency for the amount requested to be authorized. This value is returned for partial authorizations.	String (5)

#### **Example** <PaymentData> **Element**

```
<PaymentData>
  <PaymentRequestID>9935369793074590426287/PaymentRequestID>
  <PaymentProcessor>sample/PaymentProcessor>
  <Amount>20.00</Amount>
  <CurrencyCode>USD</CurrencyCode>
  <AuthorizationType>0</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*.

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

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

Element Name	Description	Data Type and Length
<eci></eci>	Optional information that you can receive if you use the Payer Authentication service.	String (64)
<aav_cavv></aav_cavv>	Optional authentication data that you can receive after the customer is authenticated.	String (32) (in base 64)
<xid></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>7DDCrsDjEdqNhsAcOxvljwAHBwE=</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.

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

Table 49 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 50 Child Elements of <MerchantDefinedData> in the Single Transaction Report

Element Name	Description	Data Type and Length
<field1> through <field20></field20></field1>	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.

```
<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)? (CookiesEnabled)? (FlashEnabled) (ImagesEnabled) (JavascriptEnabled) (ProxyIPAddress) (ProxyIPAddressActivities) (ProxyIPAddressAttributes) (ProxyServerType) (TrueIPAddress) (TrueIPAddressActivities) (TrueIPAddressAttributes) </RiskData>

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

Element Name	Description	Data Type and Length
<factors></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.	String (100)
<hostseverity></hostseverity>	Indicates the risk associated with the customer's email domain.	Numeric (5)
<score></score>	Total score calculated for the order.	Numeric (5)
<timelocal></timelocal>	The customer's local time, which is calculated from the transaction request time and the customer's billing address.	DateTime (25)
<pre><consumerpassword provided=""></consumerpassword></pre>	Reserved for future use.	Boolean (1)
<lostpassword></lostpassword>	Reserved for future use.	Boolean (1)

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

Element Name	Description	Data Type and Length
<repeatcustomer></repeatcustomer>	Reserved for future use.	Boolean (1)
<cookiesaccepted></cookiesaccepted>	Reserved for future use.	Boolean (1)
<consumerloyalty></consumerloyalty>	Reserved for future use.	Boolean (1)
<consumerpromotions></consumerpromotions>	Reserved for future use.	Boolean (1)
<giftwrap></giftwrap>	Reserved for future use.	Boolean (1)
<returnsaccepted></returnsaccepted>	Reserved for future use.	Boolean (1)
<productrisk></productrisk>	Reserved for future use.	String (6)
<appliedthreshold></appliedthreshold>	Score threshold applied to the order. For information about how <b>ics_score</b> selects a threshold, see the <i>Decision Manager Developer's Guide</i> .	Numeric (5)
<appliedtimehedge></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)
<appliedvelocityhedge></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></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></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)
<pre><appliedcategorytime></appliedcategorytime></pre>	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></appliedavs>	Reserved for future use.	String (5)
<appliedcv></appliedcv>	Reserved for future use.	String (1)
<binaccounttype></binaccounttype>	Type of customer. This field can contain one of these values:	String (2)
	■ CN: (Consumer) private customer	
	■ CP: (Corporate) business customer	

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

Element Name	Description	Data Type and Length
<binscheme></binscheme>	Subtype of card account. This field can contain one of these values:	String (32)
	<ul> <li>Maestro International</li> </ul>	
	<ul> <li>Maestro UK Domestic</li> </ul>	
	<ul> <li>MasterCard Credit</li> </ul>	
	<ul><li>MasterCard Debit</li></ul>	
	<ul><li>Solo</li></ul>	
	<ul><li>Visa Credit</li></ul>	
	<ul><li>Visa Debit</li></ul>	
	<ul><li>Visa Electron</li></ul>	
<binissuer></binissuer>	Name of the bank or entity that issued the card account.	String (128)
<bincountry></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)
<ipcity></ipcity>	Name of the city decoded from the IP address used directly or indirectly by the customer to send the order.	String (50)
<ipcountry></ipcountry>	Name of the country decoded from the IP address used directly or indirectly by the customer to send the order.	String (2)

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

Element Name	Description	Data Type and Length
<iproutingmethod></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:	String (25)
	■ Anonymizer	
	<ul> <li>AOL, AOL dial-up, AOL POP, and AOL proxy</li> </ul>	
	■ Cache proxy	
	■ Fixed	
	<ul><li>International proxy</li></ul>	
	■ Mobile gateway	
	■ POP	
	■ Regional proxy	
	■ Satellite	
	■ SuperPOP	
<ipstate></ipstate>	Name of the state decoded from the IP address used directly or indirectly by the customer to send the order.	String (2)
<infocodes></infocodes>	Information codes returned for the order. For a list of child elements, see " <infocodes>."</infocodes>	
<cookiesenabled></cookiesenabled>	Whether cookies are enabled in the customer's browser. This field can contain one of these values:	String (5)
	■ true	
	■ false	
<flashenabled></flashenabled>	Whether Flash is enabled in the customer's browser. This field can contain one of these values:	String (5)
	■ true	
	■ false	

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

Element Name	Description	Data Type and Length
<imagesenabled></imagesenabled>	Whether images are enabled in the customer's browser. This field can contain one of these values:	String (5)
	■ true	
	■ false	
<javascriptenabled></javascriptenabled>	Whether JavaScript is enabled in the customer's browser. This field can contain one of these values:	String (5)
	■ true	
	■ false	
<proxyipaddress></proxyipaddress>	IP address of the proxy if it is available.	String (45)

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

Element Name	Description	Data Type and Length
<proxyipaddress Activities&gt;</proxyipaddress 	Actions associated with the proxy IP Address. This field can contain one or more of these values, separated by carets (^):	String (255)
	<ul> <li>BANK: IP address belongs to a financial organization.</li> </ul>	
	<ul> <li>CLICK_FRAUD: IP address has been used for click fraud.</li> </ul>	
	<ul> <li>CONNECTING_TO_BOTNET: IP address has been connected to a botnet.</li> </ul>	
	<ul> <li>CONNECTING_TO_MALWARE_SITE:</li> <li>IP address has been connected to a malware site.</li> </ul>	
	<ul> <li>DNS_CONNECTION_ANOMALY: IP address has had DNS connection anomaly.</li> </ul>	
	<ul> <li>INSTANT_MSG: IP address has been used for instant messaging.</li> </ul>	
	<ul> <li>IRC_CONNECTION_ANOMALY: IP address has been connected to a suspicious IRC server.</li> </ul>	
	<ul> <li>LEGITIMATE: IP address has been legitimate.</li> </ul>	
	<ul> <li>MALWARE: IP address has been used for malware.</li> </ul>	
	<ul> <li>NIGERIAN: IP address has been used for Nigerian email or spam.</li> </ul>	
	<ul> <li>OTHER: IP has been involved in other activities.</li> </ul>	
	<ul> <li>P2P: IP address has been used for peer-to-peer communication.</li> </ul>	
	<ul><li>PHISH: IP address has been used for phishing.</li></ul>	
	<ul> <li>SPAM: IP address has been used to send spam.</li> </ul>	
	<ul> <li>TCP_SCAN_FLAG: IP address has been used as TCP port scanner.</li> </ul>	
	<ul> <li>UDP_SCAN_FLAG: IP address has been used as UDP port scanner</li> </ul>	

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

Element Name	Description	Data Type and Length
<proxyipaddress Attributes&gt;</proxyipaddress 	Characteristics associated with the proxy IP Address. This field can contain one or more of these values, separated by carets (^):	String (255)
	<ul> <li>DYNAMIC: IP address has been dynamic.</li> </ul>	
	<ul> <li>STATIC: IP address has been static.</li> </ul>	
	<ul> <li>BOGON: IP address has been part of the bogon ranges.</li> </ul>	
	<ul> <li>HIJACKED: IP address has been part of the hijacked ranges.</li> </ul>	
	<ul> <li>BOTNET_ZOMBIE: IP address has been either a zombie or a botnet.</li> </ul>	
	<ul> <li>OPEN_RELAY: IP address has been an open relay.</li> </ul>	
	<ul> <li>OPEN_PROXY: IP address has been an open proxy.</li> </ul>	
	■ PROXY: IP address has been a proxy.	
	<ul><li>NAME_SERVER: IP address has been a name server.</li></ul>	
	<ul> <li>RANGE: IP address has been part of an IP range.</li> </ul>	
	■ PORTAL: IP address has been a portal.	
<proxyservertype></proxyservertype>	Type of proxy server matched to the HTTP headers. This field can contain one of these values:	String (12)
	<ul> <li>Anonymous: presence of HTTP header indicates the presence of a proxy but does not disclose the client IP address.</li> </ul>	
	<ul> <li>Hidden: absence of an HTTP header indicates the presence of a proxy.</li> </ul>	
	Transparent: presence of an HTTP header indicates the presence of a proxy and discloses the client IP address. This value is the safest.	
<trueipaddress></trueipaddress>	True customer's IP address detected by the application.	String (45)

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

Element Name	Description	Data Type and Length
<trueipaddress activities=""></trueipaddress>	Actions associated with the true IP Address. This field can contain one or more of these values, separated by carets (^):	String (255)
	<ul> <li>BANK: IP address belongs to a financial organization.</li> </ul>	
	<ul> <li>CLICK_FRAUD: IP address has been used for click fraud.</li> </ul>	
	<ul> <li>CONNECTING_TO_BOTNET: IP address has been connected to a botnet.</li> </ul>	
	<ul> <li>CONNECTING_TO_MALWARE_SITE:</li> <li>IP address has been connected to a malware site.</li> </ul>	
	<ul> <li>DNS_CONNECTION_ANOMALY: IP address has had DNS connection anomaly.</li> </ul>	
	<ul> <li>INSTANT_MSG: IP address has been used for instant messaging.</li> </ul>	
	<ul> <li>IRC_CONNECTION_ANOMALY: IP address has been connected to a suspicious IRC server.</li> </ul>	
	<ul> <li>LEGITIMATE: IP address has been legitimate.</li> </ul>	
	<ul> <li>MALWARE: IP address has been used for malware.</li> </ul>	
	<ul> <li>NIGERIAN: IP address has been used for Nigerian email or spam.</li> </ul>	
	<ul> <li>OTHER: IP has been involved in other activities.</li> </ul>	
	<ul> <li>P2P: IP address has been used for peer-to-peer communication.</li> </ul>	
	PHISH: IP address has been used for phishing.	
	SPAM: IP address has been used to send spam.	
	<ul><li>TCP_SCAN_FLAG: IP address has been used as TCP port scanner.</li></ul>	
	<ul><li>UDP_SCAN_FLAG: IP address has been used as UDP port scanner.</li></ul>	

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

Element Name	Description	Data Type and Length
<trueipaddress Attributes&gt;</trueipaddress 	Characteristics associated with the true IP Address. This field can contain one or more information codes, separated by carets (^). This field can contain one of these values:	String (255)
	<ul> <li>DYNAMIC: IP address has been dynamic.</li> </ul>	
	<ul> <li>STATIC: IP address has been static.</li> </ul>	
	<ul> <li>BOGON: IP address has been part of the bogon ranges.</li> </ul>	
	<ul> <li>HIJACKED: IP address has been part of the hijacked ranges.</li> </ul>	
	<ul> <li>BOTNET_ZOMBIE: IP address has been either a zombie or a botnet.</li> </ul>	
	<ul> <li>OPEN_RELAY: IP address has been an open relay.</li> </ul>	
	<ul> <li>OPEN_PROXY: IP address has been an open proxy.</li> </ul>	
	■ PROXY: IP address has been a proxy.	
	<ul> <li>NAME_SERVER: IP address has been a name server.</li> </ul>	
	<ul> <li>RANGE: IP address has been part of an IP range.</li> </ul>	
	<ul> <li>PORTAL: IP address has been a portal.</li> </ul>	

#### 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>
 <CookiesEnabled>y</CookiesEnabled>
  <FlashEnabled>y</FlashEnabled>
  <ImagesEnabled>n</ImagesEnabled>
  <JavascriptEnabled>y</JavascriptEnabled>
  <ProxyIPAddress />
 <ProxyIPAddressActivities />
  <ProxyIPAddressAttributes />
 <ProxyServerType />
  <TrueIPAddress>11.111.111.1
  <TrueIPAddressActivities />
  <TrueIPAddressAttributes />
</RiskData>
```

# <InfoCodes>

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

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

Table 52 Child Elements of <InfoCodes>

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

## **Example** <InfoCodes> element

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

# <InfoCode>

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

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

Table 53 Child Elements of <InfoCode>

Element Name	Description	Data Type and Length
<codetype></codetype>	Category of information code returned for an order. This element can contain one of these values:	String (20)
	<ul><li>address</li></ul>	
	■ hotlist	
	<ul><li>identity</li></ul>	
	■ internet	
	<ul><li>merchant_velocity</li></ul>	
	■ phone	
	<ul><li>suspicious</li></ul>	
	<ul><li>velocity</li></ul>	

Table 53 Child Elements of <InfoCode> (Continued)

Element Name	Description	Data Type and Length
<codevalue></codevalue>	Description of the information code returned in the <codetype> element. For a description of the values, see Appendix G, "Score Information Codes," on page 273. For merchant_velocity, see the custom merchant velocity order and product rules and the corresponding information codes created for your implementation.</codetype>	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.

The syntax is:

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

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

Element Name	Description	Data Type and Length
<profile></profile>	Profile used to evaluate an order. See " <profile>," page 107.</profile>	String (255)

#### Example <ProfileList> element

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

# <Profile>

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

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

Table 55 Attributes of <Profile> in the Single Transaction Report

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

Table 56 Child Elements of <Profile> in the Single Transaction Report

Element Name	Description	Data Type and Length
<profilemode></profilemode>	Activity mode of the profile; this field contains one of these values:	String (255)
	■ Active	
	■ Passive	
<profiledecision></profiledecision>	Decision returned by the profile; this field contains one of these values:	String
	■ ACCEPT	
	■ REJECT	
	■ REVIEW	
<rulelist></rulelist>	List of rules used to evaluate an order. For a list of child elements, see " <rulelist>."</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.

#### The syntax is:

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

Table 57 Child Elements of <RuleList> in the Single Transaction Report

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

#### Example <RuleList> element

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

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

Table 58 Child Elements of <Rule> in the Single Transaction Report

Element Name	Description	Data Type and Length
<rulename></rulename>	Name of the rule	String (255)
<ruledecision></ruledecision>	Decision returned by the rule. Possible values:	String (6)
	■ Accept	
	■ Reject	
	■ Review	
	■ Ignore	

#### 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.

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

Table 59 Child Elements of <TravelData>

Element Name	Description	Data Type and Length
<tripinfo></tripinfo>	Information about the itinerary. For a list of the child elements, see " <tripinfo>."</tripinfo>	
<passengerinfo></passengerinfo>	Information about the passengers. For a list of the child elements, see " <passengerinfo>."</passengerinfo>	

#### Example <TravelData> element

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

# <TripInfo>

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

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

Table 60 Child Elements of <TripInfo>

Element Name	Description	Data Type and Length
<completeroute></completeroute>	Concatenation of individual travel legs in the format ORIG1-DEST1[:ORIG2-DEST2:ORIGn-DESTn], for example: SF0-JFK:JFK-LHR:LHR-CDG. For a complete list of airport codes, see IATA's City Code Directory.	String (255)
<journeytype></journeytype>	Type of travel. For example, you can use values such as one way or round trip.	String (32)
<pre><departuredate time=""></departuredate></pre>	Departure date and time of the first leg of the trip in one of these formats:	DateTime (25)
	■ yyyy-MM-dd HH:mm z	
	■ yyyy-MM-dd hh:mm a z	
	■ yyyy-MM-dd hh:mma z	
	HH = hour in 24-hour format hh = hour in 12-hour format a = am or pm (case insensitive) z = your time zone	

#### Example <TripInfo> element

# <PassengerInfo>

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

#### The syntax is:

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

#### Table 61 Child Elements of <PassengerInfo>

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

#### Example <PassengerInfo> element

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

# <Passenger>

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

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

Table 62 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 63 Child Elements of <TravelData>

Element Name	Description	Data Type and Length
<passengerfirstname></passengerfirstname>	Passenger's first name.	String (60)
<passengerlastname></passengerlastname>	Passenger's last name.	String (60)
<passengerid></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></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></passengertype>	Passenger classification associated with the price of the ticket. This element can contain one of these values:	String (32)
	<ul><li>ADT: Adult</li></ul>	
	CNN: Child	
	■ INF: Infant	
	■ YTH: Youth	
	■ STU: Student	
	<ul><li>SCR: Senior Citizen</li></ul>	
	■ MIL: Military	
<passengerphone></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></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>
```

# **Subscription Detail Report**

Some customer profiles do not have values for all the fields in the report. If a field does not have a value, the field is omitted from the report.

## **XML Conventions**

## **Report Declaration Syntax**

These conventions are used to describe the report:



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

## **Element Declaration Syntax**

These conventions are used to describe the syntax of each XML element:

```
<Sample Attribute=CDATA>
  (Element)
  (ChoiceOne) | (ChoiceTwo)
  (ComplexElement)
```

```
(RequiredRecurringElement)+
  (OptionalElement)?
  (OptionalRecurringElement)*
</Sample>
```



The DTDs for the reports can use a syntax with the ?, +, or \* character inside the parentheses. For example, instead of (OptionalElement)?, the DTD might use (OptionalElement?). Either syntax is acceptable.

Table 64 Conventions for XML Syntax

Convention	Description
<sample></sample>	Parent of the subsequent 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 element ChoiceOne or ChoiceTwo but not both.
(ComplexElement)	Element with one or more children.
(RequiredRecurringElement)+	Required element. Can appear one or more times.
(OptionalElement)?	Optional element. Can appear once or be omitted.
(OptionalRecurringElement)*	Optional element. Can appear zero or more times.

# **Data Types and Lengths**

The following table describes the data types. In the description for each element, the data length indicates the maximum length for that element.

Table 65 Data Types for XML Reports

Data Type	Description
Alphanumeric	String containing letters, numbers, and special characters such as @, #, and %. All text uses UTF-8 character encoding.
Boolean	Single character: T for true or F for false.
Amount	An amount, including a decimal point if necessary.
Date	YYYY-MM-DD, where:
	<ul><li>YYYY is the four-digit year</li></ul>
	■ MM is the two-digit month
	■ DD is the two-digit day
	The dashes are included in a Date value.

Table 65 Data Types for XML Reports (Continued)

Data Type	Description
Date Time	YYYY-MM-DDTHH:MM:SS[+ -]HH:MM, where:
	YYYY is the four-digit year.
	MM is the two-digit month.
	<ul><li>DD is the two-digit day.</li></ul>
	■ THH: MM: SS is the time, with HH representing hours, MM representing minutes, and SS representing seconds.
	■ [+   -] HH: MM is the time zone's offset from Greenwich Mean Time (GMT), 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 GMT. For example, the offset for Pacific Daylight Time is -07:00.
	<b>Example</b> 2010-02-28T16:31:18-07:00 represents February 28, 2010 at 4:31:18 PM PDT.
Numeric	String containing numbers.

# **XML Report Elements**

# <Report>

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

#### **Syntax**

#### Table 66 Attributes of <Report>

Attribute Name	Description	Data Type & Length
Name	Name of the report. Possible value:	Alphanumeric
	■ Subscription Detail Report	(100)
Version	Version number of the report.	Numeric (10)
xmlns	XML namespace for the report.	Alphanumeric (100)
MerchantID	CyberSource merchant ID used for the transactions in the report.	Alphanumeric (30)
ReportStartDate	First date included in the report.	DateTime (25)
ReportEndDate	Last date included in the report.	DateTime (25)

#### Example <Report> Element

## <SubscriptionPayments>

The <SubscriptionPayments> element contains all the customer profile payments that are included in the report.

#### **Syntax**

```
<SubscriptionPayments>
(SubscriptionPayment)*
</SubscriptionPayments>
```

#### Example <SubscriptionPayments> Element

## <SubscriptionPayment>

The <SubscriptionPayment> element contains the customer, payment, and customer profile information for a transaction.

#### **Syntax**

Table 67 Attributes of <SubscriptionPayments>

Attribute Name	Field Description	Data Type & Length
payment_request_id	Identifier for the transaction request.	String (26)
subscription_id	Identifier for the customer profile.	String (26)
transaction_date	Date on which the transaction took place.	DateTime (25)
merchant_ref_number	Merchant-generated order reference or tracking number.	String (50)
transaction_ref_ number	Identifier for the transaction.	String (64)
e_commerce_indicator	Type of transaction. Possible values:	String (13)
	■ internet (default)	
	■ moto	
	■ retail	

#### Example <SubscriptionPayment> Element

```
<SubscriptionPayment payment_request_id="1895362076290174065740"</pre>
                     subscription_id="1858271439560174065740"
                     transaction_date="2010-02-11T18:43:28+09:00"
                     merchant_ref_number="1185827118784"
                     transaction_ref_number="00189193RYZPS6GPE1SX"
                     e_commerce_indicator="M">
   <BillTo>
   </BillTo>
   <ShipTo>
      . . .
   </ShipTo>
   <PaymentMethod>
      . . .
   </PaymentMethod>
   <PaymentData>
   </PaymentData>
   <MerchantDefinedData>
   </MerchantDefinedData>
   <SubscriptionDetails>
   </SubscriptionDetails>
</SubscriptionPayment>
```

## <BillTo>

The <BillTo> element contains the customer's contact information.

## **Syntax**

```
<BillTo>
  (customer_firstname)
  (customer_lastname)
  (bill_address1)
  (bill_address2)
  (bill_city)
  (bill_state)
  (bill_zip)
  (bill_country)
  (company_name)
  (customer_email)
  (customer_phone)
  (customer_ipaddress)
  (customer_account_id)
</BillTo>
```

Table 68 Elements of <BillTo>

Element Name	Field Description	Data Type & Length
<pre><customer_firstname></customer_firstname></pre>	First name of the customer.	String (60)
<pre><customer_lastname></customer_lastname></pre>	Last name of the customer.	String (60)
<pre><bill_address1></bill_address1></pre>	First line of the billing street address.	String (60)
 <bill_address2></bill_address2>	Second line of the billing street address. Used for additional address information.	String (60)
  dill_city>	City of the customer.	String (50)
 <bill_state></bill_state>	State or province of the customer's billing address.	String (2)
  dill_zip>	Zip code of the customer.	String (10)
  dill_country>	Country of the customer.	String (2)
<pre><company_name></company_name></pre>	Company name of the customer.	String (40)
<pre><customer_email></customer_email></pre>	Email address of the customer.	String (255)
<pre><customer_phone></customer_phone></pre>	Phone number of the customer.	String (20)
<pre><customer_ipaddress></customer_ipaddress></pre>	IP address of the customer.	String (15)
<pre><customer_account_id></customer_account_id></pre>	Identifier for the customer's account. You defined this value when you created the customer profile.	String (50)

#### Example <BillTo> Element

# <ShipTo>

The <ShipTo> element contains the shipping information.

#### **Syntax**

```
<ShipTo>
  (ship_to_firstname)
  (ship_to_lastname)
  (ship_to_address1)
  (ship_to_address2)
  (ship_to_city)
  (ship_to_state)
  (ship_to_zip)
  (ship_to_country)
  (ship_to_company_name)
</ShipTo>
```

Table 69 Elements of <ShipTo>

Element Name	Field Description	Data Type & Length
<ship_to_firstname></ship_to_firstname>	First name of the person receiving the product.	String (60)
<pre><ship_to_lastname></ship_to_lastname></pre>	Last name of the person receiving the product.	String (60)
<pre><ship_to_address1></ship_to_address1></pre>	Street address to which the product is shipped.	String (60)
<pre><ship_to_address2></ship_to_address2></pre>	Secondary street address line to which the product is shipped.	String (60)
<pre><ship_to_city></ship_to_city></pre>	City to which the product is shipped.	String (60)

Table 69 Elements of <ShipTo> (Continued)

Element Name	Field Description	Data Type & Length
<ship_to_state></ship_to_state>	State or province to which the product is shipped.	String (2)
<pre><ship_to_zip></ship_to_zip></pre>	Postal code to which the product is shipped	String (10)
<pre><ship_to_country></ship_to_country></pre>	Country to which the product is shipped.	String (2)
<pre><ship_to_company_ name=""></ship_to_company_></pre>	Company to which the product is shipped.	String (60)

#### Example <ShipTo> Element

# <PaymentMethod>

The <PaymentMethod> element contains the payment information.

#### **Syntax**

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

#### Example <PaymentMethod> Element

## <Card>

The <Card> element contains the card information. This element is used for credit cards and PINIess debit cards.

## **Syntax**

```
<Card>
    (card_type)
    (customer_cc_expmo)
    (customer_cc_expyr)
    (customer_cc_startmo)
    (customer_cc_startyr)
    (customer_cc_issue-number)
    (account_suffix)
</Card>
```

Table 70 Elements of <Card>

Element Name	Field Description	Data Type & Length
<card_type></card_type>	Card type used for the transaction.	String (3)
	For credit card details, see Credit Card Services Using the SCMP API or Credit Card Services Using the Simple Order API.	
<pre><customer_cc_expmo></customer_cc_expmo></pre>	Expiration month for the card.	Integer (2)
<pre><customer_cc_expyr></customer_cc_expyr></pre>	Expiration year for the card.	Integer (4)
<pre><customer_cc_startmo></customer_cc_startmo></pre>	Starting month of the card validity period for Maestro (UK Domestic) if the card has a start date printed on it.	Integer (2)
<pre><customer_cc_startyr></customer_cc_startyr></pre>	Starting year of the card validity period for Maestro (UK Domestic) if the card has a start year printed on it.	Integer (4)
<pre><customer_cc_issue- number=""></customer_cc_issue-></pre>	Indicates how many times a Maestro (UK Domestic) card has been issued to the account holder.	String (5)
<account_suffix></account_suffix>	Last four digits of the customer's payment account number.	String (4)

#### **Example** <Card> Element

## <Check>

The <Check> element contains the check information.

## **Syntax**

```
<Check>
  (account_suffix)
  (ecp_account_type)
  (ecp_rdfi)
</Check>
```

#### Table 71 Elements of <Check>

Element Name	Field Description	Data Type & Length
<account_suffix></account_suffix>	Last four digits of the customer's account number.	String (4)
<ecp_account_< td=""><td>Account type. Possible values:</td><td>String (1)</td></ecp_account_<>	Account type. Possible values:	String (1)
type>	C: Checking	
	S: Savings (USD only)	
	x: Corporate Checking (USD only)	
<ecp_rdfi></ecp_rdfi>	Bank routing transit number.	Non- negative Integer (9)

#### Example <Check> Element

```
<Check>
    <account_suffix>1111</account_suffix>
    <ecp_account_type>C</ecp_account_type>
    <ecp_rdfi>1111111111</ecp_rdfi>
</Check>
```

# <PaymentData>

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

## **Syntax**

```
<PaymentData>
   (ics_applications)
   (recurring_payment_event_amount)
   (payment_processor)
   (currency_code)
   (reason_code)
   (auth_rcode)
   (auth_code)
   (auth_type)
   (auth_auth_avs)
   (auth_auth_response)
   (auth_cavv_response)
   (ics_rcode)
   (ics_rflag)
   (ics_rmsg)
   (request_token)
</PaymentData>
```

Table 72 Elements of <PaymentData>

Element Name	Field Description	Data Type & Length
<ics_applications></ics_applications>	Comma-separated list of CyberSource services that were processed.	String (255)
<pre><recurring_payment_ event_amount=""></recurring_payment_></pre>	Payment amount for an individual payment in an installment or recurring subscription.	String (15)
<pre><payment_processor></payment_processor></pre>	Name of the financial institution that processed the transaction.	String (40)
<pre><currency_code></currency_code></pre>	Currency used by the customer.	String (5)
<reason_code></reason_code>	Reason code that indicates why the customer profile payment succeeded or failed. For details, see the appendix of reason codes in the documentation for the relevant payment method.	Numeric (3)
<auth_rcode></auth_rcode>	Indication of the authorization's success or failure.	Integer (1)
<auth_code></auth_code>	Code returned from the processor for an approved authorization.	String (6)

Table 72 Elements of <PaymentData> (Continued)

Element Name	Field Description	Data Type & Length
<auth_type></auth_type>	Specifies that the authorization was obtained outside the CyberSource system. This field is used with forced captures.	String (6)
	For details on forced captures, see <i>Credit</i> Card Services Using the SCMP API or Credit  Card Services Using the Simple Order API.	
<auth_auth_avs></auth_auth_avs>	Result of the AVS fraud check.	String (1)
<auth_auth_response></auth_auth_response>	Response sent from the processor.	String (10)
<auth_cavv_response></auth_cavv_response>	Result of the CVN fraud check.	String (10)
<ics_rcode></ics_rcode>	One-digit code that indicates whether the entire request was successful.	Integer (1)
<ics_rflag></ics_rflag>	One-word description of the result of the entire request.	String (50)
<ics_rmsg></ics_rmsg>	Message that explains the <ics_flag> value.</ics_flag>	String (255)
<request_token></request_token>	Request token value returned from a request.	String (256)

#### Example <PaymentData> Element

```
<PaymentData>
   <ics_applications>ics_auth,ics_bill</ics_applications>
   <recurring_payment_event_amount>99.99</recurring_payment_event_amount>
   <payment_processor>hsbc</payment_processor>
   <currency_code>USD</currency_code>
   <reason_code>200</reason_code>
   <auth_rcode>0</auth_rcode>
   <auth_code>JS1111</auth_code>
   <auth_type>0</auth_type>
   <auth_auth_avs>N</auth_auth_avs>
   <auth_auth_response>00</auth_auth_response>
   <auth_cavv_response>1111</auth_cavv_response>
   <ics_rcode>1</ics_rcode>
   <ics_rflag>111111111<//cs_rflag>
   <ics_rmsq>1111111111<//r>
   <request_token>Afvvj5r9uxlPGppxMFE2FNaWtdbSB04e4rJkb81ynjU01w43
request_token>
</PaymentData>
```

# <MerchantDefinedData>

The <MerchantDefinedData> element contains the merchant-defined data.

## **Syntax**

<MerchantDefinedData>
 (merchant\_defined\_data1)
 (merchant\_defined\_data2)
 (merchant\_defined\_data3)
 (merchant\_defined\_data4)
</MerchantDefinedData>

Table 73 Elements of <MerchantDefinedData>

Element Name	Field Description	Data Type & Length
<pre><merchant_defined_data1></merchant_defined_data1></pre>	Four fields that merchants can use to store	String (255)
<pre><merchant_defined_data2></merchant_defined_data2></pre>	information.	
<pre><merchant_defined_data3></merchant_defined_data3></pre>	Important Merchant-defined data fields are not intended to and MUST NOT be used to capture	
<pre><merchant_defined_data4></merchant_defined_data4></pre>	•	
	<b>Note</b> If you are creating a customer profile based on an authorization, the merchant-defined data fields do not get transferred to the new customer profile.	

#### Example <MerchantDefinedData> Element

# <SubscriptionDetails>

The <SubscriptionDetails> element contains information about the customer profile.

#### **Syntax**

```
<SubscriptionDetails>
   (recurring_payment_amount)
   (subscription_type)
   (subscription_title)
   (last_subscription_status)
   (subscription_status)
   (subscription_payment_method)
   (recurring_start_date)
   (next_scheduled_date)
   (event_retry_count)
   (payments_success)
   (payment_success_amount)
   (recurring_number_of_payments)
   (installment_sequence)
   (installment_total_count)
   (recurring_frequency)
   (recurring_approval_required)
   (recurring_payment_event_approved_by)
   (recurring_automatic_renew)
   (comments)
   (setup_fee)
   (setup_fee_currency)
   (tax_amount)
   (merchant_secure_data1)
   (merchant_secure_data2)
   (merchant_secure_data3)
   (merchant_secure_data4)
</SubscriptionDetails>
```

Table 74 Elements of <SubscriptionDetails>

Element Name	Field Description	Data Type & Length
<pre><recurring_payment_ amount=""></recurring_payment_></pre>	Payment amount for all the payments in an installment or recurring subscription.	Integer (15)

Table 74 Elements of <SubscriptionDetails> (Continued)

Element Name	Field Description	Data Type & Length
<pre><subscription_type></subscription_type></pre>	Type of subscription or customer profile. Possible values:	String (20)
	■ on-demand	
	<ul><li>recurring</li></ul>	
<subscription_title></subscription_title>	Name or title of the customer profile.	String (60)
<pre><last_subscription_ status=""></last_subscription_></pre>	Status of the subscription or customer profile on the previous day.	String (20)
<subscription_status></subscription_status>	Current status of the customer profile. Possible values:	String (20)
	■ hold	
	■ retry	
	<ul><li>cancelled</li></ul>	
	■ current	
	■ superseded	
<pre><subscription_payment_ method=""></subscription_payment_></pre>	Method of payment associated with the customer profile.	String (20)
<recurring_start_date></recurring_start_date>	First payment date for an installment or recurring subscription.	DateTime (25)
<pre><next_scheduled_date></next_scheduled_date></pre>	Next payment date for an installment	DateTime (25)
	or recurring subscription.	
<pre><event_retry_count></event_retry_count></pre>	Total number of payments that are pending in retry mode.	Integer (3)
<pre><payments_success></payments_success></pre>	Total count of successful payments to date.	Integer (5)
<pre><payment_success_amount></payment_success_amount></pre>	Total amount of payments to date.	Decimal (15)
<pre><recurring_number_of_ payments=""></recurring_number_of_></pre>	Total number of payments set up for an installment subscription.	Integer (3)
<pre><installment_sequence></installment_sequence></pre>	Total number of payments in the schedule for an installment subscription.	Decimal (2)
<pre><installment_total_ count=""></installment_total_></pre>	Total number of payments for an installment subscription. This value is used in conjunction with <installment_sequence> to keep track of the number of installments that have been billed.</installment_sequence>	Decimal (2)

Table 74 Elements of <SubscriptionDetails> (Continued)

Element Name	Field Description	Data Type & Length
<comments></comments>	Optional comments that you can make about the subscription or customer profile.	String (255)
<setup_fee></setup_fee>	Fee charged to your customer when you created an installment or recurring subscription.	Decimal (15)
<pre><setup_fee_currency></setup_fee_currency></pre>	Currency of the setup fee.	String (3)
<tax_amount></tax_amount>	Total amount of tax to be applied to the product.	Decimal (15)
<pre><merchant_secure_data1></merchant_secure_data1></pre>	Storage fields for any type of data.	String (100)
<pre><merchant_secure_data2></merchant_secure_data2></pre>		
<pre><merchant_secure_data3></merchant_secure_data3></pre>		
<pre><merchant_secure_data4></merchant_secure_data4></pre>		

#### Example <SubscriptionDetails> Element

```
<SubscriptionDetails>
  <recurring_payment_amount>0.00</recurring_payment_amount>
  <subscription_type>on-demand</subscription_type>
  <subscription_title>My Subscription</subscription_title>
  <last_subscription_status>CURRENT/last_subscription_status>
  <subscription_status>CURRENT</subscription_status>
  <subscription_payment_method>SW</subscription_payment_method>
  <recurring_start_date>2010-02-01 07:00:00.0/recurring_start_date>
  <next_scheduled_date>2010-03-01 07:00:00.0/next_scheduled_date>
  <event_retry_count>0</event_retry_count>
  <payments_success>0</payments_success>
  <payment_success_amount>0.00</payment_success_amount>
  <recurring_number_of_payments>0</recurring_number_of_payments>
  <installment_sequence>0.00</installment_sequence>
  <installment_total_count>0.00</installment_total_count>
  <recurring_frequency>on-demand</recurring_frequency>
  <recurring_approval_required>N</recurring_approval_required>
  <recurring_payment_event_approved_by>hsbc</recurring_payment_event_approved_by>
  <recurring_automatic_renew>N</recurring_automatic_renew>
  <comments>0</comments>
  <setup_fee>0.00</setup_fee>
  <setup_fee_currency>USD</setup_fee_currency>
  <tax_amount>0.0000000000000</tax_amount>
  <merchant_secure_data1>0</merchant_secure_data1>
  <merchant_secure_data2>0</merchant_secure_data2>
  <merchant_secure_data3>0</merchant_secure_data3>
  <merchant_secure_data4>0</merchant_secure_data4>
</SubscriptionDetails>
```

# 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.



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.

Table 75 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 Transaction Exception Detail.	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:	String (100)
	<pre>Test: https://ebctest.cybersource.com/ ebctest/reports/dtd/tedr.dtd.</pre>	
	<pre>Production: https://ebc.cybersource.com/ ebc/reports/dtd/tedr.dtd.</pre>	
MerchantID	CyberSource merchant ID used for the transaction.	String (30)
ReportStart Date	First date included in the report.	DateTime (25)
ReportEndDate	Last date included in the report.	DateTime (25)

Table 76 Child Element of <Report> in the Transaction Exception Detail Report

Element Name	Description
<requests></requests>	Contains all the requests in the report. See " <requests>," page 132.</requests>

#### **Example** <Report > **Element**

# <Requests>

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

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

Table 77 Child Elements of <Requests> in the Transaction Exception Detail Report

Element Name	Description
<request></request>	Information about a single request. See " <request>," page 133.</request>

#### **Example** <Requests> **Element**

# <Request>

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

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

Table 78 Child Elements of <Request> in the Transaction Exception Detail Report

Element Name	Description
<basicinformation></basicinformation>	Information, such as the request ID, that identifies the request. See " <basicinformation>," page 134.</basicinformation>
<paymentdata></paymentdata>	Includes the amount and currency of the payment. See " <paymentdata>," page 135.</paymentdata>
<paymentmethod></paymentmethod>	Information about the payment method for the order. See " <paymentmethod>," page 136.</paymentmethod>
<pre><errorinformation></errorinformation></pre>	Information about the error that occurred. See " <errorinformation>," page 137.</errorinformation>
<billto></billto>	Information about the billing address and purchaser for the order. See " <billto>," page 139.</billto>
<shipto></shipto>	Information about the shipping address and recipient for the order. See " <shipto>," page 140.</shipto>

#### **Example** <Request> **Element**

## <BasicInformation>

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

```
<BasicInformation>
  (RequestID)
  (TransactionDate)
  (MerchantReferenceNumber)
  (TransactionReferenceNumber)
  (TransactionType)
  (OriginalRequestID)
  (Application)

<
```

Table 79 Child Elements of <BasicInformation> in the Transaction Exception Detail Report

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

Table 79 Child Elements of <BasicInformation> in the Transaction Exception Detail Report (Continued)

Element Name	Description	Data Type and Length
<transactionreference Number&gt;</transactionreference 	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the (Simple Order API) <pre></pre>	String (60)
<transactiontype></transactiontype>	Type of transaction, such as credit card capture, credit, or bank transfer.	String (30)
<originalrequestid></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)
<application></application>	Describes the type of transaction.  Multiple applications can be associated with a request and are separated by a comma.	String (50)

#### **Example** <BasicInformation> **Element**

<BasicInformation>

<RequestID>1406253049220167904565/RequestID>

<TransactionDate>2006-02-22T16:21:44-08:00</RequestDate>

<MerchantReferenceNumber>1140625304845</merchantReferenceNumber>

<TransactionReferenceNumber>02YZPT2EOGDX3D

TransactionReferenceNumber>

<TransactionType>Credit card capture</TransactionType>

<OriginalRequestID>1406235110599167904565/OriginalRequestID>

<Application>ics\_auth,ics\_service\_fee\_auth</application>

</BasicInformation>

# <PaymentData>

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

#### The syntax is:

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

Table 80 Child Elements of <PaymentData> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<amount></amount>	Amount specified in the request.	Amount (19)
<currencycode></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.

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

Table 81 Child Elements of <PaymentMethod> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<accountsuffix></accountsuffix>	Last four characters of the account number.	String (4)
<bankcode></bankcode>	Bank code or sort code for the account if a bank account was used for the transaction.	String (15)
<pre><bankaccountname></bankaccountname></pre>	Name of account holder.	String (60)
<expirationmonth></expirationmonth>	If a credit card was used for the transaction, expiration month of the card (MM).	Numeric (2)
<expirationyear></expirationyear>	If a credit card was used for the transaction, expiration year of the card (YYYY).	Numeric (4)

Table 81 Child Elements of <PaymentMethod> in the Transaction Exception Detail Report (Continued)

Element Name	Description	Data Type and Length
<cardtype></cardtype>	Type of card or bank account. For the possible values, see Appendix D, "Types of Cards and Bank Accounts," on page 262.	String (50)

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

#### **Example** <PaymentMethod> element for a card transaction

# <ErrorInformation>

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

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

Table 82 Child Elements of <ErrorInformation> in the Transaction Exception
Detail Report

Element Name	Description	Data Type and Length
<paymentprocessor></paymentprocessor>	See Processor Names.	String (40)
<action></action>	Brief description of the action. Possible values:	String (15)
	■ ERROR	
	■ FAILED	
	■ CANCELLED	
<errorcategory></errorcategory>	Type of error. Possible values:	String (20)
	■ Data Error	
	■ Failure	
	■ Processor Error	
	■ Settlement Error	
<errormessage></errormessage>	Description of the error.	String (255)
<reasoncode></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 E, "Reason Codes in the Transaction Exception Detail Report," on page 264.	Numeric (3)
<processorresponse Code&gt;</processorresponse 	Code returned directly from the processor for the error that occurred.	String (60)

#### **Example** <ErrorInformation> **Element**

```
<ErrorInformation>
  <PaymentProcessor>sample processor
<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.

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

Table 83 Child Elements of <BillTo> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<firstname></firstname>	First name of the billed customer.	String (60)
<lastname></lastname>	Last name of the billed customer.	String (60)
<address1></address1>	First line of the billing address.	String (60)
<address2></address2>	Second line of the billing address.	String (60)
<city></city>	City of the billing address.	String (50)
<state></state>	State, province, or territory of the billing address.	String (20)
<postalcode></postalcode>	Postal code of the billing address.	String (10)
<country></country>	ISO country code of the billing address.	String (2)
<companyname></companyname>	Company name of the billing address.	String (60)
<email></email>	Email address of the bill-to customer.	String (255)

Table 83 Child Elements of <BillTo> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<phone></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.

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

Table 84 Child Elements of <ShipTo> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<firstname></firstname>	First name of the customer receiving the shipment.	String (60)
<lastname></lastname>	Last name of the customer receiving the shipment.	String (60)
<address1></address1>	First line of the shipping address.	String (60)
<address2></address2>	Second line of the shipping address.	String (60)
<city></city>	City of the shipping address.	String (60)

Table 84 Child Elements of <ShipTo> in the Transaction Exception Detail Report

Element Name	Description	Data Type and Length
<state></state>	State, province, or territory of the shipping address.	String (50)
<postalcode></postalcode>	Postal code of the shipping address.	String (10)
<country></country>	ISO country code of the shipping address.	String (2)

#### Example <ShipTo> Element

# **User Management Report**

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

# <Report>

<Report> is the root element of the report.

Table 85 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 User Listing.	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 is:	String (100)
	<pre>Test: https:// ebctest.cybersource.com/ebctest/ reports/dtd/ul.dtd.</pre>	
	<pre>Production: https:// ebc.cybersource.com/ebc/reports/dtd/ ul.dtd.</pre>	

Table 86 Child Element of <Report> in the User Management Report

Element Name	Description
<users></users>	Information about each user. See " <users>," page 143.</users>

#### Example <Report > Element

# <Users>

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

#### The syntax is:

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

#### Table 87 Child Element of <Users> in the User Management Report

Element Name	Description
<user></user>	Information about a user. See " <user>," page 143.</user>

#### Example <users> Element

# <User>

The <user> element contains information about a user.

```
<User username CDATA #REQUIRED
    merchantid CDATA #REQUIRED
    firstname CDATA #REQUIRED
    lastname CDATA #REQUIRED
    email CDATA #IMPLIED
    datecreated CDATA #REQUIRED
    lastaccess CDATA #REQUIRED</pre>
```

status CDATA #REQUIRED

role CDATA #REQUIRED>
 (Permissions)
</User>

Table 88 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)
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:	String
	<ul> <li>enabled: user can perform tasks according to permissions granted.</li> </ul>	
	<ul><li>disabled: user cannot log in the Business Center.</li></ul>	
role	Named collection of single permissions that describe the tasks assigned to a user, such as admin or custom.	String

Table 89 Child Element of <User> in the User Management Report

Element Name	Description
<permissions></permissions>	Information about the permissions granted to a user. See " <permissions>," page 145.</permissions>

#### 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>
```

# <Permissions>

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

The syntax is:

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

Table 90 Child Element of <Permissions> in the User Management Report

Element Name	Description
<permission></permission>	Each permission granted to the user. See " <permission>," page 146.</permission>

#### **Example** <Permissions> **Element**

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

# <Permission>

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

#### The syntax is:

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

Table 91 Attribute of <Permission> in the User Management Report

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

#### **Example** <Permission> Element

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

4

# **Exported Search Results**

# 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.

Table 92 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)

Table 92 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
2 (B)	Date and Time	Complete date and time of the transaction, for example:	DateTime (25)
		Aug 30 2006 11:15:17 AM	
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 <b>ics_credit</b> and <b>ics_ecp_credit</b> 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> <li>Credit Card Authorization (Accept), Credit Card Settlement (Accept)</li> </ul>	
		■ Tax Calculation(Accept),Credit Card Authorization(Accept) ,Credit Card Settlement(Accept), Advanced Fraud Screen(Accept)	

#### **Sample Record**

Each record includes information about an order.

```
ubcvpl_3,Nov 27 2006 12:27:04 PM,1646520241230167904065,ubcvpl_
3272706102704,,, jane.doe@example.com,,,3333,Customer List
Modification(Accept)

ubcvpl_3,Nov 10 2006 05:24:05 PM,1632013444870167904065,fraud_cleanup_
tool_remove_1163201344486,,,,,,IFS Update(Accept)

ubcvpl_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)"

ubcvpl_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.



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**

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 93 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 Payment Batch Detail Report.	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 YYYY-MM-DD to YYYY-MM-DD. 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 94, page 151.

#### **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,SZJPTM07Y805,Visa, USD,100.00,ics\_bill

Table 94 Fields in the Transaction Record in the Payment Batch Detail Report

Positio n	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.	String (60)
		This field corresponds to the <b><service>_</service> reconciliationID</b> (Simple Order API) and to the <b><service>_trans_ref_no</service></b> (SCMP API) reply fields.	
7	payment_method	Type of card or bank account. For the possible values, see Appendix D, "Types of Cards and Bank Accounts," on page 262.	String (50)
8	currency	ISO currency code used for the transaction.	String (5)

Table 94 Fields in the Transaction Record in the Payment Batch Detail Report

Positio n	Field Name	Description	Data Type and Length
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,,,,

P

Table 95 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 Payment Events Report.	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 <i>YYYY-MM-DD</i> .	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 96, page 155. 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 96 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
1	request_id	Unique identifier generated by CyberSource for the transaction. If your payment processor is Ingenico ePayments, the value in this field may be 1 followed by 21 zeros in these cases:	Numeric (26)
		<ul> <li>Transaction older than six months: request ID no longer stored.</li> </ul>	
		<ul> <li>Transaction information sent by processor: no valid request ID.</li> </ul>	
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)

 Table 96
 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
4	payment_type	Method of payment used for the order. Possible values:	String (10)
		bank transfer: Bank transfer. For China payments and refunds, the bank transfer value indicates a Chinese bank card or PayEase eWallet transaction.	
		<ul> <li>credit card: Personal credit card. For China payments and refunds, the credit card value indicates an international credit card transaction.</li> </ul>	
		■ corporate: Corporate credit card	
		<ul> <li>debit: Debit card, such as a Maestro (UK Domestic) or Solo card</li> </ul>	
		■ check: Electronic check	
		<ul><li>PayPal Credit: PayPal transaction</li></ul>	
		<ul><li>PayPal Debit: PayPal transaction</li></ul>	
		If your processor is TeleCheck, the payment types are:	
		■ Debit: Debit card	
		■ Claim: Bill or settlement	
		■ Credit: Credit card	
		■ Void: Voided transaction	

 Table 96
 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
5	event_type	Type of event that occurred for the transaction:	Alpha (20)
	(credit card, bank transfer, or direct debit transactions)	<ul> <li>Chargeback: The customer did not authorize the transaction. For details about the chargeback, see the "processor_message" value in the report.</li> </ul>	
		<ul> <li>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.</li> </ul>	
		<ul> <li>Failed: The account was invalid or disabled. For details about the failure, see the "processor_ message" value in the report.</li> </ul>	
		<ul> <li>Other: The processor reported an unanticipated event.</li> </ul>	
		<ul> <li>Payment: The payment was received by the processor's bank; the value is always positive.</li> </ul>	
		<ul> <li>Refund: The payment was returned; the value is always negative. For details about the refund, see the "processor_ message" value in the report.</li> </ul>	
		<ul> <li>Reversal: A payment was reversed. For details about the reversal, see the "processor_ message" value in the report.</li> </ul>	
		<ul> <li>Settled: The transaction has been settled: the payment has been received, or the refund has been given to the customer.</li> </ul>	
		<ul> <li>Settled Unmatched: A bank transfer payment has been received but cannot be matched to the original request.</li> </ul>	

 Table 96
 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
5	event_type (PayEase China Processing transactions)	Type of event that occurred for the transaction. Possible values:	Alpha (20)
		<ul> <li>Chargeback: The original payment transaction is being disputed by the cardholder or the cardholder's bank.</li> </ul>	
		Payment Abnormal: The payment has been held up for regulatory or legal reasons.	
		Payment Declined: The processor has refused the payment request.	
		<ul> <li>Payment Failed: The payment request failed. The reason is not specified.</li> </ul>	
		<ul> <li>Payment Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled payment.</li> </ul>	
		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.	
		<ul> <li>Refund Abnormal: The refund has been held up for regulatory or legal reasons.</li> </ul>	
		Refund Declined: The processor has refused the refund request.	

Table 96	Fields in the Transaction Record in the Payment Events Report
----------	---

Position	Field Name	Description	Data Type and Length
		<ul> <li>Refund Failed: The refund request failed. The reason is not specified.</li> </ul>	
		Refund Funded: The processor has submitted a transfer to the merchant's bank account as a result of a settled refund.	
		<ul> <li>Refund Pending Cyb: The refund has not been completed. It is awaiting transmission by CyberSource.</li> </ul>	
		<ul> <li>Refund Pending Proc: The refund has not been completed. It is awaiting settlement by the processor.</li> </ul>	
		<ul> <li>Refund Settled: The refund has been confirmed by the processor and is expected to be funded.</li> </ul>	
		<ul> <li>Unknown: The processor does not acknowledge receiving the request.</li> </ul>	
5	event_type (check transactions)	Type of event that occurred for the check transaction. These values vary with the processor.	Alpha (20)
		Successful Events	
		<ul> <li>Payment: Payment has been received. The value is always positive.</li> </ul>	
		<ul> <li>Refund: A refund (credit) occurred.</li> <li>The value is always</li> <li>negative.Completed: The transaction was completed:</li> </ul>	
		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.	

Table 96 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
		Failed Events	
		<ul> <li>Correction: A positive or negative correction occurred to a payment or refund.</li> </ul>	
		<ul> <li>Declined: The account was invalid or disabled. For details about the decline, see the "processor_ message" value in the report.</li> </ul>	
		Error: An error occurred. For details about the error, see the "processor_message" value in the report.	
		<ul> <li>Failed: The account was invalid or disabled. For details about the failure, see the "processor_ message" value in the report.</li> </ul>	
		<ul><li>Final NSF: The final instance of insufficient funds occurred.</li></ul>	
		<ul><li>First NSF: The bank will attempt to re-deposit the funds.</li></ul>	
		<ul> <li>NSF: The bank returned the check because of insufficient funds.Other: The processor reported an unanticipated event.</li> </ul>	
		<ul> <li>Second NSF: The bank will attempt to re-deposit the funds for the second time.</li> </ul>	
		Stop Payment: The customer stopped the payment.	
		<ul><li>Void: The check was successfully voided.</li></ul>	

Table 96 Fields in the Transaction Record in the Payment Events Report

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:	Alpha (20)
		<ul> <li>Batched: The PayPal transaction was completed, but the funds have not been transferred to your account.</li> </ul>	
		<ul> <li>Canceled_reversal: You requested that the reversal requested by the customer be cancelled.</li> </ul>	
		Completed: The PayPal transaction (standard or pre- approved payment was completed, and the funds have been transferred to your account.	
		<ul> <li>Denied: You denied the request.</li> <li>The reason is not specified.</li> </ul>	
		<ul> <li>Failed: The request failed. The reason is not specified.</li> </ul>	
		<ul> <li>MIPS: A billing agreement was created or modified.</li> </ul>	
		<ul> <li>Pending: The PayPal transaction is not completed. The value will eventually change to Completed, Failed, or Denied.</li> </ul>	
		<ul> <li>Refunded: You initiated a refund of the PayPal payment.</li> </ul>	
		<ul> <li>Reversed: A payment was reversed due to a chargeback or other type of reversal.</li> </ul>	
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.	String (60)
		This field corresponds to the <service>_reconciliationID (Simple Order API) and <service>_trans_ref_ no (SCMP API) reply fields.</service></service>	

Table 96 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
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)
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	Additional information that may appear from the processor about the event, such as an error message or reason. For Ingenico ePayments direct debit reversals, this field contains a banking reversal code. See Appendix F, "Banking Codes in the Payment Events Report," on page 269.	String (255)
		Possible values for PayPal transactions:	
		<ul><li>pending: The payment status is pending.</li></ul>	
		<ul> <li>For a PayPal credit or a PayPal reversal, this field contains one of these values:</li> </ul>	
		<ul> <li>buyer_complaint: The customer has placed a reversal about this transaction.</li> </ul>	
		<ul> <li>chargeback: The customer has initiated a chargeback.</li> </ul>	
		<ul> <li>guarantee: The customer triggered a money back guarantee.</li> </ul>	

 Table 96
 Fields in the Transaction Record in the Payment Events Report

Position	Field Name	Description	Data Type and Length
		<ul> <li>refund: You have given the customer a refund.</li> </ul>	
		<ul> <li>address: The customer did not include a confirmed shipping address. You must manually accept or deny this payment.</li> <li>echeck: The check has not yet cleared.</li> </ul>	
		<ul> <li>intl: You hold a non-U.S. account and do not have a withdrawal method. You must manually accept or deny this payment.</li> </ul>	
		<ul> <li>multi_currency: You do not have a balance in the currency sent. You must manually accept or deny this payment.</li> </ul>	
		<ul> <li>other: A reversal has occurred for a reason other than buyer_complaint, chargeback, guarantee, or refund.         Alternately, the payment is pending for a reason other than address, echeck, intl, multi_currency, unilateral, upgrade, or verify.     </li> </ul>	
		<ul> <li>unilateral: The payment was made to an email address that is not yet registered or confirmed.</li> </ul>	
		<ul> <li>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.</li> </ul>	
		<ul> <li>verify: The payment is pending. You must verify your account before accepting this payment.</li> </ul>	

# **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.



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", "SZJPTM07Y805", "Visa", "USD", "100.00", "ics\_bill", "smartfdc"

#### Table 97 Additional Field for Payment Submission Detail Report

Position	Field Name	Description	Data Type and Length
11	payment_processor	See Processor Names.	String (40)

# **Subscription Detail Report**

Some customer profiles do not have values for all the fields in the report. If a field does not have a value, the field is omitted from the report.

# **CSV Conventions**

The CSV conventions for the Subscription Detail Report are:

■ The first and second records in the report describe the report format and provide the date range for the information in the report.

Records are separated by a carriage return followed by a line feed.

The following table describes the data types. The data lengths indicate the maximum length of each field.

Table 98 Report Data Types

Data Type	Description	
Alphanumeric	String containing letters, numbers, and special characters such as @, #, and $\$ All text uses UTF-8 character encoding.	
Boolean	Single character: T for true or F for false.	
Amount	An amount, including a decimal point if necessary.	
Date	YYYY-MM-DD, where:	
	YYYYY is the four-digit year	
	MM is the two-digit month	
	■ DD is the two-digit day	
	The dashes are included in a Date value.	
Date Time	YYYY-MM-DDTHH:MM:SS[+ -]HH:MM, where:	
	YYYYY is the four-digit year.	
	MM is the two-digit month.	
	■ DD is the two-digit day.	
	$\mathtt{T}HH: \mathtt{MM}: \mathtt{SS}$ is the time, with $\mathtt{H}H$ representing hours, $\mathtt{M}M$ representing minutes and $\mathtt{SS}$ representing seconds.	
	[+ -] $^{HH}:MM$ is the time zone's offset from Greenwich Mean Time (GMT), 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 GMT. For example, the offset for Pacific Daylight Time (PDT is $-0.7:0.0$ .	
	<b>Example</b> 2010-02-28T16:31:18-07:00 represents February 28, 2010 at 4:31:18 PM PDT.	
Numeric	String containing numbers.	

# **CSV Report Fields**

#### **First Header Record**

The first header record provides the report name, report version, and the date range for the information in the report.

#### **Example First Header Record**

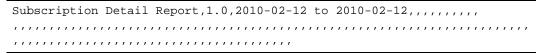


Table 99 Fields in the First Header Record

Position	Field Name	Description	Data Type & Length
1	report_name	Name of the report. Possible value:	Alphanumeric (100)
		Subscription Detail Report	
2	version_number	Version number of the report.	Numeric (10)
3	date_range	Dates included in the report in the format YYYY-MM-DD to YYYY-MM-DD. The first date is the start date. The second date is the end date.	Alphanumeric (100)

#### Second Header Record

The second header record provides the name of each field in the report.

#### Example Second Header Record

merchant\_id,transaction\_date,ics\_applications,payment\_request\_id, recurring\_payment\_event\_amount, recurring\_payment\_amount, currency\_code, subscription\_id, merchant\_ref\_number, customer\_account\_id, subscription\_ type, subscription\_title, last\_subscription\_status, subscription\_status, subscription\_payment\_method,recurring\_start\_date,next\_scheduled\_date, event\_retry\_count,recurring\_number\_of\_payments,payments\_success, payment\_success\_amount,installment\_sequence,installment\_total\_count, recurring\_frequency,recurring\_approval\_required,recurring\_payment\_event\_ approved\_by,recurring\_automatic\_renew,comments,setup\_fee,setup\_fee\_ currency,tax\_amount,customer\_firstname,customer\_lastname,bill\_ address1,bill\_address2,bill\_city,bill\_state,bill\_zip,bill\_country, ship\_to\_address1,ship\_to\_address2,ship\_to\_city,ship\_to\_state, ship\_to\_company\_name,ship\_to\_country,ship\_to\_firstname,ship\_to\_lastname, ship\_to\_zip,company\_name,customer\_email,customer\_phone,customer\_ ipaddress,card\_type,customer\_cc\_expmo,customer\_cc\_expyr,customer\_cc\_ startmo,customer\_cc\_startyr,customer\_cc\_issue-number,account\_suffix,ecp\_ account\_type,ecp\_rdfi,reason\_code,auth\_rcode,auth\_code,auth\_type,auth\_ auth\_avs,auth\_auth\_response,auth\_cavv\_response,ics\_rcode,ics\_rflag,ics\_ rmsg,request\_token,payment\_processor,e\_commerce\_indicator,transaction\_ ref\_number,merchant\_defined\_data1,merchant\_defined\_data2,merchant\_ defined\_data3,merchant\_defined\_data4,merchant\_secure\_data1,merchant\_ secure\_data2, merchant\_secure\_data3, merchant\_secure\_data4

#### **Transaction Record**

Each transaction record provides detailed information about a payment transaction.

#### **Example Transaction Record**

infodev,2010-02-11 18:43:28.0,"ics\_auth,ics\_
bill",18953620762065740,99.99,
0.00,USD,18582716017405740,118588784,,on-demand,,CURRENT,CURRENT,SW,
2010-02-28 07:00:00.0,,0,0,0,0,0,0,ondemand,N,,N,,0.00,USD,,JOHN,SMITH,8310 Capitol of Texas Hwy North,Suite
100,Austin,TX,78731,US,8310 Capitol of Texas Hwy North,Suite
100,Austin,TX,,US,JOHN,SMITH,78731,,customer@example.com,,,Switch,01,201
0,01,07,,1111,,,200,0,JS1111,O,N,00,,,,,Afvvj5r9uxlPGppxMFE2FNaWtdbSB04e
4rJkbTolKnjU04mAAAlw43,hsbc,M,00189193RYPE1SX,gift,rush
shipping,discount #1,discount #2,,,,,

Table 100 Fields in the Transaction Record

Position	Field Name	Field Description	Data Type & Length
1	merchant_id	Your CyberSource merchant ID.	String (30)
2	transaction_date	Date on which the transaction took place.	DateTime (25)
3	ics_applications	Comma-separated list of CyberSource services that were processed.	String (255)
4	payment_request_id	Identifier for the transaction request.	String (26)
5	recurring_payment_event_ amount	Payment amount for an individual payment in an installment or recurring subscription.	String (15)
6	recurring_payment_ amount	Payment amount for all the payments in an installment or recurring subscription.	String (15)
7	currency_code	Currency used by the customer.	String (5)
8	subscription_id	Identifier for the customer profile.	String (26)
9	merchant_ref_number	Merchant-generated order reference or tracking number.	String (50)
10	customer_account_id	Identifier for the customer's account. You defined this value when you created the subscription or customer profile.	String (50)
11	subscription_type	Type of subscription or customer profile. Possible values:	String (20)
		■ on-demand	
		■ recurring	
12	subscription_title	Name or title of the subscription or customer profile.	String (60)
13	last_subscription_status	Status of the subscription or customer profile on the previous day.	String (20)
14	subscription_status	Current status of the subscription or customer profile. Possible values:	String (20)
		■ hold	
		■ retry	
		<ul><li>cancelled</li></ul>	
		■ current	
		■ superseded	
15	subscription_payment_ method	Method of payment associated with the subscription or customer profile.	String (20)

Table 100 Fields in the Transaction Record (Continued)

Position	Field Name	Field Description	Data Type & Length
16	recurring_start_date	First date on which your customer is billed for an installment or recurring subscription.	DateTime (25)
17	next_scheduled_date	Next date on which your customer will be billed for an installment or recurring subscription.	DateTime (25)
18	event_retry_count	Total number of payments that are pending in retry mode.	Integer (3)
19	recurring_number_of_ payments	Total number of payments set up for an installment subscription.	Integer (3)
20	payments_success	Total count of successful payments to date.	Integer (5)
21	payment_success_amount	Total amount of payments to date.	Decimal (15)
22	installment_sequence	Total number of payments in the schedule for an installment subscription.	Decimal (2)
23	installmenttotal_count	Total number of payments for an installment subscription. This value is used in conjunction with installment_sequence to keep track of the number of installments that have been billed.	Decimal (2)
24	recurring_frequency	Frequency of payments for the subscription or customer profile. Possible values:	String (20)
		■ on-demand	
		■ weekly	
		■ bi-weekly	
		■ semi-monthly	
		■ monthly	
		■ quarterly	
		■ quad-weekly	
		■ semi annually	
		■ annually	

Table 100 Fields in the Transaction Record (Continued)

Position	Field Name	Field Description	Data Type & Length
25	recurring_approval_ required	Value indicating whether approval is required for payments for an installment or recurring subscription. Possible values:	String (6)
		<ul><li>true: Payments must be approved before processing.</li></ul>	
		<ul> <li>false: Payments do not need to be approved before processing.</li> </ul>	
26	recurring_payment_event_ approved_by	Name of the person or financial institution that approved the payment.	String (30)
27	recurring_automatic_ renew	Flag indicating whether to automatically renew the payment schedule for an installment subscription. Possible values:	String (5)
		<ul> <li>true: Subscription schedule is renewed automatically.</li> </ul>	
		<ul> <li>false: Subscription schedule will not be renewed automatically.</li> </ul>	
28	comments	Optional comments you can include for the subscription or customer profile.	String (255)
29	setup_fee	Fee that was charged to your customer when the installment or recurring subscription was created.	Decimal (15)
30	setup_fee_currency	Currency of the setup fee.	String (3)
31	tax_amount	Total amount of tax to be applied to the product.	Decimal (15)
32	customer_firstname	First name of the customer.	String (60)
33	customer_lastname	Last name of the customer.	String (60)
34	bill_address1	First line of the billing street address as it appears on the issuer's records.	String (60)
35	bill_address2	Second line of the billing street address. Used for additional address information.	String (60)
36	bill_city	City of the customer.	String (50)
37	bill_state	State or province of the customer's billing address.	String (2)
38	bill_zip	ZIP code of the customer.	String (10)

Table 100 Fields in the Transaction Record (Continued)

Position	Field Name	Field Description	Data Type & Length
39	bill_country	Country of the customer.	String (2)
40	ship_to_address1	Street address to which the product is shipped.	String (60)
41	ship_to_address2	Secondary street address line to which the product is shipped.	String (60)
42	ship_to_city	City to which the product is shipped.	String (60)
43	ship_to_state	State or province to which the product is shipped.	String (2)
44	ship_to_company_name	Company to which the product is shipped.	String (60)
45	ship_to_country	Country to which the product is shipped.	String (2)
46	ship_to_firstname	First name of the person receiving the product.	String (60)
47	ship_to_lastname	Last name of the person receiving the product.	String (60)
48	ship_to_zip	Postal code to which the product will be shipped.	String (10)
49	company_name	Company name of the customer.	String (40)
50	customer_email	Email address of the customer.	String (255)
51	customer_phone	Phone number of the customer.	String (20)
52	customer_ipaddress	IP address of the customer.	String (15)
53	card_type	Card type used for the transaction.  For credit card details, see <i>Credit</i> Card Services Using the SCMP API  or Credit Card Services Using the  Simple Order API.	String (3)
54	customer_cc_expmo	Expiration month of the card.	Integer (2)
55	customer_cc_expyr	Expiration year of the card.	Integer (4)
56	customer_cc_startmo	Starting month of the card validity period for Maestro (UK Domestic) if the card has a start date printed on it.	Integer (2)
57	customer_cc_startyr	Starting year of the card validity period for Maestro (UK Domestic) if the card has a start year printed on it.	Integer (4)
58	customer_cc_issue- number	Indicates how many times a Maestro (UK Domestic) card has been issued to the account holder.	String (5)

Table 100 Fields in the Transaction Record (Continued)

Position	Field Name	Field Description	Data Type & Length
59	account_suffix	Last four digits of the customer's account number.	String (4)
60	ecp_account_type	Account type. Possible values:	String (1)
		■ C: Checking	
		■ S: Savings (USD only)	
		<ul><li>X: Corporate Checking (USD only)</li></ul>	
61	ecp_rdfi	Bank routing /transit number.	Non-negative Integer (9)
62	reason_code	Reason code that indicates why the subscription or customer profile payment succeeded or failed. For details, see the appendix of reason codes in the documentation for the relevant payment method.	Numeric (3)
63	auth_rcode	Indication of whether the authorization was successful.	Integer (1)
64	auth_code	Code returned from a processor for an approved authorization.	String (6)
65	auth_type	Specifies that an authorization was obtained outside the CyberSource system. This value is used with forced captures.	String (6)
		For details on forced captures, see Credit Card Services Using the SCMP API or Credit Card Services Using the Simple Order API.	
66	auth_auth_avs	Result of AVS fraud check.	String (1)
67	auth_auth_response	Response sent from the processor.	String (10)
68	auth_cavv_response	Result of the CVN fraud check.	String (10)
69	ics_rcode	One-digit code that indicates whether the entire request was successful.	Integer (1)
70	ics_rflag	One-word description of the result of the entire request.	String (50)
71	ics_rmsg	Message that explains the <b>ics_flag</b> reply flag.	String (255)
72	request_token	Request token value returned from a request.	String (256)
73	payment_processor	Name of the financial institution that processed the transaction.	String (40)

Table 100 Fields in the Transaction Record (Continued)

Position	Field Name	Field Description	Data Type 8 Length
74	e_commerce_indicator	Type of transaction. Possible values:	String (13)
		■ internet (default)	
		■ moto	
		■ retail	
75	transaction_ref_number	Identifier for the transaction.	String (64)
76-79	merchant_defined_data1	Four fields that merchants can use	String (255)
	merchant_defined_data2	to store information.	
	merchant_defined_data3	Important Merchant-defined data fields are not intended to and MUST	
	merchant_defined_data4	NOT be used to capture personally identifying information. Accordingly, merchants are prohibited from capturing, obtaining, and/or transmitting any personally identifying information in or via the merchant-defined data fields. Personally identifying information includes, but is not limited to card number, social security number, driver's license number, state-issued identification number, passport number, and card verification numbers (CVV, CVC2, CVV2, CID, CVN). In the event CyberSource discovers that a merchant is capturing and/or transmitting personally identifying information via the merchant-defined data fields, whether or not intentionally, CyberSource WILL immediately suspend the merchant's account, which will result in a rejection of any and all transaction requests submitted by the merchant after the point of suspension.	
		<b>Note</b> If you are creating a subscription or customer profile based on an authorization, the merchant-defined data fields do not get transferred to the new subscription or customer profile.	

Table 100 Fields in the Transaction Record (Continued)

Position	Field Name	Field Description	Data Type & Length
80-83	merchant_secure_data1	Storage fields for any type of data.	String (100)
	merchant_secure_data2		
	merchant_secure_data3		
	merchant_secure_data4		

# 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.



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**



Table 101 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 Transaction Exception Detail Report.	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 YYYY-MM-DD to YYYY-MM-DD. 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,0004223530000167905139,2006-05-01T07:42:0307:00,exampleMerchant,3C515C71D48F631,1140625304845,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,999-9999999,,,,,,,,,,,,,,,,,,

Table 102 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 Request.	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 102 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.</service></service>	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 D, "Types of Cards and Bank Accounts," on page 262.	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 Processor Names.	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:	String (15)
		■ ERROR	
		■ FAILED	
		■ CANCELLED	
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 E, "Reason Codes in the Transaction Exception Detail Report," on page 264.	Numeric (3)
15	processor_response_ code	Code returned directly from the processor for the error that occurred.	String (60)

Table 102 Fields in the Transaction Record in the Transaction Exception Detail Report (Continued)

Position	Field Name	Description	Data Type and Length
16	error_category	Type of error. Possible values:	String (20)
		■ Data Error	
		■ Failure	
		■ Processor Error	
		■ Settlement Error	
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)
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)

Table 102 Fields in the Transaction Record in the Transaction Exception Detail Report (Continued)

Position	Field Name	Description	Data Type and Length
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 103 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 User Listing Report.	String (100)
2 (B)	version_number	Version number of the report. The current version number is 1.0.	Numeric (10)

Table 103 Fields in the First Line of the User Management Report

Position (Column)	Field Name	Description	Data Type (Length)
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 104 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)
7 (G)	LastAccess	Date when the user most recently logged in the Business Center.	DateTime (25)
8 (H)	Status	Activity status of the user:	String
		<ul> <li>enabled: user can perform tasks according to permissions granted.</li> </ul>	
		<ul> <li>disabled: user cannot log in the Business Center.</li> </ul>	
9 (I)	Role	Named collection of single permissions that describe the tasks assigned to a user, such as admin or custom.	String
10 (J)	Permissions	Pipe-separated list of all permissions granted to the user, for example:	String
		Customer Profile View Customer Profile Management One Time Payment Subscription View Subscription Management Virtual Terminal Settings View	

# **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

# **Collection Report Appendix**

The information below describes how to reconcile CyberSource transactions with transaction level data in the Ingenico Report known as the Collection Report Appendix.

In order to link CyberSource transactions with transaction level data in the Collection Report Appendix, you need to:

- 1 Collect and save the Reconciliation Reference Number from the API Response Payload.
- 2 Map the Reconciliation Reference Number to transactions in the Collection Report Appendix.

These two steps are elaborated below.



The Collection Appendix Report is not a CyberSource report. This report is generated by Ingenico and made available to its merchants through CyberSource.

Step 1 Collect and save the Reconciliation Reference Number from the API Response payload.

The field name in the API response payload depends on the API and the service called, as described in the following table:

Table 105 Services using Reconciliation Reference Number

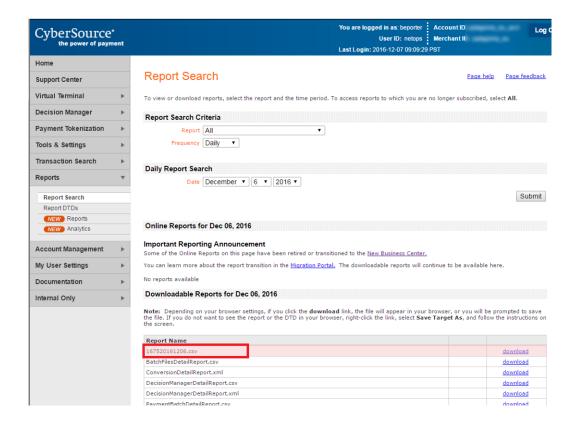
Field Name	Definition	Service Returned By	Data Type (Length)
SCMP API: auth_reconciliation_ reference_number  SO API: ccAuthReply_ reconciliationReferenceNumber	Unique number generated by CyberSource that identifies the transaction. Merchants can use this value to identify transactions in the Ingenico ePayments Collections Report, which provides settlement information.  This field is supported only	Authorization	String (20)
SCMP API: bill_reconciliation_ reference_number	on Ingenico ePayments.  Same as above.	Capture	Same as above.
SO API: ccCaptureService_ reconciliationReferenceNumber			
SCMP API: credit_reconciliation_ reference_number  SO API: ccCreditService_	Same as above.	Credit	Same as above.
reconciliationReferenceNumber  SCMP API: direct_debit_reconciliation_ reference_number	Same as above.	Direct debit	Same as above.
SO API: directDebitReply_ reconciliationReferenceNumber			
SCMP API: direct_debit_refund_ reconciliation_reference_number	Same as above.	Direct debit refund	Same as above.
SO API: directDebitRefundReply_reconciliationReferenceNumber			
SCMP API: bank_transfer_ reconciliation_reference_number	Same as above.	Bank transfer	Same as above.
SO API: bankTransferReply_ reconciliationReferenceNumber			
SCMP API: bank_transfer_refund_ reconciliation_reference_number	Same as above.	Bank transfer refund	Same as above.
SO API: bankTransferRefundReply_reconciliationReferenceNumber			

Table 105 (Continued)Services using Reconciliation Reference Number

Field Name	Definition	Service Returned By	Data Type (Length)
SCMP API: bank_transfer_real_time_reconciliation_reference_number	Same as above.	Real time bank transfer	Same as above.
SO API: bankTransferRealTimeReply_reconciliationReferenceNumber			

- Step 2 Download the daily Collection Appendix Report from the Business Center or from Ingenico, and map the Reconciliation Reference Number from the response to the number in the 13th column (M) in the report. The naming convention for the file is as follows:
  - The first four numbers are the Ingenico Merchant ID.
  - The following numbers represent the report date where date is expressed as YYYYMMDD.

In the example below, the Merchant ID is 1675, the report date is 20161206, and the file name is 167520161206.csv.



# **Report Fields**

Each line of the report includes a transaction record. The table below describes the fields in the report. The 13th column (M) in the report (Merchant Reference Number) is the value you want to use to reconcile your transactions with the API Response.

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

+;ON;1675;20170109;GBP;185.00;GBP;185.00 ;CC;AMEX;N;223209068083;8193590927; ; ;a0117003.pg9;P

Table 106 Fields in the First Line of the Collection Appendix Report

Position (Column)	Field Name	Description	Data Type (Length)	
1 (A)	Record Category	Category of the transaction record.	String	
2 (B)	Record Type	Type of transaction.	String	
3 (C)	Merchant ID	CyberSource Merchant ID.	String (30)	
4 (D)	Date Due	Payment due date.	String	
5 (E)	Currency Due	Currency of payment due.	String	
6 (F)	Amount Due	Payment amount due.	String	
7 (G)	Order Currency	Currency of the order.	String	
8 (H)	Order Amount	Amount of the order.	String	
9 (I)	Payment Method	Transaction payment method.	String	
10 (J)	Credit Card Company	Credit card company for transaction.	String	
11 (K)	Cross-Border Indicator	Indicates whether or not the transaction is a cross-border transaction. A cross-border transaction is a transaction for which the credit card is issued in another country and accepted by a merchant in China.	String	
12 (L)	Payment Reference Number	Payment reference number for the transaction.	String	
13 (M)	Merchant Reference Number	Merchant reference number for the transaction.	String	
14 (N)	Invoice Number	Invoice number used for the transaction.	String	
15 (O)	Customer ID	Customer ID associated with the transaction.	String	
16 (P)	Filename Data Delivery	Location of transaction record in file.	String	
17 (Q)	Payment Type	Type of payment.	String	

# Simple Order API Request and Reply Examples

#### Example 1 Direct Debit Request

```
<?xml version="1.0" encoding="UTF-8"?><requestMessage</pre>
xmlns="urn:schemas-cybersource-com:transaction-data-1.133">
   <merchantID>infodev</merchantID>
   <merchantReferenceCode>41134</merchantReferenceCode>
   <billTo>
      <firstName>John</firstName>
      <lastName>Smith
      <street1>Parkstrasse 4</street1>
      <city>Hinterbruhl</city>
      <postalCode>2371</postalCode>
      <country>AT</country>
      <phoneNumber>999-999-9999</phoneNumber>
      <email>null@cybersource.com</email>
   </billTo>
   <purchaseTotals>
      <currency>eur</currency>
      <grandTotalAmount>100.00/grandTotalAmount>
   </purchaseTotals>
   <fundTransfer>
      <accountNumber>55500643635</accountNumber>
      <accountName>Direct_Debit Testing</accountName>
      <bankCheckDigit>77</bankCheckDigit>
   </fundTransfer>
   <bankInfo>
      <bankCode>31000</pankCode>
      <address>Vienna Central Branch</address>
      <city>Hinterbruhl</city>
      <country>AT</country>
   </bankInfo>
   <directDebitService run="true">
      <directDebitText>Direct Debit Text/directDebitText>
      <directDebitType>001</directDebitType>
   </directDebitService>
</requestMessage>
```

#### Example 2 Direct Debit Reply

```
<?xml version="1.0" encoding="UTF-8"?><c:replyMessage</pre>
xmlns:c="urn:schemas-cybersource-com:transaction-data-1.133">
   <c:merchantReferenceCode>41134</c:merchantReferenceCode>
   <c:requestID>4810177770926150601200</c:requestID>
   <c:decision>ACCEPT</c:decision>
   <c:reasonCode>100</c:reasonCode>
   <c:purchaseTotals>
      <c:currency>eur</c:currency>
   </c:purchaseTotals>
   <c:directDebitReply>
      <c:reasonCode>100</c:reasonCode>
      <c:amount>100.00</c:amount>
      <c:requestDateTime>2016-12-06T09:50:08Z</c:requestDateTime>
      <c:reconciliationID>3002687348</c:reconciliationID>
      <c:processorResponse>800</c:processorResponse>
      <c:mandateID>477938982411684108</c:mandateID>
      <c:iban>AT611904300234573201</c:iban>
      <c:reconciliationReferenceNumber>3002687348
c:reconciliationReferenceNumber>
   </c:directDebitReply>
   <c:reserved>
      <ics_message xmlns="urn:schemas-cybersource-com:transaction-</pre>
data:ics">
      <direct_debit_rmsg>Request was processed successfully.</direct_</pre>
debit rmsq>
      <direct_debit_time>2016-12-06T095008Z</direct_debit_time>
      <currency>eur</currency>
      <direct_debit_trans_ref_no>3002687348</direct_debit_trans_ref_no>
      <ics_return_code>1000000</ics_return_code>
      <direct_debit_rflag>SOK</direct_debit_rflag>
      <direct_debit_return_code>1310000</direct_debit_return_code>
      <request_id>4810177770926150601200</request_id>
      <direct_debit_iban>AT611904300234573201</direct_debit_iban>
      <ics_rmsg>Request was processed successfully.</ics_rmsg>
      <direct_debit_mandate_id>477938982411684108</direct_debit_</pre>
mandate_id>
      <direct_debit_rcode>1</direct_debit_rcode>
      <direct_debit_response_code>800</direct_debit_response_code>
      <direct_debit_amount>100.00</direct_debit_amount>
      <direct_debit_reconciliation_reference_number>3002687348</direct_</pre>
debit_reconciliation_reference_number>
      <ics_decision_reason_code>100</ics_decision_reason_code>
      <direct debit.reason code>100</direct debit.reason code>
      <ics_rflag>SOK</ics_rflag>
      <merchant_ref_number>41134</merchant_ref_number>
      <ics_rcode>1</ics_rcode>
      </ics_message>
   </c:reserved>
</c:replyMessage>
```

# **SCMP API Request and Reply Examples**

#### Example 3 Direct Debit Request

bank\_account\_name=Direct\_Debit Testing bank\_account\_number=202064002123 bank\_address=Malaga Branch bank\_check\_digit=34 bank\_city=Malaga bank\_code=0182 bank\_country=ES bank\_name=Banco Bilbao bank\_swiftcode=BKBKESMMMAL bill\_address1=Apartado 163 bill\_address2=Kontakt E.S.C. bill\_city=Empuriabrava bill\_country=ES bill\_zip=ES-17487 currency=eur customer\_email=null@cybersource.com customer\_firstname=John customer\_lastname=Smith customer\_phone=999-999-9999 direct\_debit\_text=Direct Debit Text direct\_debit\_type=004 grand\_total\_amount=100.00 ics\_applications=ics\_direct\_debit merchant\_id=mercid123 merchant\_ref\_number=41198 request\_id=4810167562350179112523 sender\_id=senderid123

#### Example 4 Direct Debit Reply

```
currency=eur
direct_debit.reason_code=100
direct_debit_amount=100.00
direct_debit_iban=ES9121000418450200051332
direct_debit_mandate_id=119141761517895214
direct_debit_rcode=1
direct_debit_reconciliation_reference_number=3002686613
direct_debit_response_code=800
direct_debit_return_code=1310000
direct_debit_rflag=SOK
direct_debit_rmsg=Request was processed successfully.
direct_debit_time=2016-12-06T093236Z
direct_debit_trans_ref_no=3002686613
ics_decision_reason_code=100
ics_rcode=1
ics_return_code=1000000
ics_rflag=SOK
ics_rmsg=Request was processed successfully.
merchant_ref_number=41198
request_id=4810167562306309301540
```

# XML Report DTDs



# **Notification of Change 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 NotificationOfChanges (NotificationOfChange) *>
<!ELEMENT NotificationOfChange (UpdatedAccountType?,</pre>
UpdatedRoutingNumber?, UpdatedAccountNumber?, UpdatedConsumerName?)>
<!ATTLIST NotificationOfChange MerchantReferenceNumber CDATA #REQUIRED
                TransactionReferenceNumber CDATA #IMPLIED
                NOCDate CDATA #REQUIRED
                NOCCode CDATA #IMPLIED>
<!ELEMENT UpdatedAccountType (#PCDATA)>
<!ELEMENT UpdatedRoutingNumber (#PCDATA)>
<!ELEMENT UpdatedAccountNumber (#PCDATA)>
<!ELEMENT UpdatedConsumerName (#PCDATA)>
```

# **Payment Batch Detail Report**

```
BatchDate CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (TransactionReferenceNumber, PaymentMethod,
CurrencyCode, Amount, CustomerID, Application)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT Application (#PCDATA)>
Version 1.1
<!ELEMENT Report (Batches)>
<!ATTLIST Report Name CDATA #REQUIRED
                Version NMTOKEN #REQUIRED
                 xmlns CDATA #REQUIRED
                 MerchantID CDATA #REQUIRED
                 ReportStartDate CDATA #REQUIRED
```

<!ELEMENT TransactionId (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT CustomerId (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT LineItems (LineItem)\*>
<!ELEMENT LineItem (InvoiceNumber)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT InvoiceNumber (#PCDATA)>
<!ELEMENT Application (#PCDATA)>

## **Version 1.2**

<!ELEMENT TransactionType (#PCDATA)>

```
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, TransactionId,
PaymentMethod, CurrencyCode, CustomerId?, Amount, LineItems?, Application,
WalletType?)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT TransactionId (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT CustomerId (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT LineItems (LineItem) *>
<!ELEMENT LineItem (InvoiceNumber)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT InvoiceNumber (#PCDATA)>
<!ELEMENT Application (#PCDATA)>
<!ELEMENT WalletType (#PCDATA)>
```

```
<!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, TransactionId,
PaymentMethod, CurrencyCode, CustomerId?, Amount, LineItems?, Application,
WalletType?, ProcessorTID?, NetworkTransactionID?)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT TransactionId (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT CustomerId (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
```

```
<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (InvoiceNumber)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT InvoiceNumber (#PCDATA)>
<!ELEMENT Application (#PCDATA)>
<!ELEMENT WalletType (#PCDATA)>
<!ELEMENT ProcessorTID (#PCDATA)>
<!ELEMENT NetworkTransactionID (#PCDATA)>
```

```
<!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, TransactionId,
PaymentMethod, CurrencyCode, CustomerId?, Amount, LineItems?, Application,
WalletType?, Channel?, ProcessorTID?, NetworkTransactionID?,
EffectiveDate?)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT TransactionId (#PCDATA)>
<!ELEMENT PaymentMethod (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT CustomerId (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT LineItems (LineItem)*>
<!ELEMENT LineItem (InvoiceNumber)>
<!ATTLIST LineItem Number CDATA #REQUIRED>
<!ELEMENT InvoiceNumber (#PCDATA)>
<!ELEMENT Application (#PCDATA)>
<!ELEMENT WalletType (#PCDATA)>
<!ELEMENT Channel (Type, SubType)>
<!ELEMENT Type (#PCDATA)>
<!ELEMENT SubType (#PCDATA)>
<!ELEMENT ProcessorTID (#PCDATA)>
<!ELEMENT NetworkTransactionID (#PCDATA)>
<!ELEMENT EffectiveDate (#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
                  TransactionDate CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT BankTransfer (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
Exception?, BoletoNumber?, PaymentTypeDescription)>
<!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 PaymentTypeDescription (#PCDATA)>
<!ELEMENT DirectDebit (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST DirectDebit Event CDATA #REOUIRED
                      EventDate NMTOKEN #REQUIRED>
<!ELEMENT CreditCard (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST CreditCard Event CDATA #REQUIRED
                     EventDate NMTOKEN #REQUIRED>
<!ELEMENT Check (DebitIndicator?, TransactionID?,
TransactionReferenceNumber, MerchantCurrencyCode, MerchantAmount,
ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode, FeeAmount,
ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST Check Event CDATA #REQUIRED
                EventDate NMTOKEN #REQUIRED>
<!ELEMENT FeeCurrencyCode (#PCDATA)>
<!ELEMENT FeeAmount (#PCDATA)>
```

```
<!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
                 TransactionDate CDATA #REQUIRED
                 MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT BankTransfer (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
Exception?, BoletoNumber?, PaymentTypeDescription )>
<!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 PaymentTypeDescription (#PCDATA)>
<!ELEMENT DirectDebit (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST DirectDebit Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT CreditCard (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST CreditCard Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Check (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode,
FeeAmount, ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST Check Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT FeeCurrencyCode (#PCDATA)>
<!ELEMENT FeeAmount (#PCDATA)>
```

```
<!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*, Payment*)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                 TransactionDate CDATA #REQUIRED
                 MerchantReferenceNumber CDATA #REQUIRED>
<!ELEMENT BankTransfer (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
Exception?, BoletoNumber?, PaymentTypeDescription )>
<!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 PaymentTypeDescription (#PCDATA)>
<!ELEMENT DirectDebit (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST DirectDebit Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT CreditCard (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST CreditCard Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Payment (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode,
FeeAmount, ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST Payment Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Check (DebitIndicator?, TransactionID?,
TransactionReferenceNumber, MerchantCurrencyCode, MerchantAmount,
```

```
<!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*, Payment*)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                 TransactionDate CDATA #REQUIRED
                 MerchantReferenceNumber CDATA #REQUIRED
                 Application CDATA #REQUIRED>
<!ELEMENT BankTransfer (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
Exception?, BoletoNumber?, PaymentTypeDescription )>
<!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 PaymentTypeDescription (#PCDATA)>
<!ELEMENT DirectDebit (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
<!ATTLIST DirectDebit Event CDATA #REQUIRED
                        EventDate NMTOKEN #REOUIRED>
<!ELEMENT CreditCard (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription)>
```

```
<!ATTLIST CreditCard Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Payment (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode,
FeeAmount, ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST Payment Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Check (DebitIndicator?, TransactionID?,
TransactionReferenceNumber, MerchantCurrencyCode, MerchantAmount,
ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode, FeeAmount,
ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST Check Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT DebitIndicator (#PCDATA)>
<!ELEMENT TransactionID (#PCDATA)>
<!ELEMENT FeeCurrencyCode (#PCDATA)>
<!ELEMENT FeeAmount (#PCDATA)>
<!ELEMENT PayPal (TransactionReferenceNumber, MerchantCurrencyCode?,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode,
FeeAmount, ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST PayPal Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
Version 1.4
<!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*, Payment*)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                 TransactionDate CDATA #REQUIRED
                 MerchantReferenceNumber CDATA #REQUIRED
                 Application CDATA #REQUIRED>
<!ELEMENT BankTransfer (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
Exception?, BoletoNumber?, PaymentTypeDescription, CustomerId)>
<!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 PaymentTypeDescription (#PCDATA)>
<!ELEMENT CustomerId (#PCDATA)>
<!ELEMENT DirectDebit (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription, CustomerId)>
<!ATTLIST DirectDebit Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT CreditCard (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, ProcessorMessage?,
PaymentTypeDescription, CustomerId)>
<!ATTLIST CreditCard Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Payment (TransactionReferenceNumber, MerchantCurrencyCode,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode,
FeeAmount, ProcessorMessage?, PaymentTypeDescription, CustomerId)>
<!ATTLIST Payment Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT Check (DebitIndicator?, TransactionID?,
TransactionReferenceNumber, MerchantCurrencyCode, MerchantAmount,
ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode, FeeAmount,
ProcessorMessage?, PaymentTypeDescription, CustomerId)>
<!ATTLIST Check Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
<!ELEMENT DebitIndicator (#PCDATA)>
<!ELEMENT TransactionID (#PCDATA)>
<!ELEMENT FeeCurrencyCode (#PCDATA)>
<!ELEMENT FeeAmount (#PCDATA)>
<!ELEMENT PayPal (TransactionReferenceNumber, MerchantCurrencyCode?,
MerchantAmount, ConsumerCurrencyCode, ConsumerAmount, FeeCurrencyCode,
FeeAmount, ProcessorMessage?, PaymentTypeDescription, CustomerId)>
<!ATTLIST PayPal Event CDATA #REQUIRED
                        EventDate NMTOKEN #REQUIRED>
```

# **Payment Submission Detail Report**

```
TargetCurrency?, ExchangeRate?, ExchangeRateDate?, DCCIndicator?,
BoletoNumber?, NumberOfInstallments?)>
<!ATTLIST Request RequestID CDATA #REQUIRED
                  MerchantReferenceNumber CDATA #REOUIRED>
<!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

```
<!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 #REOUIRED>
<!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>
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<!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>
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<!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 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 RMsq (#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?,</pre>
                               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>
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<!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)>
```

```
<!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>
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<!ATTLIST field8 name CDATA #IMPLIED>
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<!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)>
```

```
<!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 RMsq (#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)>
```

```
<!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?, 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)>
```

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

```
<!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 RMsq (#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?,</pre>
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)>
```

The new elements are <BalanceAmount?>, <BalanceCurrencyCode?>, <RequestedAmount?>, and <RequestedAmountCurrencyCode?>.

```
<!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?,
BalanceAmount?, BalanceCurrencyCode?, RequestedAmount?,
RequestedAmountCurrencyCode?)>
<!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 BalanceAmount (#PCDATA)>
<!ELEMENT BalanceCurrencyCode (#PCDATA)>
<!ELEMENT RequestedAmount (#PCDATA)>
<!ELEMENT RequestedAmountCurrencyCode (#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 PassengerType (#PCDATA)>
<!ELEMENT PassengerPhone (#PCDATA)>
<!ELEMENT PassengerPhone (#PCDATA)>
<!ELEMENT PassengerEmail (#PCDATA)>
```

```
The new elements are <CookiesEnabled?>, <FlashEnabled?>,
<ImagesEnabled?>, <JavascriptEnabled?>, <ProxyIPAddress?>,
<ProxyIPAddressActivities?>, <ProxyIPAddressAttributes?>,
<ProxyServerType?>, <TrueIPAddress?>, <TrueIPAddressActivities?>,
<TrueIPAddressAttributes?>.
<!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?,
BalanceAmount?, BalanceCurrencyCode?, RequestedAmount?,
RequestedAmountCurrencyCode?)>
<!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 BalanceAmount (#PCDATA)>
<!ELEMENT BalanceCurrencyCode (#PCDATA)>
<!ELEMENT RequestedAmount (#PCDATA)>
<!ELEMENT RequestedAmountCurrencyCode (#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?, CookiesEnabled?, FlashEnabled?, ImagesEnabled?,
JavascriptEnabled?, ProxyIPAddress?, ProxyIPAddressActivities?,
ProxyIPAddressAttributes?, ProxyServerType?, TrueIPAddress?,
TrueIPAddressActivities?, TrueIPAddressAttributes?)>
<!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)>
```

## **Subscription Detail Report**

```
<!ELEMENT Report (Subscriptions)>
<!ATTLIST Report Name CDATA #REQUIRED
                 Version NMTOKEN #REQUIRED
                 xmlns CDATA #REOUIRED>
                 MerchantID CDATA #REQUIRED
                 ReportStartDate CDATA #REQUIRED
                 ReportEndDate CDATA #REQUIRED
<!ELEMENT SubscriptionPayments (SubscriptionPayment) *>
<!ELEMENT SubscriptionPayment (BillTo, ShipTo, PaymentMethod,
                 PaymentData, MerchantDefinedData,
                 SubscriptionDetails)>
<!ATTLIST SubscriptionPayment payment_request_id CDATA #REQUIRED
                 subscription_id CDATA #REQUIRED
                 transaction_date CDATA #REQUIRED
                 merchant_ref_number CDATA #IMPLIED
                 transaction_ref_number CDATA #IMPLIED
                 e_commerce_indicator CDATA #IMPLIED>
```

```
<!ELEMENT BillTo (customer_firstname, customer_lastname,
                 bill_address1,bill_address2, bill_city, bill_state,
                 bill_zip, bill_country, company_name,
                 customer_email, customer_phone, customer_ipaddress,
                 customer_account_id)>
<!ELEMENT customer_firstname (#PCDATA)>
<!ELEMENT customer_lastname (#PCDATA)>
<!ELEMENT bill_address1 (#PCDATA)>
<!ELEMENT bill_address2 (#PCDATA)>
<!ELEMENT bill_city (#PCDATA)>
<!ELEMENT bill_state (#PCDATA)>
<!ELEMENT bill_zip (#PCDATA)>
<!ELEMENT bill_country (#PCDATA)>
<!ELEMENT company_name (#PCDATA)>
<!ELEMENT customer_email (#PCDATA)>
<!ELEMENT customer_phone (#PCDATA)>
<!ELEMENT customer_ipaddress (#PCDATA)>
<!ELEMENT customer_account_id (#PCDATA)>
<!ELEMENT ShipTo (ship_to_firstname, ship_to_lastname,
                  ship_to_address1, ship_to_address2, ship_to_city,
                  ship_to_state, ship_to_zip, ship_to_country,
                  ship_to_company_name)>
<!ELEMENT ship_to_firstname (#PCDATA)>
<!ELEMENT ship_to_lastname (#PCDATA)>
<!ELEMENT ship_to_address1 (#PCDATA)>
<!ELEMENT ship_to_address2 (#PCDATA)>
<!ELEMENT ship_to_city (#PCDATA)>
<!ELEMENT ship_to_state (#PCDATA)>
<!ELEMENT ship to zip (#PCDATA)>
<!ELEMENT ship_to_country (#PCDATA)>
<!ELEMENT ship_to_company_name (#PCDATA)>
<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (card_type, customer_cc_expmo, customer_cc_expyr,
                customer_cc_startmo, customer_cc_startyr,
                customer_cc_issue-number, account_suffix)>
<!ELEMENT card_type (#PCDATA)>
<!ELEMENT customer_cc_expmo (#PCDATA)>
<!ELEMENT customer_cc_expyr (#PCDATA)>
<!ELEMENT customer_cc_startmo (#PCDATA)>
<!ELEMENT customer cc startyr (#PCDATA)>
<!ELEMENT customer_cc_issue-number (#PCDATA)>
<!ELEMENT account_suffix (#PCDATA)>
<!ELEMENT Check (account_suffix, ecp_account_type, ecp_rdfi)>
<!ELEMENT account_suffix (#PCDATA)>
<!ELEMENT ecp_account_type (#PCDATA)>
<!ELEMENT ecp_rdfi (#PCDATA)>
<!ELEMENT PaymentData (ics_applications,
                 recurring_payment_event_amount, payment_processor,
                 currency_code, reason_code, auth_rcode, auth_code,
                 auth_type, auth_auth_avs, auth_auth_response,
                 auth_cavv_response, ics_rcode, ics_rflag, ics_rmsg,
                 request_token)>
<!ELEMENT ics_applications (#PCDATA)>
```

```
<!ELEMENT recurring_payment_event_amount (#PCDATA)>
<!ELEMENT payment_processor (#PCDATA)>
<!ELEMENT currency_code (#PCDATA)>
<!ELEMENT reason_code (#PCDATA)>
<!ELEMENT auth_rcode (#PCDATA)>
<!ELEMENT auth_code (#PCDATA)>
<!ELEMENT auth_type (#PCDATA)>
<!ELEMENT auth_auth_avs (#PCDATA)>
<!ELEMENT auth_auth_response (#PCDATA)>
<!ELEMENT auth_cavv_response (#PCDATA)>
<!ELEMENT ics_rcode (#PCDATA)>
<!ELEMENT ics_rflag (#PCDATA)>
<!ELEMENT ics_rmsg (#PCDATA)>
<!ELEMENT request_token (#PCDATA)>
<!ELEMENT MerchantDefinedData (merchant_defined_data1,
                 merchant_defined_data2, merchant_defined_data3,
                 merchant_defined_data4)>
<!ELEMENT merchant_defined_data1 (#PCDATA)>
<!ELEMENT merchant_defined_data2 (#PCDATA)>
<!ELEMENT merchant_defined_data3 (#PCDATA)>
<!ELEMENT merchant_defined_data4 (#PCDATA)>
<!ELEMENT SubscriptionDetails (recurring_payment_amount,
                 subscription_type, subscription_title,
                 last_subscription_status, subscription_status,
                 subscription_payment_method, recurring_start_date,
                 next_scheduled_date, event_retry_count,
                 payments_success, payment_success_amount,
                 recurring_number_of_payments?,
                 installment sequence?, installment total count?,
                 recurring_frequency, recurring_approval_required,
                 recurring_payment_event_approved_by,
                 recurring_automatic_renew, comments, setup_fee,
                 setup_fee_currency,tax_amount,
                 merchant_secure_data1, merchant_secure_data2,
                 merchant_secure_data3, merchant_secure_data4)>
<!ELEMENT recurring_payment_amount (#PCDATA)>
<!ELEMENT subscription_type (#PCDATA)>
<!ELEMENT subscription_title (#PCDATA)>
<!ELEMENT last_subscription_status (#PCDATA)>
<!ELEMENT subscription_status (#PCDATA)>
<!ELEMENT subscription_payment_method (#PCDATA)>
<!ELEMENT recurring_start_date (#PCDATA)>
<!ELEMENT next_scheduled_date (#PCDATA)>
<!ELEMENT event_retry_count (#PCDATA)>
<!ELEMENT payments_success (#PCDATA)>
<!ELEMENT payment_success_amount (#PCDATA)>
<!ELEMENT recurring_number_of_payments (#PCDATA)>
<!ELEMENT installment_sequence (#PCDATA)>
<!ELEMENT installment_total_count (#PCDATA)>
<!ELEMENT recurring_frequency (#PCDATA)>
<!ELEMENT recurring_approval_required (#PCDATA)>
<!ELEMENT recurring_payment_event_approved_by (#PCDATA)>
<!ELEMENT recurring_automatic_renew (#PCDATA)>
```

```
<!ELEMENT comments (#PCDATA)>
<!ELEMENT setup_fee (#PCDATA)>
<!ELEMENT setup_fee_currency (#PCDATA)>
<!ELEMENT tax_amount (#PCDATA)>
<!ELEMENT merchant_secure_data1 (#PCDATA)>
<!ELEMENT merchant_secure_data2 (#PCDATA)>
<!ELEMENT merchant_secure_data3 (#PCDATA)>
<!ELEMENT merchant_secure_data4 (#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 ProcessorResponseCode (#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?)>
```

```
<!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, Application)>
<!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 Application (#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?,ProcessorResponseCode?)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Action (#PCDATA)>
<!ELEMENT ErrorCategory (#PCDATA)>
<!ELEMENT ErrorMessage (#PCDATA)>
<!ELEMENT ReasonCode (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#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 #REOUIRED>
<!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>
```

## B

## Sample XML Reports

## **Payment Batch Detail Report**

```
<?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="1.4"</pre>
        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"</pre>
                      MerchantReferenceNumber="45CBBDE3378A553">
               <TransactionReferenceNumber>5652882910
               </TransactionReferenceNumber>
               <PaymentMethod>Visa</PaymentMethod>
               <CurrencyCode>USD</CurrencyCode>
               <Amount>100.00</Amount>
               <CustomerID>123456789</CustomerID>
               <Application>ics_bill</Application>
            </Request>
            <Request RequestID="0004173790000167905139"</pre>
                     MerchantReferenceNumber="5DADC3D2F4B7118">
               <TransactionReferenceNumber>5629152830
               </TransactionReferenceNumber>
               <PaymentMethod>Visa</PaymentMethod>
               <CurrencyCode>USD</CurrencyCode>
               <Amount>100.00</Amount>
               <CustomerID>123456789</CustomerID>
               <Application>ics_credit</Application>
            </Request>
            <Request RequestID="0004174690000167905139"</pre>
                     MerchantReferenceNumber="CBBF93898A39519">
               <TransactionReferenceNumber>5653068690
               </TransactionReferenceNumber>
               <PaymentMethod>Visa</PaymentMethod>
               <CurrencyCode>USD</CurrencyCode>
               <Amount>100.00</Amount>
```

## **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="1.4"</pre>
        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"</pre>
               MerchantReferenceNumber="3C515C71D48F631">
         <BankTransfer Event="Payment"</pre>
                  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"</pre>
               MerchantReferenceNumber="4D587J04H33S492">
         <Check Event="Payment"</pre>
                EventDate= "2003-04-18T09:00-07:00">
            <DebitIndicator>Debit/DebitIndicator>
            <TransacationID>184264545034</TransacationID>
            <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"</pre>
        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"</pre>
                     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"</pre>
                     MerchantReferenceNumber="5DADC3D2F4B7118">
               <TransactionReferenceNumber>5629152830
               </TransactionReferenceNumber>
               <PaymentMethod>Visa</PaymentMethod>
               <CurrencyCode>USD</CurrencyCode>
               <Amount>100.00</Amount>
               <Application>ics_credit</Application>
               <PaymentProcessor>FDMS South/PaymentProcessor>
            </Request>
```

## 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"</pre>
        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"</pre>
                     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>
   </Ratches>
</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/</pre>
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"</pre>
              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
     </LineItem>
   </LineItems>
   <ApplicationReplies>
     <ApplicationReply Name="ics_bill">
       <RCode>1</RCode>
       <RFlag>SOK</RFlag>
       <RMsg>Request was processed successfully.
     </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"</pre>
       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"</pre>
             RequestDate="2008-05-01T07:42:03-07:00"
             MerchantReferenceNumber="3C515C71D48F631"
             Comments="rush order"
             TransactionReferenceNumber="20080110_1684_370597149">
    <RillTo>
      <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
     </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/
tdr_1_4.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/</pre>
tdr_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"</pre>
              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.
      </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 Boleto Bancário

This sample contains a successful Boleto 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/
tdr_1_4.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/</pre>
tdr_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"</pre>
              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
      </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 "https://ebctest.cybersource.com/ebctest/reports/</pre>
dtd/tdr_1_5.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_</pre>
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-</pre>
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>

<CompanyName>OK Go</CompanyName>

<State>CA</State><Zip>94043</Zip>

```
<Email>jdoe@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
        </LineItem>
     </LineItems>
     <ApplicationReplies>
        <ApplicationReply Name="ics_ecp_debit">
          <RCode>1</RCode>
          <RFlag>SOK</RFlag>
          <RMsg>Request was processed successfully.
        </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"
    MerchantID="ok_go"
    ReportStartDate="2009-05-26T18:30:00-08:00"
    ReportEndDate="2009-05-27T18:30:00-08:00">
<Requests>
   <Request RequestID="2434465504100167904567"</pre>
            ReguestDate="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.
       </ApplicationReply>
       <ApplicationReply Name="ics_decision">
       <RCode>0</RCode>
       <RFlag>DREVIEW</RFlag>
```

```
<RMsq>Decision is REVIEW.</RMsq>
</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>O</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>
         <R111e>
         <RuleName>sample rule name/RuleName>
         <RuleDecision>IGNORE</RuleDecision>
         </Rule>
         </RuleList>
         </Profile>
         </ProfileList>
         <TravelData>
         <TripInfo>
         <CompleteRoute>AB-CD:EF-GH</CompleteRoute>
         <JourneyType>round trip
         <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
         <PassengerEmail>jdoe@example.com</PassengerEmail>
         </Passenger>
         </PassengerInfo>
         </TravelData>
      </Request>
   </Requests>
</Report>
```

```
<Request MerchantReferenceNumber="66663986" RequestDate="2010-05-</pre>
05T13:03:17-06:00" RequestID="2730825971570000131868" SubscriptionID=""
Source="SCMP API" TransactionReferenceNumber="0550479788T1ND8Z">
         <BillTo>
            <FirstName>Sample</FirstName>
            <LastName>Merchant</LastName>
            <Address1>1001 Test Ave.</Address1>
            <Address2>Suite 16</Address2>
            <City>Test City</City>
            <State>TX</State>
            <Zip>12345</Zip>
            <Email>sample@example.com</Email>
            <Country>US</Country>
            <Phone/>
         </BillTo>
         <PaymentMethod>
            <Card>
               <AccountSuffix>1111</AccountSuffix>
               <ExpirationMonth>12</ExpirationMonth>
               <ExpirationYear>2021</ExpirationYear>
               <CardType>Visa</CardType>
            </Card>
         </PaymentMethod>
         <LineItems>
            <LineItem Number="0">
               <FulfillmentType/>
               <Ouantity>1</Ouantity>
               <UnitPrice>1.00</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>
         </ApplicationReplies>
         <PaymentData>
            <PaymentRequestID>2730825971570000131868/PaymentRequestID>
            <PaymentProcessor>smartpay/PaymentProcessor>
            <Amount>1.00</Amount>
            <CurrencyCode>USD</CurrencyCode>
            <TotalTaxAmount>0.00</TotalTaxAmount>
            <AuthorizationCode>888888</AuthorizationCode>
            <AVSResult>I1</AVSResult>
            <AVSResultMapped>X</AVSResultMapped>
            <RequestedAmount>1.00</RequestedAmount>
            <RequestedAmountCurrencyCode>USD</RequestedAmountCurrencyCode>
         </PaymentData>
      </Request>
```

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

#### Subscription Detail Report

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM
   "https://ebctest.cybersource.com/ebctest/reports/dtd/sdr.dtd">
<Report Name="Subscription Detail"</pre>
  Version="1.0"
  xmlns=""https://ebctest.cybersource.com/ebctest/reports/dtd/sdr.dtd""
  MerchantID="infodev"
  ReportStartDate="2010-02-11T15:00:00+09:00"
  ReportEndDate="2010-02-12T15:00:00+09:00">
   <SubscriptionPayments>
      <SubscriptionPayment payment_request_id="11111111111111111111"</pre>
                  subscription_id="1111111111111111111"
                  transaction_date="2010-02-11T18:43:28+09:00"
                  merchant_ref_number="1111111111111"
                  transaction_ref_number="1111111RYZPS6548PSX"
                  e_commerce_inidicator="M">
         <BillTo>
            <customer firstname>JOHN</customer firstname>
            <customer_lastname>SMITH</customer_lastname>
            <bill_address1>8310 Capitol of Texas Hwy North</bill_address1>
            <bill_address2>Suite 100</bill_address2>
            <bill_city>Austin</bill_city>
            <bill_state>TX</bill_state>
            <bill_zip>78731</bill_zip>
            <bill_country>US</bill_country>
            <company_name>Your Company/company name>
            <customer_email>customer@example.com</customer_email>
            <customer_phone>650-965-6000</customer_phone>
            <customer_ipaddress>http://11.1.1.111</customer_ipaddress>
            <customer_account_id>111111</customer_account_id>
         </BillTo>
         <ShipTo>
            <ship_to_firstname>JOHN</ship_to_firstname>
            <ship_to_lastname>SMITH</ship_to_lastname>
            <ship_to_address1>8310 Capitol of Texas Hwy
               </ship_to_address1>
            <ship_to_address2>Suite 100</ship_to_address2>
            <ship_to_city>Austin</ship_to_city>
            <ship_to_state>TX</ship_to_state>
            <ship_to_zip>78731</ship_to_zip>
            <ship_to_country>US</ship_to_country>
            <ship_to_company_name>Your Company</ship_to_company_name>
         </ShipTo>
         <PaymentMethod>
```

```
<Card>
               <card_type>Visa</card_type>
               <customer_cc_expmo>01</customer_cc_expmo>
               <customer_cc_expyr>2011</customer_cc_expyr>
               <account_suffix>1111</account_suffix>
            </Card>
         </PaymentMethod>
         <PaymentData>
            <ics_applications>ics_auth,ics_bill</ics_applications>
           <recurring_payment_event_amount>99.99
            </recurring_payment_event_amount>
            <payment_processor>hsbc</payment_processor>
            <currency_code>USD</currency_code>
            <reason_code>200</reason_code>
            <auth rcode>0</auth rcode>
            <auth_code>JS1111</auth_code>
            <auth_type>0</auth_type>
            <auth_auth_avs>N</auth_auth_avs>
            <auth_auth_response>00</auth_auth_response>
            <auth_cavv_response>1111</auth_cavv_response>
            <ics_rcode>1</ics_rcode>
            <ics_rflag>111111111</ics_rflag>
            <ics_rmsg>1111111111</ics_rmsg>
            <request_token>5r9ux1PGppxMFEWusMJsKaWtdb444</request_token>
         </PaymentData>
         <MerchantDefinedData>
            <merchant_defined_data1>gift</merchant_defined_data1>
            <merchant_defined_data2>rush shipping</merchant_defined_</pre>
data2>
            <merchant_defined_data3>document #1</merchant_defined_data3>
            <merchant_defined_data4>document #2</merchant_defined_data4>
         </MerchantDefinedData>
         <SubscriptionDetails>
            <recurring_payment_amount>0.00</recurring_payment_amount>
            <subscription_type>on-demand</subscription_type>
            <subscription_title>My Subscription/subscription_title>
            <last_subscription_status>CURRENT</last_subscription_status>
            <subscription_status>CURRENT</subscription_status>
            <subscription_payment_method>SW</subscription_payment_method>
            <recurring_start_date>2010-02-01 07:00:00.0</recurring_start_</pre>
date>
            <next_scheduled_date>2010-03-01 07:00:00.0/next_scheduled_
date>
            <event_retry_count>0</event_retry_count>
            <payments_success>0</payments_success>
            <payment_success_amount>0.00</payment_success_amount>
            <recurring_number_of_payments>0</recurring_number_of_</pre>
payments>
            <installment_sequence>0.00</installment_sequence>
            <installment_total_count>0.00</installment_total_count>
            <recurring_frequency>on-demand</recurring_frequency>
            <recurring_approval_required>N</recurring_approval_required>
            <recurring_payment_event_approved_by>hsbc
```

## 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"</pre>
       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
        <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>
      <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"</pre>
        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"</pre>
      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>
```

#### Sample CSV Reports



#### **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, 5652882910, Visa, USD, 100.00, ics_
bill

123456, CyberSource, 2003-05-
01,0004173790000167905139, 5DADC3D2F4B7118, 5629152830, Visa, USD, -
100.00, ics_credit

123456, CyberSource, 2003-05-
01,0004174690000167905139, CBBF93898A39519, 5653068690, 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 Submission Detail Report**

This sample contains two capture transactions and one credit transaction.

Payment, 2/28/2004, 58342, USD, 100.00, USD, 100.00, USD, 1.00,



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","45CBBDE3378A553","5652882910","Visa","USD",
"100.00","ics_bill","FDMS South"

"123456","CyberSource","2003-05-
01","0004173790000167905139","5DADC3D2F4B7118","5629152830","Visa","USD",
"-100.00","ics_credit","FDMS South"

"123456","CyberSource","2003-05-
01","0004174690000167905139","CBBF93898A39519","5653068690","Visa","USD",
"100.00","ics_bill","FDMS South"
```

#### **Subscription Detail Report**

recurring frequency, recurring approval required, recurring payment event\_approved\_by, recurring\_automatic\_renew, comments, setup\_fee, setup\_fee\_currency,tax\_amount,customer\_firstname,customer\_lastname, bill\_address1,bill\_address2,bill\_city,bill\_state,bill\_zip, bill\_country, ship\_to\_address1, ship\_to\_address2, ship\_to\_city, ship\_to\_state,ship\_to\_company\_name,ship\_to\_country,ship\_to\_firstname, ship\_to\_lastname,ship\_to\_zip,company\_name,customer\_email, customer\_phone,customer\_ipaddress,card\_type,customer\_cc\_expmo, customer\_cc\_expyr,customer\_cc\_startmo,customer\_cc\_startyr, customer\_cc\_issue-number,account\_suffix,ecp\_account\_type,ecp\_rdfi, reason\_code,auth\_rcode,auth\_code,auth\_type,auth\_auth\_avs, auth\_auth\_response,auth\_cavv\_response,ics\_rcode,ics\_rflag,ics\_rmsg, request\_token,payment\_processor,e\_commerce\_indicator, transaction\_ref\_number,merchant\_defined\_data1,merchant\_defined\_data2, merchant\_defined\_data3, merchant\_defined\_data4, merchant\_secure\_data1, merchant\_secure\_data2,merchant\_secure\_data3,merchant\_secure\_data4 infodev, 2010-02-11 18:43:28.0, "ics\_auth, ics\_bill", 18953620762065740, 99.99,0.00,USD,185827160174065740,118588784,,on-demand,,CURRENT, CURRENT, SW, 2010-02-28 07:00:00.0,,0,0,0,0,0,0,0,,on-demand, N,,N,,0.00, USD,, JOHN, SMITH, 8310 Capitol of Texas Hwy North, Suite 100, Austin, TX, 78731, US, 8310 Capitol of Texas Hwy North, Suite 100, Austin, TX,, US, JOHN, SMITH, 78731,, customer@example.com,,, Switch, 01, 2010, 01, 07,, 1111,,,200,0,JS1111,O,N,00,,,,,Afvvj5r9uxlPGppxbSB04e4rJknx81+3YynjU0 4mAAA1w43,hsbc,M,00189193RYPE1SX,gift,rush shipping,discount #1, discount #2,,,, infodev, 2010-02-11 18:49:36.0, ics auth, 18953657621065740, 49.99, 0.00, USD, 185827143974065740, 118588784, , on-demand, , CURRENT, CURRENT, SW, 2010-02-28 07:00:00.0,,0,0,0,0,0,0,0,,on-demand,N,,N,,0.00,USD,,JOHN, SMITH, 8310 Capitol of Texas Hwy North, Suite 100, Austin, TX, 78731, US, 8310 Capitol of Texas Hwy North, Suite 100, Austin, TX, US, JOHN, SMITH, 78731,,customer@example.com,,,Switch,01,2010,01,07,,1111,,,200,0, JS1111,O,N,00,,,,,Afvvj5r973pjupIRxWTI2nRKUas9KsBPj5r973pjupIRMA AA2xQH, hsbc, M, 00189195RYPE1T0, gift, rush shipping, discount #1, discount #2,,,,,

## Transaction Exception Detail Report

address2,bill\_city,bill\_state,bill\_zip,bill\_country,company\_

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

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

Request,1466816420000167904565,2006-05-03T11:40:44-05:00,gdtest2,,,QYEM5E8UK7Z9RX,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,,Nederlands,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,,,QYGR0YBCK6TG71,Refund,DD,,4.25,eur,cybersource,1466922580000167904565,ERROR,313,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

## Types of Cards and Bank Accounts

D

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
- China Cash On Order
- 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.

### Е

# 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 107 Reason Codes in the Transaction Exception Detail Report

Reason Code Reply Flag	Description
101	The request is missing one or more required fields.
DMISSINGFIELD	Possible action: If you are using the Simple Order API, see the reply fields <b>missingField_0N</b> for which fields are missing. Resend the request with the complete information.
102	One or more fields in the request contains invalid data.
DINVALIDDATA	Possible action: If you are using the Simple Order API, see the reply fields <code>invalidField_0N</code> for the invalid fields. If you are using the Hosted Order Page, you can receive this reason code for invalid ( <code>InvalidField_0N</code> ) and missing ( <code>MissingField_0N</code> ) 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	Error: General system failure.
ESYSTEM	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 107 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.
	<b>Note</b> 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.
20, 11, 21, 21, 2022	Possible action: Request a different card or other form of payment.
204	The account has insufficient funds.
DCARDREFUSED	Possible action: Request a different card or other form of payment.
205	The card was stolen or lost.
DCARDREFUSED	Possible action: Review the customer's information and determine if you want to request a different card from the customer.
207	The issuing bank was unavailable.
DCARDREFUSED	Possible action: Wait a few minutes and resend the request.
208	The card is inactive or not authorized for card-not-present transactions.
DCARDREFUSED	Possible action: Request a different card or other form of payment.
209	American Express Card Identification Digits (CID) did not match.
DCARDREFUSED	Possible action: Request a different card or other form of payment.
210	The credit limit for the card has been reached.
DCARDREFUSED	Possible action: Request a different card or other form of payment.
223 DPAYMENTREFU SED	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	Invalid account number.
DINVALIDCARD	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 107 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	Processor failure.
DINVALIDDATA	Possible action: Wait a few minutes and resend the request.
237	The authorization has already been reversed.
DINVALIDDATA	Possible action: No action required.
238	The authorization has already been captured.
DINVALIDDATA	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	The request ID is invalid for the follow-on request.
DINVALIDDATA	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	The transaction has already been settled or reversed.
DINVALIDDATA	Possible action: No action required.
244 DINVALIDACCOU NT	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.

Table 107 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code Reply Flag	Description
247	You requested a credit for a capture that was previously voided.
DINVALIDDATA	Possible action: No action required.
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 <b>directDebitService_validateRequestID</b> 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 <i>Global Payment Service Planning and User's Guide</i> .

Table 107 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code Reply Flag	Description
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 <i>Global Payment Service Planning and User's Guide</i> .
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	You have exceeded the maximum daily refund amount allowed.
DINVALIDDATA	Suggested action: Resend your request the following day.
342	An error occurred during settlement.
DINVALIDDATA	Suggested action: Verify the information in your request and resend the order.

## APPENDIX

## F

## 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, Ingenico ePayments processors return a banking reversal code. For electronic check debit reversals, CyberSource ACH Service returns a banking reason code.

Table 108 describes the possible values for the Ingenico ePayments banking reversal codes.

Table 109 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 45
- Payment Events Report, CSV format, on page 152
- Direct debits chapter in the Global Payment Service Planning and User's Guide

#### Table 108 Ingenico ePayments 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.
10	Name/number do not match. The account number and named account holder do not match.

Table 108 Ingenico ePayments Banking Reversal Codes (Continued)

Code	Description
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 109 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.
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.

Table 109 CyberSource ACH Service Return Reason Codes (Continued)

Code	Description
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.
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.

Table 109 CyberSource ACH Service Return Reason Codes (Continued)

Code	Description
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).

APPEN

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

#### 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.
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.

Codes	Description	
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.	
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, mail.example.com) 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.	

Codes	Description	
NEG-IP	The IP address (for example, 10.1.27.63) is on the negative list.	
NEG-IP3	The network IP address (for example, 10.1.27) 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.
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)



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.	

Codes	Description	
VELI-SA	The shipping address has been used several times during the medium tracking interval.	
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.

### Н

## Notification of Change Codes

The following table describes the Notification of Change (NOC) codes.

Table 110 NOC Codes

Code	NOC Reason	Description	Required Action
C01	Incorrect account number	The customer's bank account number is incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C02	Incorrect routing number	The bank's routing number is incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C03	Incorrect routing number and incorrect account number	The bank's routing number and the customer's bank account number are incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C04	Incorrect customer name	The customer name associated with the bank account is incorrect.	Correct all applicable records before submitting additional electronic check transactions for the customer.
C05	Incorrect transaction code	The transaction was submitted to a specific type of account but includes a conflicting account type code (checking / savings).	Correct all applicable records before submitting additional electronic check transactions for the customer.
C06	Incorrect account number and incorrect transaction code	The customer's bank account number is incorrect and the transaction was submitted to a specific type of account but includes a conflicting account type code (checking /savings).	Correct all applicable records before submitting additional electronic check transactions for the customer.

Table 110 NOC Codes

Code	NOC Reason	Description	Required Action
C07	Incorrect routing number, incorrect account number, and incorrect transaction code	The bank's routing number and the customer's bank account number are incorrect. Additionally, the transaction was submitted to a specific type of account but includes a conflicting account type code (checking /savings).	Correct all applicable records before submitting additional electronic check transactions for the customer.

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