

CyberSource Business Center Reporting

User Guide

January 2017



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Recent Revisions to This Document

Release	Changes
January 2017	■ Removed the Capture Detail Report. This report has been retired.
September 2014	■ Added updated DTDs for the following reports: <ul style="list-style-type: none">• Payment Events Report• Transaction Exception Detail Report
April 2014	■ This revision contains only editorial changes and no technical updates.
December 2013	■ This revision contains only editorial changes and no technical updates.
June 2010	■ Updated the test and production report server URL. See " Formatting the URL ," page 36.
May 2010	■ Added Single Transaction Report version 1.7. See " Single Transaction Report ," page 122.

Introduction to Reports

The Business Center is your focal point when you need to reconcile your orders and the amount in your bank account. The reports show all the payments collected from all customers during a specific day and the refunds. In addition to reconciling your orders, you can use the reports for many purposes:

- To view the total number of orders and the total amount by card type. For example, you can use this information to decide what credit cards to accept.
- To compare your sales with your credits. For example, you can use this information to make sure that your credits do not exceed a certain percentage of your sales and that no suspicious pattern exists in the amounts refunded to customers.
- To review and process your orders during the day if you have multiple fulfillment cycles and offer same-day shipping for orders received before a certain time.

**Important**

Reports are available on the Business Center for six months. If you need to save or print a report, make sure to do so before the report is deleted.

This chapter comprises these sections:

- [User Permissions](#)
- [Types of Reports](#)
- [Report Formats](#)

For all reports, you can find a list of [ISO Standard Country Codes](#) and of [State, Province, and Territory Codes for the United States and Canada](#) in the Support Center.

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. For instructions on setting the user permissions, see the [Business Center User Guide](#).

[Table 1](#) 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. However, the user cannot log into the Business Center. Important You cannot use an administrator account to download reports.

User Administration

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

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

User Name	Role	Name	Email Address
ubcp1_3	admin	James	
ubcp3user1	reportdownload	ubc p3user1	
ubcp3user2	custom	ubcp3 user2	
ubcp3user4	custom	ubcp3 user4	
ubcp3user5	custom	ubcp3 user5	
ubcp3user6	custom	ubcp3 user6	
akuma	custom	ashok	
hmoham	custom	Haneef	
vdddsa	custom	Vin	

Add User

Role Management

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

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

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

Add Role

Types of Reports

The Business Center provides several types of reports that are divided among two main groups:

- Pre-defined reports are generated automatically for all merchants every day (or week or month):
 - [Authorization Reports](#)
 - [Payment Events Report](#)
 - [Capture Reports](#)
 - [Transaction Exception Detail Report](#)
 - [Order Detail Report](#)

For pre-defined reports, see [Chapter 2, "Using Pre-Defined Reports," on page 16](#).

- On-demand reports can be requested at will through the Business Center:
 - Exportable Search Results. See ["Downloading Search Results," page 29](#).
 - On-Demand Reports available with an API query (POST method) or a client application (GET method). See ["Using a Client Application," page 35](#) and ["Using a Query API," page 38](#).
 - On-demand reports. See ["Requesting On-Demand Reports," page 29](#):
 - ["Transaction Exception Detail Report," page 42](#)
 - ["Single Transaction Report," page 45](#)
 - ["User Management Report," page 47](#)

Subscribing to Downloadable Reports

You can select the format (CSV or XML) for reports in the Business Center under Account Management > Report Subscriptions.

Step 1 On the Report Subscriptions page, click **Edit**.

Step 2 Select the options that you want, and click **Update**.

You cannot receive a report in more than one format or in a format to which you have not subscribed. All merchants receive the Order Detail Report. All merchants who accept electronic checks processed with TeleCheck receive the Payment Events Report. By default, all merchants are automatically signed up to receive the CSV format of these reports. Your changes take effect after 48 hours.

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 below:

```
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.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://businesscenter.cybersource.com/sbc/
reports/dtlds/odr.dtd">
<Report Name="Order Detail Report"
  Version="1.0"
  xmlns="https://businesscenter.cybersource.com/sbc/reports/
dtlds/
  odr.dtd"
  MerchantID="abc0002"
  ReportStartDate="2004-04-13T07:00:00-07:00"
  ReportEndDate="2004-04-14T07:00:00-07:00">
  <Requests>
    <Request RequestID="0818691223270167904565"
      TransactionDate="2004-04-13T15:12:09-07:00"
      MerchantReferenceCode="1081869122069">
    </Request>
  </Requests>
</Report>
```

The Order Detail Report, the Payment Events Report, and the Transaction Exception Detail Report are available in XML format.

CSV Format

To understand how a report in CSV format is constructed, you need to become familiar with the data types used.

Conventions

CSV reports use the following conventions:

- The first and second records in the report describe the report format and indicate which dates are 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 as follows:


```
"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 as follows:


```
"Sample ""value"""
```
- Records are separated by a carriage return and a line feed.

Data Types and Lengths

This chapter uses the following terms 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), 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`.

Example `2004-04-13T07:00:00-07:00` represents **April 4, 2004 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.

XML Format

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

Syntax

Each report is described as follows.

Report Declaration

These conventions are used to describe the report:

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



Note

The value of `URireference` is the same as that for `xmlns`. Whether you are operating in test or live mode, the namespace always refers to `businesscentertest` (Order Detail report) or `ebctest` (exportable search results, and Payment Events and Transaction Exception Detail reports), not `businesscenter` or `ebc`. In addition, the root element for the exported search results is `Result`, not `Report`.

Element Declaration

This section uses the following conventions to describe each XML element:

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



Note

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

Table 2 Conventions for XML Syntax

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

Data Types and Lengths

This chapter uses the following terms 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), 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*.

Example 2004-04-13T07:00:00-07:00 represents April 4, 2004 at 7 AM PDT.
- Numeric: string containing numbers.
- String: Letters, numbers, and special characters (for example, @, #, and %). All text uses UTF-8 character encoding.

The data lengths indicate the maximum length of each field.

Using Pre-Defined Reports

This chapter describes the types of pre-defined report available and how to view, print, download, and save your reports in one of the available formats if you need to keep them for a long time.

Choosing a Report

You can find these reports in the Business Center:

- [Authorization Reports](#)
- [Batch File Reports](#)
- [Order Detail Report](#)
- [Payment Events Report](#)
- [Transaction Exception Detail Report](#)

Authorization Reports

Authorization reports are available as daily detail, monthly detail, and monthly summary reports. To download a CSV version of these reports, scroll to the bottom of the page and click the link.

Authorization Detail Report

This report shows each card authorization and the result of each request (accepted or declined). Within each section, the credit cards are listed alphabetically, and each order is detailed under the appropriate card type. The totals are located at the top of the sections.

Table 3 Fields in the Authorization Detail Report

Field	Description
Order Number	Your order number
Date	Date of the transaction

Table 3 Fields in the Authorization Detail Report (Continued)

Trans Ref No	CyberSource's unique reference number for the transaction
CC Last 4	Last four digits of the customer's payment card
Amount	Amount of the transaction
Customer Data	Customer's billing information and email address
Customer ID	If available, your identifier for the customer
Merch-Defined	If available, merchant-defined data containing more order information
Comments	If available, additional information that you added to the order
Reason	Three-digit reason code indicating the result for the transaction
Source	Your user who processed the transaction




You can view daily or monthly versions (Authorization Monthly Detail Report) of this report. Use the Authorization Detail Report to ensure that your Smart Authorization settings are not causing legitimate orders to be declined and to follow your recent orders. To export this report in CSV format, see ["Exporting a Report to a Spreadsheet," page 26](#).

Report

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

If your browser recognizes the output, the report will appear below. Otherwise, you will be prompted to save the file. The process may take a few minutes.

Report View

Next > 1 of 12 Export:   

Authorization Detail Report

20 April 2007

Currency USD

Approved Transactions Grand Total: 17

Visa Total: 17

Order Number	Date	Trans Ref No	CC Last 4	Amount	Customer Data	Customer ID	Merch-Def
33557799	04/20/07	02343692U00DZZ	2317	15	B.H TASK 610 Aiden Rd. Suite Return Markham, ON L3R 9Z1 big.harrytask@cybersour ce.com		
75849309	04/20/07	02365868U0P07C	2317	1	B.H TASK 610 Aiden Rd. Suite Return Markham, ON L3R 9Z1 big.harrytask@cybersour ce.com		
75849309	04/20/07	02365869U0P07C	2317	1	B.H TASK 610 Aiden Rd. Suite Return Markham, ON L3R 9Z1 big.harrytask@cybersour ce.com		

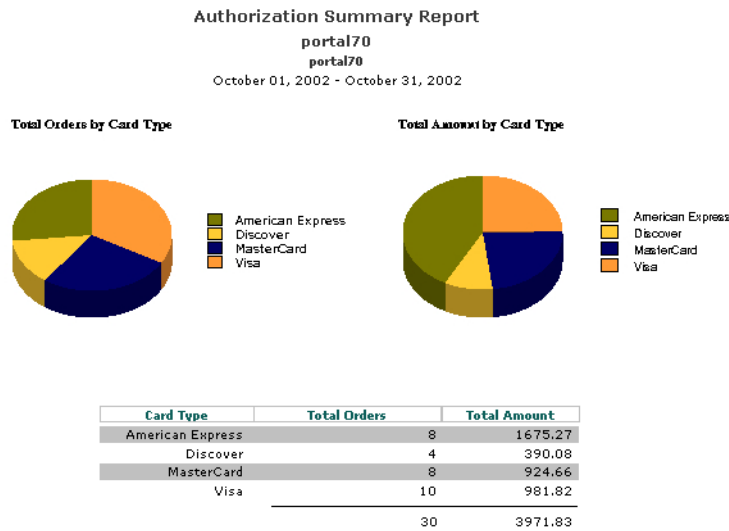
Declined Transactions Grand Total: 6.42

Visa Total: 6.42

Order Number	Date	Trans Ref No	CC Last 4	Amount	Customer Data	Customer ID	Merch-Def
33557799	04/20/07	KPOWU0P0705G	1111	3.21	JAMES BOND 600 Morgan Falls Road Room 2-21 Atlanta, GA 30350 skoutl@cybersource.com		
33557799	04/20/07	KPOWU0P0705H	1111	3.21	JAMES BOND 600 Morgan Falls Road Room 2-21 Atlanta, GA 30350 skoutl@cybersource.com		

Authorization Summary Report

The Authorization Summary Report provides a daily or monthly overview of your business activity. This report is organized by the card types that your customers use. The report includes graphs that show the percentage of orders in which each card type was used and the total amount of purchases made with each card type. Use this report to better understand your overall business activity and to see what card types to accept. To export this report in CSV format, see "Exporting a Report to a Spreadsheet," page 26.



Batch File Reports

After all the requests in a file are processed, CyberSource creates two reports:

- Response files show the results of the requests.
- Daily Summary Report shows a summary of the batched transactions.
- Daily Detail Report (CSV and XML formats) shows details of the batched transactions.

Response Files

After all the requests in the file are processed, CyberSource creates two types of CSV-formatted response files that you can use to determine the results of the requests in the file:

- Full file: includes the results for all the requests in the batched transactions file.

Format for the name of the file <merchantID>.<batchID>.<date your file was received>.reply.all

Example infodev.12345.20070612.reply.all

- Exception file: includes results for the requests for which the decision is not `ACCEPT`: all requests that are marked for review or are rejected.

Format for the name of the file `<merchantID>.<batchID>.<date your file was received>.reply.rejected`

Example `infodev.12345.20070612.reply.rejected`

The reports are available in the Reports area of the [Business Center](#). You can download them as you download other CyberSource reports.

These files comprise a file header followed by a blank line and one or more data records, each on a separate line.

File Header

The file header is a list of comma-separated name-value pairs with the merchant ID and the batch ID.

Example Response File Header

```
merchantID=infodev,batchID=12345
```

Data Records

The data records provide the API reply information for the requests in the file. Each data record consists of a comma-separated list of name-value pairs containing the API reply information for a single request. The name-value pairs can be in any order.



Note

The order of the data records in the response file may not correspond to the order of the requests in your file. Use the value of the **merchantReferenceCode** to link the result in the response file to the corresponding request from the batch transaction file.

The following example shows a full file with two successful requests and one failed request. The failed request is the second data record (in bold) in the example.

Example Response File

```
merchantID=infodev,batchID=12345

merchantReferenceCode=ABC12320398,ccCaptureReply_reasonCode=100,
reasonCode=100,decision=ACCEPT,ccCaptureReply_reconciliationID=
1018546244150167904178,requestID=1018546244150167904178,ccCaptur
eReply_amount=327.49,ccCaptureReply_requestDateTime=2007-06-
13T22:43:53Z; purchaseTotals_currency=EUR

merchantReferenceCode=ABC141854,ccCaptureReply_reasonCode=241,
reasonCode=241,decision=REJECT,requestID=1018546227570167904150

merchantReferenceCode=ABC39882097,ccCreditReply_reasonCode=100,
reasonCode=100,decision=ACCEPT,ccCreditReply_reconciliationID=
1018546230720167904150,requestID=1018546230720167904150,ccCreditReply_
amount=14.99,ccCreditReply_requestDateTime=2005-09-23T22:44:33Z;
purchaseTotals_currency=CAD
```

Daily Summary Report

This report summarizes the batched transactions. To obtain the report, follow these steps:

-
- Step 1** Log in to the Business Center.
 - Step 2** In the navigation pane, click **Reports > Report Search**.
 - Step 3** In the **Report** pull-down menu, select **Batch Files Daily Summary Report**.
 - Step 4** Select a start date and click **Submit**.

Step 5 On the Report Search Results page, click the link to view the report.

You can download the report in PDF and CSV formats. Links for these downloads are in the upper right corner of the Report View area. The figure below shows a sample report.

Batch Files Daily Summary Report
 struong_acct
 September 21, 2006

Batch ID	123123	Total Count	104	1
Processor	paymenttech	Total Count	70	2
Debits		Total Count	70	3
	Transaction Count	Payment Status	Amount	Currency
	1	ERROR	50.00	USD
	67	PENDING	8,976.37	USD
	2	TRANSMITTED	100.00	USD
Processor	vital	Total Count	34	
Debits		Total Count	31	
	Transaction Count	Payment Status	Amount	Currency
	4	ERROR	250.00	USD
	18	PENDING	1,500.00	USD
	9	TRANSMITTED	1,874.96	USD
Credits		Total Count	3	
	Transaction Count	Payment Status	Amount	Currency
	3	TRANSMITTED	100.00	USD
Batch ID	123678	Total Count	13	
Processor	paymenttech	Total Count	13	
Debits		Total Count	13	
	Transaction Count	Payment Status	Amount	Currency
	2	ERROR	50.00	USD
	9	PENDING	1,432.98	USD
	2	TRANSMITTED	100.00	USD

- The report consists of a main section (1) for each batch file. The heading for each batch file displays the batch file ID and the total number of transactions in the file.
- For each file, the report is divided into sections for each processor (2) included in the file. The heading for each processor displays the name of the processor and the total number of transactions that were performed for the processor.
- For each processor, the report shows the types of transactions (3) that were performed, such as credits and debits. The heading for each type of transaction displays the total number of transactions for that type of transaction.
- For each type of transaction, the report shows the totals for each different payment status (4), such as ERROR, PENDING, or TRANSMITTED. The line for each payment status displays the total number of transactions with that payment status, the total amount for all the transactions with that payment status, and the currency used for the transactions with that payment status.

Daily Detail Report

This daily downloadable report shows the batches processed the previous day. This report is available in CSV and XML format in the test and live modes of the Business Center. After you generate a report, you have access to it for one year.

For a description of the fields contained in the report, see ["Batch Files Detail Report," page 52](#) for the CSV format and ["Batch Files Detail Report," page 79](#) for the XML format.

Order Detail Report

The Order Detail Report is a daily downloadable report that shows all the order activity from the previous day. To use this report efficiently, you need to use a unique order number for each order.

The report is provided in either CSV or XML format in test and live mode. When you go live, you can no longer search for or receive reports for your test transactions. Once you have generated a report, you have access to this report for one year. You can receive the report in one format only. All merchants are automatically signed up to receive the CSV format, but if you prefer, you can choose the XML format in the Report Subscription page of the Business Center.

Each format provides essentially the same information, with a few differences:

- The XML report contains line item information whereas the CSV report does not.
- The names of the XML elements may differ from those of the API fields. To see how the two are related, see ["Correspondence Between the Business Center and its Components," page 188](#).

For a description of the formats, see ["CSV Format," page 13](#) and ["XML Format," page 14](#). For a description of the fields contained in the report, see ["Order Detail Report," page 63](#) for the CSV format and ["Order Detail Report," page 100](#) for the XML format.

To select a report format:

You must be an administrator.

-
- Step 1** Log into the Business Center with your merchant ID and password.
 - Step 2** Click **Settings > Account Information**.
 - Step 3** Scroll down the page to the Order Detail Report Format section, select either CSV or XML.
 - Step 4** Click **Update**.
- The change in format takes place 48 hours later.
-

To obtain the report:

You must use Internet Explorer.

-
- Step 1** Log into the Business Center with your merchant ID and password.
- Step 2** Click **Reports > Report Search**.
- Step 3** Select the report, frequency, and date or interval.
- Step 4** Click **Submit**.
Your report appears as a line item in a table.
- Step 5** Right-click **Download** and select **Save Target as**.
- Step 6** Choose a location for your report and/or the DTD if your report is in XML format.



For CSV reports, make sure to change the file extension to `.txt`.

-
- Step 7** Click **Save**.
- Step 8** To export your CSV report into a spreadsheet, see ["Exporting a Report to a Spreadsheet," page 26](#).
-

Payment Events Report

The Payment Events Report is a daily downloadable report that shows the settlement and batch information for electronic check debits and credits from the previous day. This report contains processor-related information if your processor is TeleCheck or AmeriNet. All other information that you need to reconcile your account is provided in the Order Detail Report.

For instructions on downloading and using this report, see Order Detail Report above. For the contents of the report, see ["Payment Events Report," page 71](#) for the CSV format and ["Payment Events Report," page 117](#) for the XML format.

Transaction Exception Detail Report

The Transaction Exception Detail Report is a daily downloadable report that shows detailed information about transactions that were flagged by CyberSource or by the processor because of errors that were sent in the request data 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 may 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 change your system so that you can avoid these errors in the future. For the contents of the report, see "[Transaction Exception Detail Report](#)," page 75 for the CSV format and "[Transaction Exception Detail Report](#)," page 145 for the XML format.



Important

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

All other information that you need to reconcile your account is provided in the Order Detail Report.

Viewing a Report

To view a report:

Step 1 In the navigation bar, click **Reports**.

Step 2 In the navigation pane, click **Reports > Report Search**.

Some reports are available in daily and monthly versions. Others are only available monthly.

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

To view or download reports, select the report and the time period. To access reports to which you are no longer subscribed, select "All".

Report Search Criteria

Report:

Frequency:

Daily Report Search

Date:

Reports for Feb 21, 2006

No Reports Available

Downloadable Reports for Feb 21, 2006

No Reports Available

Step 3 Choose the month or day of the report that you want to view.

Step 4 Click **Submit**.

The Business Center displays the first page of the report.

You can use the navigation bar above the report to move between pages.

Step 5 To open a specific page, type the page number in the text box, and click **Go**.

Saving a Report

Occasionally, you may want to keep a copy of a report or send the report to another person. Reports are available on the Business Center for six months. If you need to save or print a report, make sure you do so before the report is deleted. You may do so in several ways:

- You may save a report in PDF format and print it.
- You may export a report to a spreadsheet.
- You may import a report to a spreadsheet.

Printing a Report

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 <http://www.adobe.com/products/acrobat/readstep2.html>.

Step 1 Open a report that you want to print or save as a PDF.

Step 2 In the navigation bar above the report, click the PDF or the printer icon.

The option to either open or save the report appears.

Step 3 Click Open to see the report in the Acrobat Reader, or click Save to save the report to your computer so that you can print it later.

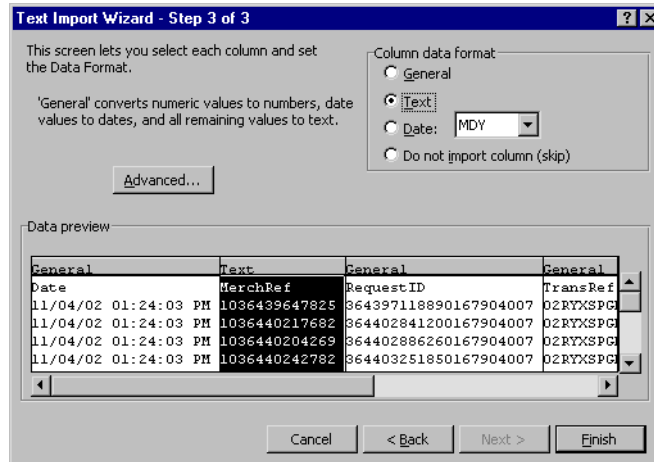
Exporting a Report to a Spreadsheet

If you want to save an authorization or capture report in a format compatible with spreadsheet programs like Microsoft® Excel, you can export the report in comma-separated values (CSV) format.

-
- Step 1** Open a report that you want to export.
 - Step 2** Click the spreadsheet icon.
Your Web browser prompts you to open or save the file.
 - Step 3** To save the file in a suitable location, change the extension `.csv` to `.txt` and click **Save**.
 - Step 4** Open Microsoft Excel.
 - Step 5** Click **File > Open**.
 - Step 6** In the *Files of type* list, select **All Files (*.*)**.
 - Step 7** Select the report file to import, then click **Open**.
 - Step 8** In the Text Import Wizard, select **Delimited**, then click **Next**.
Excel displays step 2 of the Text Import Wizard.
 - Step 9** In the Delimiters section, un-check **Tab** and check **Comma**.
In the Data preview section, Excel shows how it will import your data.
 - Step 10** Click **Next**.
Excel displays step 3 of the Text Import Wizard.

Step 11 In the data preview section, for every column of the report that shows numbers with more than eight digits, such as the order number or the request ID, click **Text** in the Column data format section (top right).

In the figure below, the MerchRef section is highlighted, and the column data format selected is text.

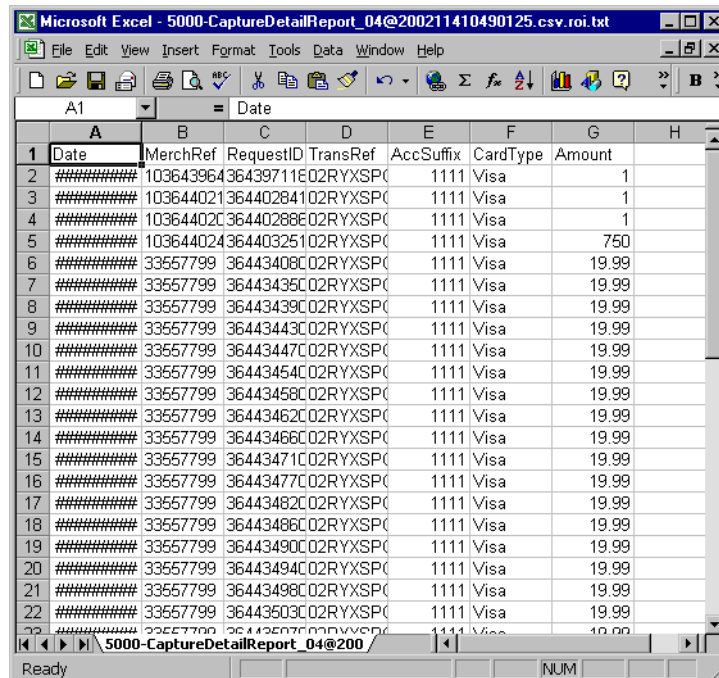


If you do not click **Text**, Excel deletes part of the request ID from the report.

Important

Step 12 Click **Finish** to import the report.

Step 13 Select All (Ctrl-A) and select **Format > Column > AutoFit Selection**.



If the request IDs in the report appear as numbers with decimal places and exponents, such as 4.22353E+18, import the report again, and make sure to complete [Step 11](#).

Combining Several Reports

You can combine daily reports to create weekly or monthly reports. To combine reports in CSV format:

- Step 1** Open the Excel spreadsheet to which you want to add other reports.
 - Step 2** Highlight the row where you want to add a report.
 - Step 3** Select **Data > Import External Data > Import Data**.
 - Step 4** Locate the file that you want to add to your report and click **Open**.
 - Step 5** Follow the instructions about importing a report into a spreadsheet (the previous section).
 - Step 6** Click **Finish**.
The report is imported where you indicated.
 - Step 7** Remove the header from the report that you imported, and make sure that the columns line up properly.
-

Requesting On-Demand Reports

In addition to the pre-defined reports in the previous chapter, the Business Center offers on-demand reports. *On-demand* means that these reports are not automatically generated every day (or week or month), but that you can request them at any time.

You can obtain on-demand reports by using one of these methods:

- [Downloading Search Results](#)
- [Using a Client Application](#)
- [Using a Query API](#)

If you have multiple fulfillment cycles during the day and offer same-day shipping for orders received before a certain time, you may need to use one of these reports to verify that orders are reviewed and processed on time.

Downloading Search Results

You can download and save in either CSV or XML format the results of a transaction search.

Exportable Fields

Data available for export is stored for six months from the date of authorization, and users with permission to search for orders can export up to 2,000 entries from any transaction search results.



An entry can be an authorization or a capture. A sale is entered twice: first as an authorization, second as a capture. Therefore, 2000 entries may comprise 2000 authorizations, 2000 captures, 1000 sales, or an undetermined combination of these events that totals 2000 entries. Therefore, your exported search results may not contain the same request IDs as your search results: you will often have more entries in your exported search results than in your search results.

You can start the export process from a transaction search result such as that shown in the figure below.

General Search Result

Search on All Transactions from Jul 31 2004 to Aug 31 2004 Total transactions found: 56

Click an order number to view detailed information about an order.

[Export Results](#)

[Next](#)
1 2

Order Number	Date	Name	Amount	Status	Request ID
1093982338713	Aug 31 2004 12:59PM	R P	1.00 USD	Pending Credit	0939823387180167904543
1093978081528	Aug 31 2004 11:49AM	AJAY SEN	30.00 USD		0939781751730167904543
1093978081528	Aug 31 2004 11:49AM	AJAY SEN	30.00 USD		0939781432340167904543
1093978081528	Aug 31 2004 11:48AM	AJAY SEN	30.00 USD		0939780815320167904543
998877	Aug 31 2004 11:20AM	JOHN DOE	32.48 USD		0939764126600167904543
1093969287843	Aug 31 2004 09:21AM	REKHA PATIL	1.00 USD	Pending Capture	0939692878480167904543
1093969181093	Aug 31 2004 09:19AM	REKHA PATIL	1.00 USD	Pending Capture	0939691810980167904543
1093966664839	Aug 31 2004 08:36AM	REKHA PATIL	1.00 USD	Pending Credit	0939666648460167904543
1093938104112	Aug 31 2004 12:41AM	JOHN DOE	32.48 USD		0939381041170167904543
1093937939564	Aug 31 2004 12:39AM	JOHN DOE	32.48 USD		0939379397570167904543
1093934016234	Aug 30 2004 11:33PM	JOHN DOE	32.48 USD	Pending Capture	0939340162390167904543
	Aug 30 2004 11:33PM	JOHN DOE		Failed	0939340011390167904543
	Aug 30 2004 11:29PM	JOHN DOE		Failed	0939337865070167904543

The following fields are automatically exported:

- Basic order fields:

merchantID (CSV only)	user
requestID	eCommerceIndicator
transactionDate	paymentAction
orderNumber	orderAmount
source	

- Basic reply fields:

reconciliationID	ics_RCode
decision	ics_RFlag
authorizationCode	ics_RMsg (XML only)
ReplyMessage (auth, capture, ecpDebit, or ecpCredit) (CSV only)	reasonCode
authFactorCode	avsCode
	cvCode

In addition, you can select among the following categories of fields after you click **Export Results** as shown below. However, you cannot select to export individual fields. For the

fields that you do not select, the name of the field will appear in the report, but the field area will be empty.

Export Search Results

Select additional categories to be included for export.

- Payment Information
(card_accountNumber, card_expirationMonth, card_expirationYear, card_cardType, check_accountType, check_accountNumber, check_bankTransitNumber, check_referenceNumber)
- Order Details
(comments, customerID)
- Billing Information
(billTo_firstName, billTo_lastName, billTo_street1, billTo_street2, billTo_city, billTo_state, billTo_postalCode, billTo_country, billTo_company, billTo_email, billTo_title, billTo_phoneNumber, billTo_ipAdress)
- Shipping Information
(shipTo_firstName, shipTo_lastName, shipTo_street1, shipTo_street2, shipTo_city, shipTo_state, shipTo_postalCode, shipTo_country, shipTo_phoneNumber)

- **Payment information**

Credit card fields: account number*, expiration month, expiration year, and card type.

Check fields: account type, account number, and these fields:

XML: routingNumber and ecpRefNum

CSV: bank transit number and reference number

* Only the last four digits of the account number are exported.

- **Order information**

comments
customerID

merchantDefinedDataField1 - 4

- **Billing and shipping information**

firstName	postalCode
lastName	country
street1	company
street2	email
city	title
state	phoneNumber
	ipAddress

Formats Available

This report is available in XML and CSV formats. For information on downloading this report, see the online help in the Business Center. These sample reports contain two orders. The decision for the first order was **accept** whereas the second one resulted in **error** because the card type and account number were invalid.

CSV Format

The CSV format is described on [page 13](#), and the report is described in "Exported Search Results," [page 55](#). This sample report contains two orders.

```
Search Results,,Nov 01 2006 08:00:00.000,Nov 30 2006 22:11:07.878

merchantID,requestID,transactionDate,orderNumber,customerID,source,user,reconciliatio
nID,eCommerceIndicator,comments,billTo_firstName,billTo_lastName,billTo_
street1,billTo_street2,billTo_city,billTo_state,billTo_postalCode,billTo_
country,billTo_company,billTo_email,billTo_title,billTo_phoneNumber,billTo_
ipAdress,shipTo_firstName,shipTo_lastName,shipTo_street1,shipTo_street2,shipTo_
city,shipTo_state,shipTo_postalCode,shipTo_country,shipTo_phoneNumber,card_
accountNumber,card_expirationMonth,card_expiration_year,card_cardType,check_
accountType,check_accountNumber,check_bankTransitNumber,check_
ReferenceNumber,paymentAction,decision,icsRCode,icsRFlag,reasonCode,authReplyMessage,
captureReplyMessage,creditReplyMessage,ecpDebitReplyMessage,ecpCreditReplyMessage,pay
mentData_orderAmount,paymentData_avsCode,paymentData_authorizationCode,paymentData_
cvCode,paymentData_
authFactorCode,merchantDefinedDataField1,merchantDefinedDataField2,merchantDefinedDat
aField3,merchantDefinedDataField4

austinital2,1636964571670167904065,2006-11-16 17:00:57 GMT,1163696457166,,Virtual
Terminal,austinital2,000987557KPOWXULCQQ13,internet,,John,Doe,83 Capital Hwy,,
Austin,TX,88888,US,,sample@sample.com,,,,,,,,,0299,01,2009,Visa,,,,,ics_
auth,accept,1,SOK,100,Request was processed successfully,,,,,1.00,Y,123456,,,,,

austinital2,1624005745650167904065,2006-11-01 17:02:55 GMT,1162400574499,,Virtual
Terminal,austinital2,,,John,Doe,83 Capital Hwy,,Austin,TX,88888,US,,
sample@sample.com,,,,,,,,,1111,01,2009,MasterCard,,,,,ics_
auth,reject,0,DINVALIDCARD,231,"The field is invalid: card_type,customer_cc_
number",,,,,,,,,
```

XML Format

For reports in XML format, you do not see line item information. However, you see the basic fields and the additional set(s) of fields that you requested. The XML format is described on [page 14](#), and the report is described in "Exported Search Results," [page 85](#). In this sample, only the fields that are always returned are shown.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Result SYSTEM "https://ebctest.cybersource.com/ebctest/reports/dtd/
ordersearch.dtd">
<Result xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/ordersearch.dtd"
  StartDate="Nov 01 2006 08:00:00.000 GMT"
  EndDate="Nov 29 2006 18:44:13.041 GMT">
  <Requests>
    <Request requestID="1636964571670167904065"
      transactionDate="2006-11-16 17:00:57 GMT"
      orderNumber="1163696457166"
      source="Virtual Terminal"
      user="austinvital2"
      reconciliationID="000987557KPOWXULCQQ13"
      eCommerceIndicator="internet">
      <ApplicationReplies>
        <ApplicationReply name="ics_auth">
          <decision>accept</decision>
          <ics_RCode>1</ics_RCode>
          <ics_RFlag>SOK</ics_RFlag>
          <reasonCode>100</reasonCode>
          <ics_RMsg>Request was processed successfully.</ics_RMsg>
        </ApplicationReply>
      </ApplicationReplies>
      <PaymentData>
        <orderAmount>1.00</orderAmount>
        <authorizationCode>123456</authorizationCode>
        <avsCode>Y</avsCode>
      </PaymentData>
    </Request>
    <Request requestID="1636950380670167904065"
      transactionDate="2006-11-16 16:37:18 GMT"
      orderNumber="1162850703058"
      source="UBC"
      user="austinvital2"
      reconciliationID="000987556KPOWXULCQQ12"
      eCommerceIndicator="internet">
      <ApplicationReplies>
        <ApplicationReply name="ics_auth">
          <decision>error</decision>
          <ics_RCode>0</ics_RCode>
          <ics_RFlag>DINVALIDCARD</ics_RFlag>
          <reasonCode>231</reasonCode>

```

```

    <ics_RMsg>The field is invalid: card_type,customer_cc_number</ics_RMsg>
  </ApplicationReply>
</ApplicationReplies>
<PaymentData>
  <orderAmount />
</PaymentData>
</Request>
/Requests>
</Result>

```

Using a Client Application

You can use this method to download either the On-Demand Order Detail or the On-Demand Capture Detail reports. Although these reports are available in CSV and XML formats, you can use only the format for which you are configured. Each report shows your transactions for a single day. If you want to view information for an entire week, month, or year, you must combine the daily reports.

The client application uses a GET method. You can also use the information in this guide to write applications that process these reports automatically.

Requirements

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

To authenticate your user name and password, your client application must use the Basic and Digest Access Authentication method that many HTTPS client libraries implement. For information about Basic and Digest Access Authentication, see <http://www.ietf.org/rfc/rfc2617.txt>.

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. This example below is written in Java.



Important

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

Installing the client

To install the CyberSource sample download client for a Java application, you need these elements:

- Sun Java 2 SDK (version 1.4.0+)
- CyberSource sample client written in Java

Follow these steps:

-
- Step 1** Place the `https_url.java` file in the directory in which you wish to run the client. A sample `https_url.java` file is located in "[https_url.java](#)," page 178.
- Step 2** Compile `https_url.java` in the same directory. The file `https_url.class` is generated.
-

CyberSource provides this sample as-is, without warranty.

Formatting the URL

To request a report, your client application must send an HTTP GET message to the report server. The URL that you specify indicates the report that you want to download. Use this URL format:

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

For example, if your merchant ID is `sample`, you would use this URL to download the CSV version of the June 1, 2009 Order Detail Report from the production system:

```
https://businesscenter.cybersource.com/sbc/DownloadReport/2009/
06/01/sample/OrderDetailReport.csv
```

The table below describes each value in the URL.

Table 4 Report URL Values

Value	Description
<i><server_name></i>	Name of the server from which to download the report. Use one of the following values: <ul style="list-style-type: none"> ■ <code>businesscentertest.cybersource.com/sbctest</code>: Test server ■ <code>businesscenter.cybersource.com/sbc</code>: Production server ■ <code>ebctest.cybersource.com</code>: Test reports server ■ <code>ebc.cybersource.com</code>: Production reports server
<i>YYYY</i>	Four-digit year for the report that you want.
<i>MM</i>	Two-digit month, such as 02 for February, for the report that you want.
<i>DD</i>	Two-digit day, such as 01 for the first day of the month, for the report that you want.
<i><merchant_id></i>	CyberSource merchant ID
<i><report_name></i>	Name of the report to download: <ul style="list-style-type: none"> ■ <code>CaptureDetailReport</code> ■ <code>OrderDetailReport</code>
<i><report_format></i>	Report format to download: <ul style="list-style-type: none"> ■ <code>csv</code>: Comma-separated values ■ <code>xml</code>: Extensible Markup Language (Order Detail Report only)

Requesting the Report

Implement this client at a command line, such as a DOS or UNIX shell (Solaris, Linux, or other) as follows:

Step 1 Generate an input file called `in.txt` with this information:

<code>url</code>	As described in the previous section, path for the report that you will download.
<code>username</code>	Your CyberSource user name.
<code>password</code>	Your CyberSource password.
<code>outfile</code>	Name of the file for the report data. CyberSource recommends that you use the name of the report being downloaded, such as <code>order_detail_report_090204.csv</code> .

Example

```
username myusername
password mypassword
url https://businesscenter.cybersource.com/sbc/DownloadReport/2009/06/
02/example/OrderDetailReport.csv
outfile order_detail_report_090204.csv
```

Step 2 Run the application from the command line as follows:

```
Java https_url inputfilename
```

Example

```
Java https_url in.txt
```

The output is written to the file specified in the input file: (*order_detail_report_090204.csv*). If the request fails, the server sends an HTTP reply message describing the error. Use this information to determine how to debug your client application.

For a description of the fields contained in the report, see ["Order Detail Report," page 63](#).
 For a description of the fields contained in the report, see ["Order Detail Report," page 100](#).

Using a Query API

You can request these reports at any time during the day, for a date range of up to six months. If your query covers more than 2000 transactions, the report shows transactions beginning at the start date until the limit is reached. If the report does not contain transactions, you receive an empty report.

The query uses a POST method with search parameters. This application uses Basic Access Authentication to send the user's name and password.

- [Order Detail Report](#)
- [Transaction Exception Detail Report](#)
- [Single Transaction Report](#)
- [User Management Report](#)

Order Detail Report

You can use this method to download the On-Demand Order Detail report in CSV or XML format.

Formulating the Query

The on-demand query can be automated to be used by a computer or viewed by a human, and you can request this report as many times as you wish and more than once with the same set of data. You send the required information in [Table 5](#) to the URL for the report:

Table 5 Required Data for the On-demand Order Detail Report Query

Parameters	Field Names	Format
Merchant ID	merchantID	
Password	password	
Start date	startDate	YYYY-MM-DD
Start time (UTC)	startTime	HH:MM:SS
End date	endDate	YYYY-MM-DD
End time (UTC)	endTime	HH:MM:SS
Format for the report (CSV or XML)	format	
Type of search	searchType	See Table 6 for possible types and values.
Search values	searchValue	

Table 6 Possible Data for the Type of Search

searchType	Type of search	searchValue
authCapture	Equivalent to Authorizations Ready to Capture (successful authorizations) in the Business Center, but in this case, you can search for up to 2000 transactions instead of 100.	Limited to no more than 30 days within the previous 6 months
authReview	Equivalent to Authorizations Needing Review (Smart Authorization declines) in the Business Center, but in this case, you can search for up to 2000 transactions instead of 100.	Limited to no more than 30 days within the previous 6 months
allTransactions	All transactions	
orderNumber	Specific order number	Required
email	Specific email	Required
lastName	Specific last name	Required
creditCard	Specific credit card number	Required
customerID	Specific customer ID	Required
requestID	Specific request ID	Required
lastNameFirstName	Specific last name and first name	Required; in the format <code>lastName, firstName</code>

Request for XML format

To use the XML format, write a program that can send the required fields in a POST request to one of these URL:

Production	https://businesscenter.cybersource.com/sbc/OrderDetailReportRequest.do
Test	https://businesscentertest.cybersource.com/sbctest/OrderDetailReportRequest.do

Request for HTML format

To use the HTML format, you write an HTML form with the same URL as above. The sample below shows the `form` tag with the minimum required information and action, a Submit button, to request a report.

```
<form action="https://businesscenter.cybersource.com/sbc/OrderDetailReportRequest.do"
  method="post">
  <table>
    <tr><td>Merchant ID</td><td><input type="text" name="merchantID"></td></tr>
    <tr><td>Password</td><td><input type="text" name="password"></td></tr>
    <tr><td>Start Date</td><td><input type="text" name="startDate"></td></tr>
    <tr><td>Start Time</td><td><input type="text" name="startTime"></td></tr>
    <tr><td>End Date</td><td><input type="text" name="endDate"></td></tr>
    <tr><td>End Time</td><td><input type="text" name="endTime"></td></tr>
    <tr><td>Format</td><td><input type="text" name="format"></td></tr>
    <tr><td>Type of Search</td><td><input type="text" name="searchType"></td></tr>
    <tr><td>Search Value</td><td><input type="text" name="searchValue"></td></tr>
  </table>
  <input type="submit" value="Submit">
</form>
```

Interpreting Result Messages

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

Error	Message
Merchant ID or password	Invalid login credentials
Incorrect date or time	Invalid date/time range
Format	Invalid format
Type of search	Invalid searchType
Search values	Invalid searchValue
System error	HTTP error code 503 (Service unavailable)

Saving the Report

You receive a response immediately in the form of the Order Detail Report. A download window appears in your browser:

-
- Step 1** Click **Save**.
 - Step 2** Choose a location for your file and click **Save**.
The download is completed.
 - Step 3** Close the window.
-

Report in CSV format

If the query is successful, the results appear as a document of type `application/csv`. The report uses the column headings names and order of the report in CSV format. To view and use this report:

-
- Step 1** Change the file extension to `.txt`.
 - Step 2** Export the report to a spreadsheet as described in "[Exporting a Report to a Spreadsheet](#)," page 26.
-

For a description of the fields contained in the report, see "[Order Detail Report](#)," page 63.

Report in XML format

If the query is successful, the results appear as a document of type `x-xml`. For reports in XML format, you do not see line item information. To use this report, you need to write a program to save or process the XML data of the report.

For a description of the fields contained in the report, see ["Order Detail Report," page 100](#).

Transaction Exception Detail Report

In the Transaction Search area of the Business Center, you can also search for errors that may have happened during a specific period of time for up to six months and 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 query uses a POST method with search parameters. The reported data remains available for six months.

The query can be automated to be used by a computer or viewed by a human, and 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 contain up to 2000 transactions. If your query covers 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 ensuring that transactions are counted only once.

Formulating the Query

The interval must not 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. You send the required information in [Table 5](#) to the URL for the report.

Production	<code>https://businesscenter.cybersource.com/sbc/TransactionExceptionDetailReportRequest.do</code>
Test	<code>https://businesscentertest.cybersource.com/sbctest/TransactionExceptionDetailReportRequest.do</code>

Table 7 Required Data for the On-Demand Transaction Exception Detail Report Query

Parameters	Field Names	Format
Merchant ID	merchantID	
User name	username	This optional field can be different from the merchant ID. If this field is empty, the merchant ID will be used to generate the report. Important To use this field, the user name must have the permission to download reports. Therefore, the user must be an administrator. Otherwise, you will receive an error message and will not be able to download the report.
Password	password	
Start date	startDate	YYYY-MM-DD
Start time	startTime	HH:MM:SS
End date	endDate	YYYY-MM-DD
End time	endTime	HH:MM:SS
Report format	format	xml csv

XML format

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

HTML format

To use the HTML format, you write an HTML form with the same URL as above. The sample below shows the `form` tag with the action to send a report request to the production URL. The form includes the required fields and a Submit button.

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

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 lines:

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

Saving the Report

You receive a response immediately. The report contains all the orders with data errors during the time period requested. 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, you need to write a program to save or process the XML data of the report.

HTML format

If you use a browser that supports XSLT, such as Microsoft Internet Explorer 6.0 or Netscape 7.1, the XML file that you receive can be converted to HTML and formatted into a table that you can see in your browser. To save the report:

-
- 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 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.
-

Note that 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 more information on the XML format of the report, see "[Transaction Exception Detail Report](#)," page 145 and the DTD on [page 175](#).

Single Transaction Report

The query uses a POST method with search parameters to obtain the details of a single transaction. For a complete description of the report (XML format only), see "[Single Transaction Report](#)," page 122.

Formulating the Query

You can request this report as many times as you wish during the day. The table below describes the required request information.

Table 8 Required Data for the Query

Parameters	Field Names	Value
Merchant ID	merchantID	Your CyberSource merchant ID
Search Type	type	transaction
Search Sub-type	subtype	transactionDetail
Request ID	requestID	Number of the transaction that you want to see
versionNumber	versionNumber	<ul style="list-style-type: none"> ■ 1.1: Default version. ■ 1.2 – 1.4: Available only to Advanced Package users. <p>Note Because these versions are not available to you, many of the elements in version 1.5 do not apply to you.</p> <ul style="list-style-type: none"> ■ 1.5: Includes the ACH raw and mapped result values.

Send the required information in [Table 5](#) to the URL for the report 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, you write a program that can send the required fields in a POST request.

HTML format

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

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

Interpreting Result Messages

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

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

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, you need to write a program to save or process the XML data of the report.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Report SYSTEM "https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_1.dtd">
<Report xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_1.dtd"
  Name="Transaction Detail"
  Version="1.1"
  MerchantID="example"
  ReportStartDate="2006-10-20T04:22:37-11:00"
  ReportEndDate="2006-10-20T04:22:37-11:00">
  <Requests>
    <Request>
      Complete details of a single transaction here
    </Request>
  </Requests>
</Report>
```

HTML format

If you use a browser that supports XSLT, such as Microsoft Internet Explorer 6.0 or Netscape 7.1, the XML file that you receive can be converted to HTML and formatted into a table that you can see in your browser. To save the report:

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 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.

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. [Table 9](#) describes the request information.

Table 9 Required Data for the On-Demand User Management Report

Parameters	Field Names	Format
Merchant ID	merchantID	Merchant or account ID used to access the Business Center.
User name	username	Name used to access the Business Center. This field can be different from the merchant ID. If this field is empty, the value of merchantID is used to generate the report. Important To use this field, the user name must have the User Management permission.
Password	password	Password associated with the user name.
Users	reportMerchantID	Value that determines which users can be included in the report. This field is optional and can contain these values: <ul style="list-style-type: none"> ■ all: Default value if the field is empty. ■ Account ID (example: <code>sampleMerchant_acct</code>) ■ Account user (example: <code>sampleMerchant_admin</code>) ■ Merchant ID (example: <code>sampleMerchant</code>) ■ Merchant user (example: <code>sampleMerchant</code>) Table 10 shows how to use the above values with the merchant ID and user name.
Report format	format	xml csv

Table 10 Sample Report Content Options

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

Send the required information in [Table 5](#) to the URL for the report to one of these URLs:

Production	<code>https://ebc.cybersource.com/ebc/UserListing</code>
Test	<code>https://ebctest.cybersource.com/ebctest/UserListing</code>

XML format

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

HTML format

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

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

Interpreting Result Messages

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

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

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, you need to write a program to save or process the XML data of the report.

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

HTML format

If you use a browser that supports XSLT, such as Microsoft Internet Explorer 6.0 or Netscape 7.1, 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. To save the report:

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.

Reports in CSV Format

This appendix describes the fields contained in the CSV format for these reports:

- [Batch Files Detail Report](#)
- [Exported Search Results](#)
- [Order Detail Report](#)
- [Payment Events Report](#)
- [Transaction Exception Detail Report](#)

For an introduction to the CSV format, see "[CSV Format](#)," page 13.

Batch Files Detail Report

This section describes the Batch Files Detail Report. A [Sample CSV Report](#) follows.

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

```
Batch Files Detail Report,1,2006-09-29 to 2006-09-30,,,,,,,,,
```

Table 11 Fields in the First Header Record

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

Example Second Header Record

```
merchant_id,txn_batch_id,payment_processor,request_id,trans_ref_
no,merchant_ref_number,ics_rflag,amount,currency,action
```

Transaction Record

Each transaction record contains information about a CyberSource payment transaction.

Example Transaction Record

```
pcpawshop,127788,vital,9979040000003515181891,7242635150,
1158078228539,SOK,25.00,USD,PENDING
```

Table 12 Fields in the Transaction Record

Position	Field Name	Description	Data Type & Length
1	merchant_id	CyberSource merchant ID used for the transaction.	String (30)
2	txn_batch_id	CyberSource batch file in which the transactions were sent.	Numeric (39)
3	payment_processor	Name of a payment processor.	String (30)
4	request_id	Identifier for the transaction.	Numeric (26)

Table 12 Fields in the Transaction Record (Continued)

Position	Field Name	Description	Data Type & Length
5	trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID (Simple Order API) and to the <service>_trans_ref_no (SCMP API) reply fields.	String (60)
6	merchant_ref_number	Merchant-generated order reference or tracking number.	String (50)
7	ics_rflag	One-word description of the result of the transaction request.	String (50)
8	amount	Amount of the transaction.	Amount (19)
9	currency	<i>ISO Standard Currency Codes</i> used for the transaction.	String (5)
10	action	One-word description of the current status of the transaction. Possible values: <ul style="list-style-type: none"> ■ BATCH_ERROR ■ BATCH_RESET ■ BATCHED ■ CANCELED_REVERS ■ CANCELLED ■ DENIED ■ FAILED ■ PENDING ■ REFUNDED ■ REVERSED ■ TRXN_ERROR ■ VOIDED 	String (50)

Sample CSV Report

This example shows a report that contains two batch files. The first batch file contains three requests; the second batch file contains one request.

```
Batch Files Detail Report,1,2006-09-29 to 2006-09-30,,,,,,
merchant_id,txn_batch_id,payment_processor,request_id,trans_ref_
no,merchant_ref_number,ics_rflag,amount,currency,action
pcpawshop,127788,vital,1595558344253232243215,7242635150,1158078228539,S
OK,25.00,USD,PENDING
pcpawshop,127788,vital,1595558354743232243215,7242636613,1158078892610,S
OK,100.00,USD,PENDING
```

```
pcpawnshop,127788,vital,1595558364563232243215,7242637653,1158079157035,S
OK,99.00,USD,VOIDED
pcpawnshop,123987,smartfdc,1595564779663232243215,7243278653,115942915703
5,SOK,4.00,USD,PENDING
```

Exported Search Results

This section describes the exported search results.

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

```
Search Results, Nov 01 2006 08:00:00.000, Nov 30 2006 21:52:08.238
```

Each part of this example (separated by commas) is described in [Table 13](#).

Table 13 Fields in the First Line of the Report

Position (Column)	Field Name	Description	Data Type (Length)
1 (A)	report_name	Name of the report. This field always contains the text <code>Search Results</code> .	String (100)
2 (B)	Start Date	First date and time included in the exported result.	DateTime (25)
3 (C)	End Date	Last date and time included in the exported result.	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

```
merchantID,requestID,transactionDate,orderNumber,customerID,source,user,reconciliatio
nID,eCommerceIndicator,comments,billTo_firstName,billTo_lastName,billTo_
street1,billTo_street2,billTo_city,billTo_state,billTo_postalCode,billTo_
country,billTo_company, billTo_email,billTo_title,billTo_phoneNumber,billTo_
ipAdress,shipTo_firstName,shipTo_lastName,shipTo_street1,shipTo_street2,shipTo_
city,shipTo_state,shipTo_postalCode, shipTo_country,shipTo_phoneNumber,card_
accountNumber,card_expirationMonth,card_expiration_year,card_cardType,check_
accountType,check_accountNumber,check_bankTransitNumber,check_
ReferenceNumber,paymentAction,decision,icsRCode,icsRFlag,
reasonCode,authReplyMessage,captureReplyMessage,creditReplyMessage,ecpDebitReplyMessa
ge,ecpCreditReplyMessage,paymentData_orderAmount,paymentData_avsCode,paymentData_
authorizationCode,paymentData_cvCode,paymentData_authFactorCode,
merchantDefinedDataField1,merchantDefinedDataField2,merchantDefinedDataField3,merchan
tDefinedDataField4
```

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

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

Each line of the report is described in [Table 14](#).

Table 14 Fields in the Transaction Record

Position (Column)	Field Name	Description	Data Type and Length
1 (A)	merchantID	CyberSource merchant ID used for the transaction.	String (30)
2 (B)	requestID	Identifier for the transaction.	Numeric (26)
3 (C)	transactionDate	Date on which the transaction was processed.	DateTime (25)
4 (D)	orderNumber	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)
5 (E)	customerID	Customer's account ID	String (50)
6 (F)	source	Source of the transaction, such as HOP or Virtual Terminal.	String (30)
7 (G)	user	Person who requested the report	String

Table 14 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
8 (H)	reconciliationID	Reference number for the transaction. Returned for the first capture of the authorization in the ccCaptureReply_reconciliationID reply field.	String (60)
9 (I)	eCommerce Indicator	Type of transaction. Certain card associations use this information when determining discount rates to charge you. Required for Verified by Visa and MasterCard SecureCode transactions. See Payer Authentication for information. This field can contain one of these values: <ul style="list-style-type: none"> ■ 5: <i>vbv</i> (Successful Verified by Visa transaction) ■ 6: <i>spa</i> (MasterCard SecureCode transaction) ■ 7: <i>internet</i> (default) (eCommerce order placed by using a Web site) ■ 8: <i>vbv_attempted</i> (Verified by Visa transaction was attempted but not authenticated) ■ E: <i>vbv_failure</i> (Depending on your payment processor, you may receive this result if Visa's directory service is not available) ■ F: <i>spa_failure</i> (MasterCard SecureCode authentication failed) ■ M: <i>moto</i> (Mail order or telephone order) ■ P: <i>retail</i> (Point-of-sale transaction) ■ R: <i>recurring</i> (Recurring transaction) ■ S: <i>install</i> (Installment payment) 	String (13)
10 (J)	comments	Brief description of the order or comment.	String
11 (K)	billTo_firstName	First name of the billed customer.	String (60)
12 (L)	billTo_lastName	Last name of the billed customer.	String (60)
13 (M)	billTo_street1	First line of the billing address.	String (60)
14 (N)	billTo_street2	Second line of the billing address.	String (60)
15 (O)	billTo_city	City of the billing address.	String (50)
16 (P)	billTo_state	State, province, or territory of the billing address. For a list of codes, see State, Province, and Territory Codes for the United States and Canada .	String (20)
17 (Q)	billTo_postalCode	Postal code of the billing address.	String (10)
18 (R)	billTo_country	ISO country code of the billing address. For a list of codes, see ISO Standard Country Codes .	String (2)
19 (S)	billTo_company	Company name of the billing address.	String (60)
20 (T)	billTo_email	Email address of the billed customer.	String (255)
21 (U)	billTo_title	Title of the billed customer.	String (30)

Table 14 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
22 (V)	billTo_phoneNumber	Phone number of the billed customer.	String (15)
23 (W)	billTo_ipAddress	IP address of the customer.	String (15)
24 (X)	shipTo_firstName	First name of the person receiving the shipment.	String (60)
25 (Y)	shipTo_lastName	Last name of the person receiving the shipment.	String (60)
26 (Z)	shipTo_street1	First line of the shipping address.	String (60)
27 (AA)	shipTo_street2	Second line of the shipping address.	String (60)
28 (AB)	shipTo_city	City of the shipping address.	String (50)
29 (AC)	shipTo_state	State, province, or territory of the shipping address. For a list of values, see State, Province, and Territory Codes for the United States and Canada .	String (20)
30 (AD)	shipTo_postalCode	Postal code of the shipping address.	String (10)
31 (AE)	shipTo_country	ISO country code of the shipping address. For a list of codes, see ISO Standard Country Codes .	String (2)
32 (AF)	shipTo_phoneNumber	Phone number of the recipient.	String (15)
33 (AG)	card_accountNumber	Credit card number of the customer. For ccCreditService , optional if ccCreditService_captureRequestID is included	String w/ numbers only (20)
34 (AH)	card_expirationMonth	Expiration month (MM) of the credit card.	String (2)
35 (AI)	card_expirationYear	Expiration year (YYYY) of the credit card.	String (4)
36 (AJ)	card_cardType	Type of card or bank account used for the transaction. This field can contain one of these values: <ul style="list-style-type: none"> ■ American Express ■ Checking ■ Corporate Checking ■ Diners Club ■ Discover ■ JCB ■ MasterCard ■ Savings ■ UNKNOWN card ■ Visa 	String (50)

Table 14 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
37 (AK)	check_accountType	Type of checking account used for the transaction. Although in the API you used the values <i>c</i> , <i>s</i> , or <i>x</i> , this field can contain one of these values: <ul style="list-style-type: none"> ■ Checking ■ Savings (U.S. dollars only) ■ Corporate checking (U.S. dollars only) 	String (1)
38 (AL)	check_accountNumber	Checking account number of the customer.	String with numbers only (25)
39 (AM)	check_bankTransitNumber	Bank routing number (also known as transit number).	String with numbers only (9)
40 (AN)	check_ReferenceNumber	Identifier that you use to track the request through the payment processor. If not sent in your request, we generate a unique value and returns it in the field reconciliationID . For TeleCheck, the maximum length is 25.	String (60)
41 (AO)	paymentAction	Comma-separated list of applications that were included in the request. Possible applications include: <ul style="list-style-type: none"> ■ <i>ics_auth</i> ■ <i>ics_bill</i> ■ <i>ics_credit</i> ■ <i>ics_ecp_credit</i> ■ <i>ics_void</i> ■ <i>ics_pay_subscription_create</i> 	String (255)
42 (AP)	decision	Summarizes the result of the overall request. The field can contain one of these values: <ul style="list-style-type: none"> ■ ACCEPT: success ■ ERROR: failure ■ REJECT: failure 	String (6)
43 (AQ)	icsRCode	One-digit code that indicates whether the entire request was successful. The field contains one of these values: <ul style="list-style-type: none"> ■ <i>-1</i>: An error occurred ■ <i>0</i>: The request was declined ■ <i>1</i>: The request was successful 	Integer (1)

Table 14 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
44 (AR)	icsRFlag	<p>One-word description of the result of the entire request:</p> <p>DDUPLICATE: This order is a duplicate of a previous order.</p> <p>DINVALIDCARD: The account number does not pass CyberSource basic checks.</p> <p>DINVALIDDATA: Data provided is not consistent with the request, such as a product with negative cost.</p> <p>DMISSINGFIELD: The request is missing a required field.</p> <p>DRESTRICTED: One or more of these problems:</p> <ul style="list-style-type: none"> ■ The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. ■ The U.S. government maintains an economic embargo against the country indicated in the billing or shipping address. <p>DSCORE: Score exceeds threshold.</p> <p>ESYSTEM: System error. Wait a few minutes, and send your request again.</p> <p>ETIMEOUT: The request timed out.</p> <p>SOK: Transaction was successful.</p>	String (50)

Table 14 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
45 (AS)	reasonCode	<p>Numeric value corresponding to the result of the overall request. If your error handler receives a reason code that it does not recognize, it uses the decision field to determine the result. This field can contain one of these values:</p> <ul style="list-style-type: none"> ■ 100: Successful transaction. ■ 101: The request is missing one or more required fields. Possible action: See the reply fields missingField_0...N for which fields are missing. Resend the request with the complete information. ■ 102: One or more request fields contain invalid data. Possible action: See the reply fields invalidField_0...N for which fields are invalid. Resend the request with the correct information. ■ 150: Error: General system failure. Possible action: Wait a few minutes and resend the request. ■ 151: Error: The request was received, but a server time-out occurred. This error does not include time-outs between the client and the server. Possible action: Wait a few minutes and resend the request. ■ 152: Error: The request was received, but a service time-out occurred. Possible action: Wait a few minutes and resend the request. ■ 234: A problem occurred with your CyberSource merchant configuration. Possible action: Do not resend the request. Contact Customer Support to correct the configuration problem. ■ 400: The Advanced Fraud Screen score exceeds your threshold. Possible action: Review the customer's order. ■ 700: The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. Possible action: Reject the customer's order. 	Integer (5)
46 (AT)	authReplyMessage	Message that describes the reply for the authorization. The report can contain only one reply reason for each service.	String (255)
47 (AU)	captureReply Message	Message that describes the reply for the capture. The report can contain only one reply reason for each service.	String (255)

Table 14 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
48 (AV)	creditReply Message	Message that describes the reply for the credit. The report can contain only one reply reason for each service.	String (255)
49 (AW)	ecpDebitReply Message	Message that describes the reply for the debit. The report can contain only one reply reason for each service.	String (255)
50 (AX)	ecpCreditReply Message	Message that describes the reply for the credit. The report can contain only one reply reason for each service.	String (255)
51 (AY)	paymentData_orderAmount	Total amount of the transaction. For credits, the amount is negative.	Amount (19)
52 (AZ)	paymentData_avsCode	Results of address verification. For a list of possible values, see "AVS Codes," page 181 .	String (5)
53 (BA)	paymentData_authorizationCode	Authorization code returned only if a value is returned by the processor or if you entered a verbal authorization code.	String (6)
54 (BB)	paymentData_cvCode	Result of processing the card verification number. For a list of possible values, see "Card Verification Number (CVN) Codes," page 183	String (1)
55 (BC)	paymentData_authFactorCode	Smart Authorization factor code that is returned only if you use Smart Authorization. If multiple codes are returned, they appear separated by carets as follows: M^N^O^U. For a list of the possible values, see "Advanced Smart Authorization Factor Codes," page 184 .	String (100)
56 (BD)	merchantDefined DataField1	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
57 (BE)	merchantDefined DataField2	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
58 (BF)	merchantDefined DataField3	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
59 (BG)	merchantDefined DataField4	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)

Sample Record

Each record includes information about an order.

```
austinvital2,1636964571670167904065,2006-11-16 17:00:57 GMT,1163696457166,,Virtual
Terminal,austinvital2,000987557KPOWXULCQQ13,internet,,John,Doe,83 Capital
Street,,Austin, TX,88888,US,,sample@sample.com,,,,,,,,,,,,,0299,01,2009,Visa,,,,,ics_
auth,accept,1, SOK,100,Request was processed successfully,,,,,1.00,Y,123456,,,,,
```

Order Detail Report

This section describes the Order Detail report.

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

```
Order Detail Report, Version 1.0,2004-04-13 to 2004-04-13
```

Each part of this example (separated by commas) is described in [Table 15](#).

Table 15 Fields in the First Line of the Report

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

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

```
row_Descriptor,merchantID,requestID,transactionDate,orderNumber,customerID,source,
user,reconciliationID,eCommerceIndicator,comments,billTo_firstName,billTo_lastName,
billTo_street1,billTo_street2,billTo_city,billTo_state,billTo_postalCode,billTo_
country,billTo_company,billTo_email,billTo_title,billTo_phoneNumber,billTo_ipAdress,
shipTo_firstName,shipTo_lastName,shipTo_street1,shipTo_street2,shipTo_city,shipTo_
state,shipTo_postalCode,shipTo_country,shipTo_phoneNumber,card_accountNumber,card_
expirationMonth,card_expirationYear,card_cardType,check_accountType,check_account
Number,check_bankTransitNumber,check_ReferenceNumber,paymentAction,decision,icsRCode,
icsRFlag,reasonCode,authReplyMessage,captureReplyMessage,creditReplyMessage,ecpDebit
ReplyMessage,ecpCreditReplyMessage,paymentData_orderAmount,paymentData_avsCode,
paymentData_authorizationCode,paymentData_cvCode,paymentData_authFactorCode,
merchantDefinedDataField1,merchantDefinedDataField2,merchantDefinedDataField3,
merchantDefinedDataField4
```

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

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

Each line of the report is described in [Table 16](#).

Table 16 Fields in the Transaction Record

Position (Column)	Field Name	Description	Data Type and Length
1 (A)	row_Descriptor	Description of the data in this record. This field always contains the value Request. This field does not appear in the exportable search results.	String (20)
2 (B)	merchantID	CyberSource merchant ID used for the transaction.	String (30)
3 (C)	requestID	Identifier for the transaction.	Numeric (26)
4 (D)	transactionDate	Date on which the transaction was processed.	DateTime (25)
5 (E)	orderNumber	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)
6 (F)	customerID	Customer's account ID	String (50)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
7 (G)	source	Source of the transaction. This element can contain one of these values: <ul style="list-style-type: none"> ■ HOP ■ Virtual Terminal 	String (30)
8 (H)	user	Person who requested the report	String
9 (I)	reconciliationID	Reference number for the transaction. Returned in the ccCaptureReply_reconciliationID reply field for the first capture of the authorization.	String (60)
10 (J)	eCommerceIndicator	Type of transaction. Certain card associations use this information when determining discount rates to charge you. Required for Verified by Visa and MasterCard SecureCode transactions. See Payer Authentication for information. This field can contain one of these values: <ul style="list-style-type: none"> ■ internet (default): eCommerce order placed by using a Web site. ■ moto: Mail order or telephone order. ■ recurring: Recurring transaction. ■ spa: MasterCard SecureCode transaction. If selected, payerAuthValidateReply_ucafCollectionIndicator is required. If authentication is successful, payerAuthValidateReply_ucafAuthenticationData is also required. ■ vbv: Successful Verified by Visa transaction. If selected, ccAuthService_cavv and ccAuthService_xid are required. ■ vbv_attempted: Verified by Visa transaction was attempted but not authenticated. If selected, ccAuthService_cavv is required and ccAuthService_xid is optional. 	String (13)
11 (K)	comments	Brief description of the order or comment.	String
12 (L)	billTo_firstName	First name of the billed customer.	String (60)
13 (M)	billTo_lastName	Last name of the billed customer.	String (60)
14 (N)	billTo_street1	First line of the billing address.	String (60)
15 (O)	billTo_street2	Second line of the billing address.	String (60)
16 (P)	billTo_city	City of the billing address.	String (50)
17 (Q)	billTo_state	State, province, or territory of the billing address. For a list of codes, see State, Province, and Territory Codes for the United States and Canada .	String (20)
18 (R)	billTo_postalCode	Postal code of the billing address.	String (10)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
19 (S)	billTo_country	ISO country code of the billing address. For a list of codes, see ISO Standard Country Codes .	String (2)
20 (T)	billTo_company	Company name of the billing address.	String (60)
21 (U)	billTo_email	Email address of the billed customer.	String (255)
22 (V)	billTo_title	Title of the billed customer.	String (30)
23 (W)	billTo_phoneNumber	Phone number of the billed customer.	String (15)
24 (X)	billTo_ipAdress	IP address of the customer.	String (15)
25 (Y)	shipTo_firstName	First name of the person receiving the shipment.	String (60)
26 (Z)	shipTo_lastName	Last name of the person receiving the shipment.	String (60)
27 (AA)	shipTo_street1	First line of the shipping address.	String (60)
28 (AB)	shipTo_street2	Second line of the shipping address.	String (60)
29 (AC)	shipTo_city	City of the shipping address.	String (50)
30 (AD)	shipTo_state	State, province, or territory of the shipping address. For a list of values, see State, Province, and Territory Codes for the United States and Canada .	String (20)
31 (AE)	shipTo_postalCode	Postal code of the shipping address.	String (10)
32 (AF)	shipTo_country	ISO country code of the shipping address. For a list of codes, see ISO Standard Country Codes .	String (2)
33 (AG)	shipTo_phoneNumber	Phone number of the recipient.	String (15)
34 (AH)	card_accountNumber	Credit card number of the customer. For ccCreditService , optional if ccCreditService_captureRequestID is included. When the account number is corrected, the corrected number is displayed instead of the original number.	String w/ numbers only (20)
35 (AI)	card_expirationMonth	Expiration month (<i>MM</i>) of the credit card.	String (2)
36 (AJ)	card_expirationYear	Expiration year (<i>YYYY</i>) of the credit card.	String (4)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
37 (AK)	card_cardType	Type of card or bank account used for the transaction. This field can contain one of these values: <ul style="list-style-type: none"> ■ American Express ■ Checking ■ Corporate Checking ■ Diners Club ■ Discover ■ JCB ■ MasterCard ■ Savings ■ UNKNOWN card ■ Visa 	String (50)
38 (AL)	check_accountType	Type of checking account used for the transaction. Although in the API you used the values c, s, or x, this field can contain one of these values: <ul style="list-style-type: none"> ■ Checking ■ Savings (U.S. dollars only) ■ Corporate checking (U.S. dollars only) 	String (1)
39 (AM)	check_accountNumber	Checking account number of the customer. When the account number is corrected, the corrected number is displayed instead of the original number.	String with numbers only (25)
40 (AN)	check_bankTransitNumber	Bank routing number (also known as transit number). When the routing number is corrected, the corrected number is displayed instead of the original number.	String with numbers only (9)
41 (AO)	check_ReferenceNumber	Identifier used to track the request through the payment processor. If not sent in your request, we generate a unique value and return it in the reconciliationID .	String (60; TeleCheck: 25)
42 (AP)	paymentAction	Comma-separated list of applications that were included in the request. Possible applications include: <ul style="list-style-type: none"> ■ ics_auth ■ ics_bill ■ ics_credit ■ ics_ecp_credit ■ ics_void ■ ics_pay_subscription_create 	String (255)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
43 (AQ)	decision	Summarizes the result of the overall request. The field can contain one of these values: <ul style="list-style-type: none"> ■ ACCEPT: success ■ ERROR: failure ■ REJECT: failure 	String (6)
44 (AR)	icsRCode	One-digit code that indicates whether the entire request was successful. The field contains one of these values: <ul style="list-style-type: none"> ■ -1: An error occurred ■ 0: The request was declined ■ 1: The request was successful 	Integer (1)
45 (AS)	icsRFlag	One-word description of the result of the entire request: <p>DDUPLICATE: This order is a duplicate of a previous order.</p> <p>DINVALIDCARD: The account number does not pass CyberSource basic checks.</p> <p>DINVALIDDATA: Data provided is not consistent with the request, such as a product with negative cost.</p> <p>DMISSINGFIELD: The request is missing a required field.</p> <p>DRESTRICTED: One or more of these problems: <ul style="list-style-type: none"> ■ The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. ■ The U.S. government maintains an economic embargo against the country indicated in the billing or shipping address. </p> <p>DSCORE: Score exceeds threshold.</p> <p>ESYSTEM: System error. Wait a few minutes, and send your request again.</p> <p>ETIMEOUT: The request timed out.</p> <p>SOK: Transaction was successful.</p>	String (50)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
46 (AT)	reasonCode	<p>Numeric value corresponding to the result of the overall request. If your error handler receives a reason code that it does not recognize, it uses the decision field to determine the result. This field can contain one of these values:</p> <ul style="list-style-type: none"> ■ 100: Successful transaction. ■ 101: One or more required request fields are missing. Possible action: See the missingField_0...N reply fields. Resend the request with the complete information. ■ 102: One or more request fields contain invalid data. Possible action: See the reply fields invalidField_0...N for which fields are invalid. Resend the request with the correct information. ■ 150: Error: General system failure. Possible action: Wait a few minutes and resend the request. ■ 151: Error: The request was received, but a server time-out occurred. This error does not include time-outs between the client and the server. Possible action: Wait a few minutes and resend the request. ■ 152: Error: The request was received, but a service time-out occurred. Possible action: Wait a few minutes and resend the request. ■ 234: A problem occurred with your CyberSource merchant configuration. Possible action: Do not resend the request. Contact Customer Support to correct the configuration problem. ■ 400: The Advanced Fraud Screen score exceeds your threshold. Possible action: Review the customer's order. ■ 700: The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. Possible action: Reject the customer's order. 	Integer (5)
47 (AU)	authFailureReason	<p>Message that explains the reply flag for the authorization. The report can contain only one failure reason for each service.</p>	String (255)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
48 (AV)	authReplyMessage	Message that describes the reply for the authorization. The report can contain only one reply reason for each service.	String (255)
49 (AW)	captureFailureReason	Message that explains the reply flag for the capture. The report can contain only one failure reason for each service.	String (255)
50 (AX)	captureReplyMessage	Message that describes the reply for the capture. The report can contain only one reply reason for each service.	String (255)
51 (AY)	creditFailureReason	Message that explains the reply flag for the credit. The report can contain only one failure reason for each service.	String (255)
52 (AZ)	creditReplyMessage	Message that describes the reply for the credit. The report can contain only one reply reason for each service.	String (255)
53 (BA)	ecpDebitReply Message	Message that describes the reply for the debit. The report can contain only one reply reason for each service.	String (255)
54 (BB)	ecpCreditReply Message	Message that describes the reply for the credit. The report can contain only one reply reason for each service.	String (255)
55 (BC)	paymentData_orderAmount	Total amount of the transaction. For credits, the amount is negative.	Amount (19)
56 (BD)	paymentData_avsCode	Results of address verification. For a list of possible values, see "AVS Codes," page 181 .	String (5)
57 (BE)	paymentData_authorizationCode	Authorization code returned only if a value is returned by the processor or if you entered a verbal authorization code.	String (6)
58 (BF)	paymentData_cvCode	Result of processing the card verification number. For a list of possible values, see "Card Verification Number (CVN) Codes," page 183	String (1)
59 (BG)	paymentData_authFactorCode	Smart Authorization factor code that is returned only if you use Smart Authorization. If multiple codes are returned, they appear separated by carets as follows: M^N^O^U. For a list of the possible values, see "Advanced Smart Authorization Factor Codes," page 184 .	String (100)
60 (BH)	merchantDefined DataField1	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
61 (BI)	merchantDefined DataField2	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)

Table 16 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
62 (BJ)	merchantDefined DataField3	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
63 (BK)	merchantDefined DataField4	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)

Sample Record

Each record includes information about an order.

```
Request,abc0002,0818691223270167904565,2004-04-13T15:12:09-07:00,
1081869122069,,Virtual Terminal,sample_user,,,,JPE,ASDSD,454 Sample Street,,
asdasd,CA,94000,US,,example@cybersource.com,,,,,,,,,,,,ics_auth,reject,0,
DINVALIDDATA,102,Unsupported ECI type. e_commerce_indicator=MOTO,,,,,,,,
```

Payment Events Report

This report contains processor-related information about events that occur for electronic check debits and credits if your processor is TeleCheck or AmeriNet. For all other information that you need to reconcile your account, see the Order Detail Report.

First Line of the Report

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

Example

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

Each part of this example (separated by commas) is described in [Table 17](#).

Table 17 Fields in the First Line of the Report

Position (Column)	Field Name	Description	Data Type and Length
1 (A)	report_name	Name of the report. This field always contains the text <code>Payment Events Report</code> .	String (100)
2 (B)	version_number	Version number of the report. The current version number is <code>1.0</code> .	Numeric (10)
3 (C)	report_date	Date included in the report. This field uses the format <code>YYYY-MM-DD</code> .	DateTime (10)
4 (D)	merchant_ID	CyberSource merchant ID used for the transaction.	String (30)

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

```
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 payment transaction. For information about possible values for each field, see the Implementation Guide for the services that you use.

Example Transaction record

```
1004223530000167905139,CyberSource,4828225690-3098813497360087, check,Payment,9/28/2004,54415,USD,20.00,USD,20.00,USD,0,Check Approved
```

Each field is described in [Table 18](#).

Table 18 Fields in the Transaction Record

Position (Column)	Field Name	Description	Data Type and Length
1 (A)	request_ID	Identifier for the transaction.	Numeric (26)
2 (B)	merchant_ID	CyberSource merchant ID used for the transaction.	String (30)
3 (C)	merchant_ref_number	Merchant-generated order reference or tracking number, such as a purchase order number.	String (50)

Table 18 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
4 (D)	payment_type	Method of payment used for the order. This field contains the following value: <ul style="list-style-type: none"> ■ Check: check debit 	String (10)
5 (E)	event_type Important Contact your processor to understand the implications of each event type for your payment process.	Type of event that occurred for the check transaction. <i>Preliminary values (immediately after transaction submission):</i> <ul style="list-style-type: none"> ■ Payment: The payment has been received by the bank. The value is always positive. ■ Refund: The refund (credit) has occurred. The value is always negative. <i>Final value for successful transactions:</i> <ul style="list-style-type: none"> ■ Completed: The transaction was completed. Wells Fargo ACH Service: After three days, if the bank does not notify Wells Fargo ACH of problems in transferring the funds, Wells Fargo ACH considers the check cleared. However, CyberSource does not guarantee that the check has truly cleared. Bank of America ACH Service: The event type is not automatically updated to Completed. To have your account configured to display the Completed event, contact Customer Support. However, CyberSource does not recommend using this event type because it does not indicate reliably that the check has cleared. <i>Final values for failed transactions (check returned by processor):</i> <ul style="list-style-type: none"> ■ Correction: A positive or negative correction was made to a payment or refund. ■ Declined: The account was invalid or disabled. For more details about the decline, see processor_message. ■ Error: An error occurred. For more details about the error, see processor_message. ■ Failed: The account was invalid or disabled. For more details about the decline, see processor_message. 	String (20)

Table 18 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
		<ul style="list-style-type: none"> ■ Final NSF: The final instance of insufficient funds occurred. ■ First NSF: The bank will attempt to re-deposit the funds. ■ NSF: The bank returned the check because of insufficient funds. ■ Other: The processor reported an unanticipated event. ■ Second NSF: The bank will attempt to re-deposit the funds for the second time. ■ Stop Payment: The customer stopped the payment. ■ Void: The check was successfully voided. 	
6 (F)	event_date	Date in GMT format that the event. This field is empty for some event types, such as Declined .	Date Time (25)
7 (G)	trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)
8 (H)	merchant_currency_code	ISO currency code of the merchant's currency. This field contains the value USD .	String (5)
9 (I)	merchant_amount	The amount deposited or withdrawn from the merchant's account for the event.	Amount (19)
10 (J)	consumer_currency_code	ISO currency code of the customer's currency. This field contains the value USD .	String (5)
11 (K)	consumer_amount	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
12 (L)	fee_currency_code	ISO currency code of the assessed fee. This field contains the value USD .	String (5)
13 (M)	fee_amount	The processor's fee for the transaction.	Amount (19)
14 (N)	processor_message	Additional information from the processor about the event, such as a success or an error message or reason. For electronic check transaction reversals with the CyberSource ACH Service, this field contains a banking reversal code. See " Banking Reversal Codes in the Payment Events Report ," page 193.	String (255)

Second Line of the Report

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 Line 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 you use.

Example Transaction Record

```
Request,0004223530000167905139,2006-05-01T07:42:03-
07:00,exampleMerchant,3C515C71D48F631,1140625304845,Credit Card
Capture,,30.00,USD,sample processor,1406235110599167904565,No action
needed.,241,,,,,4234,10,2010,20-00-00,John Smith,John,Doe,1295
Charleston,Mountain View,CA,94043,US,, ,jdoe@example.com,999-999-
9999,,,,,,,,,,,,,
```

Table 20 Fields in the Transaction Record

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

Table 20 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
6 (F)	transaction_ref_number	Reference number that you can use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID reply field.	String (60)
7 (G)	transaction_type	Type of transaction, such as credit card capture.	String (30)
8 (H)	payment_method	Type of card or bank account. This field can contain one of these values: <ul style="list-style-type: none"> ■ American Express ■ Diners Club ■ Discover ■ JCB ■ MasterCard ■ Visa 	String (50)
9 (I)	amount	Amount specified in the request.	String (19)
10 (J)	currency_code	Optional ISO Standard Currency Codes used for the transaction.	String (5)
11 (K)	payment_processor	Payment processor used for the transaction.	String (40)
12 (L)	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 (M)	action	Brief description of the action. You can see one of these values: <ul style="list-style-type: none"> ■ ERROR ■ FAILED ■ CANCELLED 	String (15)
14 (N)	reason_code	Reason code for the error that occurred. This reason code is the same one that you receive in the reply or transaction receipt. See Appendix F, "Reason Codes in the Transaction Exception Detail Report," on page 185.	Numeric (3)
15 (O)	processor_response_code	Code returned directly from the processor for the error that occurred.	String (60)
16 (P)	error_category	Type of error. You can see one of these values: <ul style="list-style-type: none"> ■ Data Error ■ Failure ■ Processor Error ■ Settlement Error 	String (20)
17 (Q)	error_message	Description of the error.	String (255)
18 (R)	account_suffix	Last four characters of the account number.	String (4)
19 (S)	customer_cc_expmo	If a credit card was used for the transaction, expiration month of the card (MM).	Numeric (2)

Table 20 Fields in the Transaction Record (Continued)

Position (Column)	Field Name	Description	Data Type and Length
20 (T)	customer_cc_expyr	If a credit card was used for the transaction, expiration year of the card (YYYY).	Numeric (4)
21 (U)	bank_code	If a bank account was used for the transaction, the bank code or sort code for the account.	String (15)
22 (V)	bank_account_name	Name of account holder.	String (60)
23 (W)	customer_firstname	First name of the billed customer.	String (60)
24 (X)	customer_lastname	Last name of the billed customer.	String (60)
25 (Y)	bill_address1	First line of the billing address.	String (60)
26 (Z)	bill_address2	Second line of the billing address.	String (60)
27 (AA)	bill_city	City of the billing address.	String (50)
28 (AB)	bill_state	State, province, or territory of the billing address.	String (20)
29 (AC)	bill_zip	Postal code of the billing address.	String (10)
30 (AD)	bill_country	<i>ISO Standard Country Codes</i> of the billing address.	String (2)
31 (AE)	company_name	Company name of the billing address.	String (60)
32 (AF)	customer_email	Email address of the billed customer.	String (255)
33 (AG)	customer_phone	Phone number of the billed customer.	String (15)
34 (AH)	ship_to_first_name	First name of the customer receiving the shipment.	String (60)
35 (AI)	ship_to_last_name	Last name of the customer receiving the shipment.	String (60)
36 (AJ)	ship_to_address1	First line of the shipping address.	String (60)
37 (AK)	ship_to_address2	Second line of the shipping address.	String (60)
38 (AL)	ship_to_city	City of the shipping address.	String (60)
39 (AM)	ship_to_state	State, province, or territory of the shipping address.	String (50)
40 (AN)	ship_to_zip	Postal code of the shipping address.	String (10)
41 (AO)	ship_to_country	<i>ISO Standard Country Codes</i> of the shipping address.	String (2)

Reports in XML Format

This appendix describes the fields contained in the XML format for these reports:

- [Batch Files Detail Report](#)
- [Exported Search Results](#)
- [Order Detail Report](#)
- [Payment Events Report](#)
- [Single Transaction Report](#)
- [Transaction Exception Detail Report](#)

For an introduction to the XML format, see "[XML Format](#)," page 14. The DTDs are described in "[DTDs for the Reports in XML Format](#)," page 155.

Batch Files Detail Report

This section describes the elements of the Batch Files Detail Report. A [Sample XML Report](#) follows the descriptions of the elements.

<Report>

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

Syntax

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

Table 21 Attributes of <Report>

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

Table 22 Child Elements of <Report>

Element Name	Description
<BatchFiles>	Batch files that are included in the report. See " <BatchFiles> ," page 80 for a list of child elements.

Example <Report> Element

```

<Report Name="Batch Files Detail Report"
  Version="1.0"
  xmlns="http://reports.cybersource.com/reports/bfdr/1.0"
  MerchantID="pcpawncshop"
  ReportStartDate="2006-09-29T05:00:00-05:00"
  ReportEndDate="2006-09-30T05:00:00-05:00">
  <BatchFiles>
    ...
  </BatchFiles>
</Report>

```

<BatchFiles>

The <BatchFiles> element contains all of the batch files that are included in the report.

Syntax

```

<BatchFiles>
  (BatchFile)*
</BatchFiles>

```


Table 23 Child Elements of <BatchFiles>

Element Name	Description
<BatchFile>	Payment processors for the transactions in the batch file. See " <BatchFile> ," page 81 for a list of attributes and child elements.

Example <BatchFiles> Element

```
<BatchFiles>
  <BatchFile BatchFileID="123">
    ...
  </BatchFile>
</BatchFiles>
```

<BatchFile>

The <BatchFile> element contains the payment processors for the transactions in the batch file.

Syntax

```
<BatchFile BatchFileID=CDATA>
  (PaymentProcessor)*
</BatchFile>
```

Table 24 Attributes of <BatchFile>

Attribute Name	Description	Data Type & Length
BatchFileID	CyberSource batch file in which the transactions were sent.	Numeric (39)

Table 25 Child Elements of <BatchFile>

Element Name	Description
<PaymentProcessor>	Requests associated with the payment processor. See " <PaymentProcessor> ," page 82 for a list of attributes and child elements.

Example <BatchFile> Element

```
<BatchFile BatchFileID="10101">
  <PaymentProcessor PaymentProcessorName="vital">
    ...
  </PaymentProcessor>
</BatchFile>
```

<PaymentProcessor>

The <PaymentProcessor> element contains the requests associated with a payment processor.

Syntax

```
<PaymentProcessor PaymentProcessorName=CDATA>
  (Request)*
</PaymentProcessor>
```

Table 26 Attributes of <PaymentProcessor>

Attribute Name	Description	Data Type & Length
PaymentProcessorName	Name of a payment processor.	String (30)

Table 27 Child Elements of <PaymentProcessor>

Element Name	Description
<Request>	Information about a payment transaction. See " <Request> ," page 82 for a list of attributes.

Example <PaymentProcessor> Element

```
<PaymentProcessor PaymentProcessorName="vital">
  <Request>
    ...
  </Request>
</PaymentProcessor>
```

<Request>

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

Syntax

```
<Request RequestID=CDATA>
  (TransactionReferenceNumber)
  (MerchantReferenceNumber)
  (TransactionStatus)
  (Amount)
  (CurrencyCode)
  (PaymentStatus)
</Request>
```

Table 28 Attributes of <Request>

Attribute Name	Description	Data Type & Length
RequestID	Unique identifier generated by CyberSource for the transaction.	Numeric (26)

Table 29 Child Elements of <Request>

Element Name	Description	Data Type & Length
Transaction Reference Number	Reference number that you use to reconcile your CyberSource reports with your processor reports. This field corresponds to the <service>_reconciliationID (Simple Order API) and to the <service>_trans_ref_no (SCMP API) reply fields.	String (60)
Merchant Reference Number	Merchant-generated order reference or tracking number.	String (50)
Transaction Status	One-word description of the result of the transaction request.	String (50)
Amount	Amount of the transaction.	Amount (19)
CurrencyCode	ISO Standard Currency Codes used for the transaction.	String (5)
PaymentStatus	One-word description of the current status of the transaction. Possible values: <ul style="list-style-type: none"> ■ BATCH_ERROR ■ BATCH_RESET ■ BATCHED ■ CANCELED_REVERS ■ CANCELLED ■ DENIED ■ FAILED ■ PENDING ■ REFUNDED ■ REVERSED ■ TRXN_ERROR ■ VOIDED 	String (50)

Example <Request> Element

```
<Request RequestID="1580782287420174065733">
  <TransactionReferenceNumber>5533830406</TransactionReferenceNumber>
  <MerchantReferenceNumber>1158078228539</MerchantReferenceNumber>
  <TransactionStatus>SOK</TransactionStatus>
  <Amount>25.00</Amount>
  <CurrencyCode>USD</CurrencyCode>
  <PaymentStatus>PENDING</PaymentStatus>
</Request>
```

Sample XML Report

This example shows a report that contains two batch files. The first batch file contains three requests; the second batch file contains one request.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://ebctest.cybersource.com/ebctest/reports/dtd/bfdr.dtd">
<Report Name="Batch Files Detail Report"
  Version="1.0"
  xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/bfdr.dtd"
  MerchantID="pcpawnshop"
  ReportStartDate="2006-09-29T05:00:00-05:00"
  ReportEndDate="2006-09-30T05:00:00-05:00">
  <BatchFiles>
    <BatchFile BatchFileID="127788">
      <PaymentProcessor PaymentProcessorName="vital">
        <Request RequestID="1595558344253232243215">
          <TransactionReferenceNumber>7242635150</TransactionReferenceNumber>
          <MerchantReferenceNumber>1158078228539</MerchantReferenceNumber>
          <TransactionStatus>SOK</TransactionStatus>
          <Amount>25.00</Amount>
          <CurrencyCode>USD</CurrencyCode>
          <PaymentStatus>PENDING</PaymentStatus>
        </Request>
        <Request RequestID="1595558354743232243215">
          <TransactionReferenceNumber>7242636613</TransactionReferenceNumber>
          <MerchantReferenceNumber>1158078892610</MerchantReferenceNumber>
          <TransactionStatus>SOK</TransactionStatus>
          <Amount>100.00</Amount>
          <CurrencyCode>USD</CurrencyCode>
          <PaymentStatus>PENDING</PaymentStatus>
        </Request>
        <Request RequestID="1595558364563232243215">
          <TransactionReferenceNumber>7242637653</TransactionReferenceNumber>
          <MerchantReferenceNumber>1158079157035</MerchantReferenceNumber>
          <TransactionStatus>SOK</TransactionStatus>
```

```

        <Amount>99.00</Amount>
        <CurrencyCode>USD</CurrencyCode>
        <PaymentStatus>VOIDED</PaymentStatus>
    </Request>
</PaymentProcessor>
</BatchFile>
<BatchFile BatchFileID="123987">
    <PaymentProcessor PaymentProcessorName="smartfdc">
        <Request RequestID="1595564779663232243215">
            <TransactionReferenceNumber>7243278653
            </TransactionReferenceNumber>
            <MerchantReferenceNumber>1159429157035
            </MerchantReferenceNumber>
            <TransactionStatus>SOK</TransactionStatus>
            <Amount>4.00</Amount>
            <CurrencyCode>USD</CurrencyCode>
            <PaymentStatus>PENDING</PaymentStatus>
        </Request>
    </PaymentProcessor>
</BatchFile>
</BatchFiles>
</Report>

```

Exported Search Results

This section describes the syntax for the exported search results and the DTD.

<Result>

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

Syntax

```

<Result xmlns=CDATA
    StartDate=CDATA
    EndDate=CDATA>
    (Requests)
</Result>

```

Table 30 Attributes of <Report>

Attribute Name	Description	Data Type and Length
xmlns	XML namespace for the DTD: https://ebctest.cybersource.com/ebctest/reports/dtd/ordersearch.dtd.	String (100)
StartDate	First date that is included in the exported result.	DateTime (25)
EndDate	Last date that is included in the exported result.	DateTime (25)

Table 31 Child Elements of <Report>

Element Name	Description
<Requests>	Contains all of the requests in the report. See <Requests> for a list of child elements.

Example <Result> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Result SYSTEM "https://ebctest.cybersource.com/ebctest/reports/dtd/ordersearch.dtd">
<Result xmlns="https://ebctest.cybersource.com/ebctest/reports/dtd/ordersearch.dtd"
  StartDate="Nov 01 2006 08:00:00.000 GMT"
  EndDate="Nov 29 2006 18:44:13.041 GMT">
  <Requests>
  </Requests>
</Result>
```

<Requests>

The <Requests> element contains all of the requests from a time period.

Syntax

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

Table 32 Child Elements of <Requests>

Element Name	Description
<Request>	Information about an order. See <Request> for a list of child elements and attributes.

Example <Requests> Element

```

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

```

<Request>

The <Request> element contains information about an order.

Syntax

```

<Request requestID CDATA #REQUIRED
  transactionDate CDATA #REQUIRED
  orderNumber CDATA #REQUIRED
  source CDATA #IMPLIED
  user CDATA #IMPLIED
  reconciliationID CDATA #IMPLIED
  eCommerceIndicator CDATA #IMPLIED
  customerID CDATA #IMPLIED
  comments CDATA #IMPLIED>
  (BillTo)?
  (ShipTo)?
  (PaymentMethod)?
  (ApplicationReplies)
  (PaymentData)
  (MerchantDefinedData)?
</Request>

```

Table 33 Attributes of <Request>

Attribute Name	Description	Data Type and Length
requestID	Unique identifier generated by CyberSource for the transaction.	Numeric (26)
transactionDate	Date of the order	DateTime (25)
orderNumber	Merchant-generated order reference or tracking number.	String (50)
source	Source of the transaction. This is an implied attribute. If present, the value is <code>Virtual Terminal</code> .	String (50)
user	Person who requested the report	String
reconciliationID	Reference number for the transaction. Returned in the ccCaptureReply_reconciliationID reply field for the first capture of the authorization.	String (60)

Table 33 Attributes of <Request> (Continued)

Attribute Name	Description	Data Type and Length
eCommerceIndicator	Type of transaction. Certain card associations use this information when determining discount rates to charge you. Returned for Verified by Visa and MasterCard SecureCode transactions. See Payer Authentication for information. This field can contain one of the following values: <ul style="list-style-type: none"> ■ <code>install</code>: Installment payment. ■ <code>internet</code> (default): eCommerce order placed by using a Web site. ■ <code>moto</code>: Mail order or telephone order. ■ <code>recurring</code>: Recurring transaction. ■ <code>spa</code>: MasterCard SecureCode transaction. ■ <code>vbv</code>: Successful Verified by Visa transaction. ■ <code>vbv_attempted</code>: Verified by Visa transaction was attempted but not authenticated. 	String (13)
customerID	Customer's account ID	String
comments	Brief description of the order or any comment you wish to add to the order.	String

Table 34 Child Elements of <Request>

Element Name	Description
<BillTo>	Information about the billing address and purchaser for the order. For a list of child elements, see <BillTo> .
<ShipTo>	Information about the shipping address and recipient for the order. For a list of child elements, see <ShipTo> .
<PaymentMethod>	Method of payment used by the customer for the transaction. For the list of child elements, see <PaymentMethod> .
<ApplicationReplies>	Reply information for all applications in the request. For a list of child elements, see <ApplicationReplies> .
<PaymentData>	Results of an authorization request. For a list of child elements, see <PaymentData> .
<MerchantDefinedData>	Information about the optional fields that you created. For a list of child elements, see <MerchantDefinedData> .

Example <Request> Element

```

<Request requestID="0818691223270167904565"
        transactionDate="2004-04-13T15:12:09-07:00"
        orderNumber="1081869122069"
        source="Virtual Terminal"
        user="abc0002">
    reconciliationID="000987557KPOWXULCQQ13"
    eCommerceIndicator="M"
    customerID="John Doe"
    comments="fast shipping">
<BillTo>
    ...
</BillTo>
<ShipTo>
    ...
</ShipTo>
<PaymentMethod>
    ...
</PaymentMethod>
<ApplicationReplies>
    ...
</ApplicationReplies>
<PaymentData>
    ...
</PaymentData>
<MerchantDefinedData>
    ...
</MerchantDefinedData>
</Request>

```

<BillTo>

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

Syntax

```

<BillTo>
  (FirstName)
  (LastName)
  (Street1)?
  (Street2)?
  (City)
  (State)
  (PostalCode)?
  (Country)
  (Company)?
  (Email)
  (Title)?
  (PhoneNumber)

```

```
(IPAddress)?
</BillTo>
```

Table 35 Child Elements of <BillTo>

Element Name	Description	Data Type and Length
<FirstName>	First name of the billed customer.	String (60)
<LastName>	Last name of the billed customer.	String (60)
<Street1>	First line of the billing address.	String (60)
<Street2>	Second line of the billing address.	String (60)
<City>	City of the billing address.	String (50)
<State>	State, province, or territory of the billing address. For a list of values, see State, Province, and Territory Codes for the United States and Canada .	String (20)
<PostalCode>	Postal code of the billing address.	String (10)
<Country>	ISO country code of the billing address. For a list of codes, see ISO Standard Country Codes .	String (2)
<Company>	Company name of the billing address.	String (60)
<Email>	Email address of the billed customer.	String (255)
<Title>	Title of the billed customer.	String (30)
<PhoneNumber>	Phone number of the billed customer.	String (15)
<IPAddress>	IP address 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>
  <email>icsinfo@cybersource.com</email>
  <country>US</country>
  <phone>650-965-6000</phone>
</BillTo>
```

<ShipTo>

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

Syntax

```
<ShipTo>
  (FirstName)?
  (LastName)?
  (Street1)?
  (Street2)?
  (City)?
  (State)?
  (PostalCode)?
  (Country)?
  (PhoneNumber)?
</ShipTo>
```

Table 36 Child Elements of <ShipTo>

Element Name	Description	Data Type and Length
<FirstName>	First name of the customer to whom the order is shipped.	String (60)
<LastName>	Last name of the customer to whom the order is shipped.	String (60)
<Street1>	First line of the shipping address.	String (60)
<Street2>	Second line of the shipping address.	String (60)
<City>	City of the shipping address.	String (60)
<State>	State, province, or territory of the shipping address. For a list of values, see State, Province, and Territory Codes for the United States and Canada .	String (50)
<PostalCode>	Postal code of the shipping address.	String (10)
<Country>	ISO country code of the shipping address. For a list of codes, see ISO Standard Country Codes .	String (2)
<PhoneNumber>	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>
  <postalCode>94043</postalCode>
  <country>US</country>
</ShipTo>
```

<PaymentMethod>

The optional <PaymentMethod> element contains information about the type of payment used by the customer: card or check. One of these options must appear in the report.

Syntax

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

Table 37 Child Elements of <PaymentMethod>

Element Name	Description
<Card>	Information used to process a credit card. See <Card> for a list of child elements.
<Check>	Information used to process a check. See <Check> for a list of child elements.

Example <PaymentMethod> Element

```
<PaymentMethod>
  <card> </card>
</PaymentMethod>
```

<Card>

The <Card> element contains information used to process a credit card. For requests that do not include credit card payment information, all child elements of <Card> are empty.

Syntax

```
<Card>
  (AccountNumber)
  (ExpirationMonth)
  (ExpirationYear)
  (CardType)
</Card>
```

Table 38 Child Elements of <Card>

Element Name	Description	Data Type and Length
<AccountNumber>	Credit card number of the customer. For ccCreditService , optional if ccCreditService_captureRequestID is included	String w/ numbers only (20)
<ExpirationMonth>	Expiration month (<i>MM</i>) of the credit card.	String (2)
<ExpirationYear>	Expiration year (<i>YYYY</i>) of the credit card.	String (4)

Table 38 Child Elements of <Card> (Continued)

Element Name	Description	Data Type and Length
<CardType>	Type of card used for the transaction. This element can contain one of the following values: <ul style="list-style-type: none"> ■ American Express ■ Diners Club ■ Discover ■ JCB ■ MasterCard ■ UNKNOWN card ■ Visa 	String (50)

Example <Card> Element

```
<Card>
  <accountNumber>1111</accountNumber>
  <expirationMonth>12</expirationMonth>
  <expirationYear>2015</expirationYear>
  <cardType>Visa</cardType>
</Card>
```

<Check>

The <Check> element contains information used to process a check. For requests that do not include check payment information, all child elements of <Check> are empty.

Syntax

```
<Check>
  (accountType)
  (accountNumber)
  (routingNumber)
  (ecpRefNum)
</Check>
```

Table 39 Child Elements of <Check>

Element Name	Description	Data Type and Length
<AccountType>	Type of checking account used for the transaction. The required field can contain one of the following values (although in the API, you used the values c, s, or x): <ul style="list-style-type: none"> ■ Checking ■ Savings (U.S. dollars only) ■ Corporate checking (U.S. dollars only) 	String (1)
<AccountNumber>	Last four digits of the checking account number of the customer.	String (25)
<RoutingNumber>	Bank routing number (also known as transit number).	String (9)
<EcpRefNum>	Identifier that you use to track the request through the payment processor. If you do not send this field in your request, CyberSource generates a unique value and returns it in the field reconciliationID. For TeleCheck, the maximum length is 25.	String (60)

Example <Check> Element

```

<Check>
  <AccountType>Checking</AccountType>
  <AccountNumber>1121</AccountNumber>
  <RoutingNumber>0003483095</RoutingNumber>
  <EcpRefNum>02RYXWMGDY9C9LEX</EcpRefNum>
</Check>

```

<ApplicationReplies>

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

Syntax

```

<ApplicationReplies>
  (ApplicationReply)*
</ApplicationReplies>

```

Table 40 Child Elements of <ApplicationReplies>

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

The following example shows replies for a request that included the **ics_auth** and **ics_bill** applications.

Example <ApplicationReplies> Element

```
<ApplicationReplies>
  <ApplicationReply name="ics_auth">
    ...
  </ApplicationReply>
  <ApplicationReply name="ics_bill">
    ...
  </ApplicationReply>
</ApplicationReplies>
```

<ApplicationReply>

The report includes an <ApplicationReply> element for each application in your request: ics_auth, ics_bill, ics_credit, ics_pay_subscription_create, ics_ecp_credit, and ics_void.

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

Syntax

```
<ApplicationReply name=CDATA>
  (Decision)
  (ICS_RCode)
  (ICS_RFlag)
  (ReasonCode)
  (ICS_RMsg)?
</ApplicationReply>
```

Table 41 Attributes of <ApplicationReply>

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

Table 42 Child Elements of <ApplicationReply>

Element Name	Description	Data Type and Length
<Decision>	Summarizes the result of the overall request. The field can contain one of the following values: <ul style="list-style-type: none"> ■ ACCEPT: success ■ REJECT: failure ■ ERROR: failure 	String (6)
<ICS_RCode>	One-digit code that indicates whether the entire request was successful. The field contains one of the following values: <ul style="list-style-type: none"> ■ 1: success ■ 0: declined ■ -1: error 	Integer (1)
<ICS_RFlag>	One-word description of the result of the entire request: <p>DDUPLICATE: This order is a duplicate of a previous order.</p> <p>DINVALIDCARD: The account number does not pass CyberSource basic checks.</p> <p>DINVALIDDATA: Data provided is not consistent with the request. For example, you requested a product with negative cost.</p> <p>DMISSINGFIELD: The request is missing a required field.</p> <p>DRESTRICTED: One or more of the following problems: <ul style="list-style-type: none"> ■ The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. ■ The U.S. government maintains economic embargoes against the country indicated in the billing or shipping address. </p> <p>DSCORE: Score exceeds threshold.</p> <p>ESYSTEM: System error. Wait a few minutes, then try sending your request again.</p> <p>ETIMEOUT: The request timed out.</p> <p>SOK: Transaction was successful.</p>	String (50)
<ICS_RMsg>	Message that explains the reply flag for the application and summarizes the result of the request and the specific applications that you requested.	String (255)

Table 42 Child Elements of <ApplicationReply> (Continued)

Element Name	Description	Data Type and Length
<ReasonCode>	<p>Numeric value corresponding to the result of the overall request. CyberSource reserves the right to add new reason codes at any time. If your error handler receives a reason code that it does not recognize, it uses the decision field to determine the result. This field can contain one of the following values:</p> <ul style="list-style-type: none"> ■ 100: Successful transaction. ■ 101: The request is missing one or more required fields. Possible action: See the reply fields missingField_0...N for which fields are missing. Resend the request with the complete information. ■ 102: One or more fields in the request contains invalid data. Possible action: See the reply fields invalidField_0...N for which fields are invalid. Resend the request with the correct information. ■ 150: Error: General system failure. Possible action: Wait a few minutes and resend the request. ■ 151: 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: Wait a few minutes and resend the request. ■ 152: Error: The request was received but there was a service time-out. Possible action: Wait a few minutes and resend the request. ■ 234: There is a problem with your CyberSource merchant configuration. Possible action: Do not resend the request. Contact Customer Support to correct the configuration problem. ■ 400: The Advanced Fraud Screen score exceeds your threshold. Possible action: Review the customer's order. ■ 700: The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. Possible action: Reject the customer's order. 	Integer (5)

Example <ApplicationReply> Element for a successful reply

```

<ApplicationReply name="ics_score">
  <decision>accept</decision>
  <ics_RCode>1</ics_RCode>
  <ics_RFlag>SOK</ics_RFlag>
  <reasonCode>100</reasonCode>
  <ics_RMsg>score service was successful</ics_RMsg>
</ApplicationReply>

```

If <ApplicationReply> does not run, the fields are empty.

<PaymentData>

The <PaymentData> element contains reply information about the authorization.

Syntax

```
<PaymentData>
  (OrderAmount)
  (AuthorizationCode)?
  (AVSCode)?
  (CVCode)?
  (AuthFactorCode)?
</PaymentData>
```

Table 43 Child Elements of <PaymentData>

Element Name	Description	Data Type and Length
<OrderAmount>	Total amount of the transaction.	Amount (19)
<AuthorizationCode>	Authorization code returned only if a value is returned by the processor or if you entered a verbal authorization code.	String (6)
<AVSCode>	Results of address verification. For a list of possible values, see "AVS Codes," page 181 .	String (5)
<CVCode>	Results of processing the card verification number. For a list of codes, see "Card Verification Number (CVN) Codes," page 183 .	String (1)
<AuthFactorCode>	Smart Authorization factor code that is returned only if you use Smart Authorization. Multiple codes are separated by carets as follows: M^N^O^U. For a list of possible values, see "Advanced Smart Authorization Factor Codes," page 184 .	String (100)

Example <PaymentData> Element

```
<PaymentData>
  <OrderAmount>10.00</OrderAmount>
  <AuthorizationCode>123456</AuthorizationCode>
  <AVSCode>Y</AVSCode>
  <CVCode>M</CVCode>
  AuthFactorCode> </AuthFactorCode>
</PaymentData>
```

<MerchantDefinedData>

The <MerchantDefinedData> element contains the fields that you use to report additional or optional data.

Syntax

```
<MerchantDefinedData>
  (field1)?
  (field2)?
  (field3)?
  (field4)?
</MerchantDefinedData>
```

Table 44 Child Elements of <MerchantDefinedData>

Element Name	Description	Data Type and Length
<field1>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
<field2>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
<field3>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
<field4>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)

Example <MerchantDefinedData> Element

```
<MerchantDefinedData>
  <field1> </field1>
  <field2> </field2>
  <field3> </field3>
  <field4> </field4>
</MerchantDefinedData>
```

Order Detail Report

This section describes the Order Detail report.

<Report>

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

Syntax

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

Table 45 Attributes of <Report>

Attribute Name	Description	Data Type and Length
Name	Name of the report. This element always contains the text Order Detail Report.	String (100)
Version	Version number of the report. The current version number is 1.0.	Numeric (10)
xmlns	XML namespace for the DTD: https://businesscentertest.cybersource.com/sbctest/reports/dtds/odr.dtd.	String (100)
merchantID	CyberSource merchant ID used for the transactions in the report.	String (30)
ReportStartDate	First date that is included in the report.	DateTime (25)
ReportEndDate	Last date that is included in the report.	DateTime (25)

Table 46 Child Elements of <Report>

Element Name	Description
<Requests>	Contains all of the requests in the report. See <Requests> for a list of child elements.

Example <Report> Element

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Report SYSTEM "https://businesscentertest.cybersource.com/sbctest/reports/
dtds/odr.dtd">
<Report Name="Order Detail Report"
  Version="1.0"
  xmlns="https://businesscentertest.cybersource.com/sbctest/reports/dtds/
odr.dtd"
  merchantID="sample"
  ReportStartDate="2004-04-13T07:00:00-07:00"
  ReportEndDate="2004-04-14T07:00:00-07:00">
</Report>
```

<Requests>

The <Requests> element contains all of the requests from a time period.

Syntax

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

Table 47 Child Elements of <Requests>

Element Name	Description
<Request>	Information about an order. See <Request> for a list of child elements and attributes.

Example <Requests> Element

```
<Requests>
  <Request RequestID="0818691223270167904565"
    orderNumber="1081869122069">
    ...
  </Request>
</Requests>
```

<Request>

The <Request> element contains information about an order.

Syntax

```
<Request requestID CDATA #REQUIRED
      transactionDate CDATA #REQUIRED
      orderNumber CDATA #REQUIRED
      customerID CDATA #IMPLIED
      source CDATA #IMPLIED
      user CDATA #IMPLIED
      reconciliationID CDATA #IMPLIED
      eCommerceIndicator CDATA #IMPLIED
      comments CDATA #IMPLIED>
  (BillTo)
  (ShipTo)?
  (PaymentMethod)
  (LineItems)?
  (ApplicationReplies)
  (PaymentData)
  (MerchantDefinedData)?
</Request>
```

Table 48 Attributes of <Request>

Attribute Name	Description	Data Type and Length
requestID	Unique identifier generated by CyberSource for the transaction.	Numeric (26)
transactionDate	Date of the order	DateTime (25)
orderNumber	Merchant-generated order reference or tracking number.	String (50)
customerID	Customer's account ID	String
source	Source of the transaction. This is an implied attribute. If present, the value is <code>Virtual Terminal</code> .	String (50)
user	Person who requested the report	String
reconciliationID	Reference number for the transaction. Returned in the ccCaptureReply_reconciliationID reply field for the first capture of the authorization.	String (60)

Table 48 Attributes of <Request> (Continued)

Attribute Name	Description	Data Type and Length
eCommerceIndicator	Type of transaction. Certain card associations use this information when determining discount rates to charge you. Required for Verified by Visa and MasterCard SecureCode transactions. See Payer Authentication for information. This field can contain one of these values: <ul style="list-style-type: none"> ■ 5: vbv (Successful Verified by Visa transaction) ■ 6: spa (MasterCard SecureCode transaction) ■ 7: internet (default) (eCommerce order placed by using a Web site) ■ 8: vbv_attempted (Verified by Visa transaction was attempted but not authenticated) ■ E: vbv_failure (Depending on your payment processor, you may receive this result if Visa's directory service is not available) ■ F: spa_failure (MasterCard SecureCode authentication failed) ■ M: moto (Mail order or telephone order) ■ P: retail (Point-of-sale transaction) ■ R: recurring (Recurring transaction) ■ S: install (Installment payment) 	String (13)
comments	Brief description of the order or any comment you wish to add to the order.	String

Table 49 Child Elements of <Request>

Element Name	Description
<BillTo>	Information about the billing address and purchaser for the order. For a list of child elements, see <BillTo> .
<ShipTo>	Information about the shipping address and recipient for the order. For a list of child elements, see <ShipTo> .
<PaymentMethod>	Method of payment used by the customer for the transaction. For the list of child elements, see <PaymentMethod> .
<LineItems>	Information about a single line item in an order. For a list of child elements, see <LineItem> .
<ApplicationReplies>	Reply information for all applications in the request. For a list of child elements, see <ApplicationReplies> .
<PaymentData>	Results of an authorization request. For a list of child elements, see <PaymentData> .
<MerchantDefinedData>	Information about the optional fields that you created. For a list of child elements, see <MerchantDefinedData> .

Example <Request> Element

```

<Request requestID="0818691223270167904565"
        transactionDate="2004-04-13T15:12:09-07:00"
        orderNumber="1081869122069"
        source="Virtual Terminal"
        user="abc0002">
  <BillTo>...</BillTo>
  <ShipTo>...</ShipTo>
  <PaymentMethod>...</PaymentMethod>
  <LineItems>...</LineItems>
  <ApplicationReplies>...</ApplicationReplies>
  <PaymentData>...</PaymentData>
  <MerchantDefinedData>...</MerchantDefinedData>
</Request>

```

<BillTo>

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

Syntax

```

<BillTo>
  (FirstName)
  (LastName)
  (Street1)?
  (Street2)?
  (City)
  (State)
  (PostalCode)?
  (Country)
  (Company)?
  (Email)
  (Title)?
  (PhoneNumber)
  (IPAddress)?
</BillTo>

```

Table 50 Child Elements of <BillTo>

Element Name	Description	Data Type and Length
<FirstName>	First name of the billed customer.	String (60)
<LastName>	Last name of the billed customer.	String (60)
<Street1>	First line of the billing address.	String (60)
<Street2>	Second line of the billing address.	String (60)
<City>	City of the billing address.	String (50)

Table 50 Child Elements of <BillTo> (Continued)

Element Name	Description	Data Type and Length
<State>	State, province, or territory of the billing address. For a list of values, see State, Province, and Territory Codes for the United States and Canada .	String (20)
<PostalCode>	Postal code of the billing address.	String (10)
<Country>	ISO country code of the billing address. For a list of codes, see ISO Standard Country Codes .	String (2)
<Company>	Company name of the billing address.	String (60)
<Email>	Email address of the billed customer.	String (255)
<Title>	Title of the billed customer.	String (30)
<PhoneNumber>	Phone number of the billed customer.	String (15)
<IPAddress>	IP address 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>
  <email>icsinfo@cybersource.com</email>
  <country>US</country>
  <phone>650-965-6000</phone>
</BillTo>

```

<ShipTo>

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

Syntax

```

<ShipTo>
  (FirstName)?
  (LastName)?
  (Street1)?
  (Street2)?
  (City)?
  (State)?
  (PostalCode)?
  (Country)?
  (PhoneNumber)?
</ShipTo>

```

Table 51 Child Elements of <ShipTo>

Element Name	Description	Data Type and Length
<FirstName>	First name of the customer to whom the order is shipped.	String (60)
<LastName>	Last name of the customer to whom the order is shipped.	String (60)
<Street1>	First line of the shipping address.	String (60)
<Street2>	Second line of the shipping address.	String (60)
<City>	City of the shipping address.	String (60)
<State>	State, province, or territory of the shipping address. For a list of values, see State, Province, and Territory Codes for the United States and Canada .	String (50)
<PostalCode>	Postal code of the shipping address.	String (10)
<Country>	ISO country code of the shipping address. For a list of codes, see ISO Standard Country Codes .	String (2)
<PhoneNumber>	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>
  <postalCode>94043</postalCode>
  <country>US</country>
</ShipTo>

```

<PaymentMethod>

The <PaymentMethod> element contains information about the type of payment used by the customer: card or check. One of these options must appear in the report.

Syntax

```

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

```

Table 52 Child Elements of <PaymentMethod>

Element Name	Description
<Card>	Information used to process a credit card. See <Card> for a list of child elements.
<Check>	Information used to process a check. See <Check> for a list of child elements.

Example <PaymentMethod> Element

```
<PaymentMethod>
  <card> </card>
</PaymentMethod>
```

<Card>

The <Card> element contains information used to process a credit card. For requests that do not include credit card payment information, all child elements of <Card> are empty.

Syntax

```
<Card>
  (AccountNumber)
  (ExpirationMonth)
  (ExpirationYear)
  (CardType)
</Card>
```

Table 53 Child Elements of <Card>

Element Name	Description	Data Type and Length
<AccountNumber>	Credit card number of the customer. For ccCreditService , optional if ccCreditService_captureRequestID is included. When the account number is corrected, the corrected number is displayed instead of the original number.	String w/ numbers only (20)
<ExpirationMonth>	Expiration month (<i>MM</i>) of the credit card.	String (2)
<ExpirationYear>	Expiration year (<i>YYYY</i>) of the credit card.	String (4)
<CardType>	Type of card used for the transaction. This element can contain one of these values: <ul style="list-style-type: none"> ■ American Express ■ Diners Club ■ Discover ■ JCB ■ MasterCard ■ UNKNOWN card ■ Visa 	String (50)

Example <Card> Element

```

<Card>
  <accountNumber>1111</accountNumber>
  <expirationMonth>12</expirationMonth>
  <expirationYear>2015</expirationYear>
  <cardType>Visa</cardType>
</Card>

```

<Check>

The <Check> element contains information used to process a check. For requests that do not include check payment information, all child elements of <Check> are empty.

Syntax

```

<Check>
  (accountType)
  (accountNumber)
  (routingNumber)
  (ecpRefNum)
</Check>

```

Table 54 Child Elements of <Check>

Element Name	Description	Data Type and Length
<AccountType>	Type of checking account used for the transaction. The required field can contain one of the following values (although in the API, you used the values c, s, or x): <ul style="list-style-type: none"> ■ Checking ■ Savings (U.S. dollars only) ■ Corporate checking (U.S. dollars only) 	String (1)
<AccountNumber>	Last four digits of the checking account number of the customer. When the account number is corrected, the corrected number is displayed instead of the original number.	String (25)
<RoutingNumber>	Bank routing number (also known as transit number). When the routing number is corrected, the corrected number is displayed instead of the original number.	String (9)
<EcpRefNum>	Identifier that you use to track the request through the payment processor. If you do not send this field in your request, CyberSource generates a unique value and returns it in the field reconciliationID. For TeleCheck, the maximum length is 25.	String (60)

Example <Check> Element

```

<Check>
  <AccountType>Checking</AccountType>
  <AccountNumber>1121</AccountNumber>
  <RoutingNumber>0003483095</RoutingNumber>
  <EcpRefNum>02RYXWMGDY9C9LEX</EcpRefNum>
</Check>

```

<LineItems>

The <LineItems> element contains all of the line items for the order. Line items are also called offers.

Syntax

```

<LineItems>
  (LineItem)*
</LineItems>

```

Table 55 Child Elements of <LineItems>

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

The following example includes two separate line items.

Example <LineItems>

```

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

```

<LineItem>

The <LineItem> element contains information about a single line item in an order. Line items are also called offers.

Syntax

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

Table 56 Attributes of <LineItem>

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 57 Child Elements of <LineItem>

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

Example <LineItem> Element

```
<LineItem Number="0">
  <fulfillmentType>P</fulfillmentType>
  <quantity>1</quantity>
  <unitPrice>20.00</unitPrice>
</LineItem>
```

<ApplicationReplies>

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

Syntax

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

Table 58 Child Elements of <ApplicationReplies>

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

The following example shows replies for a request that included the **ics_auth** and **ics_bill** applications.

Example <ApplicationReplies> Element

```
<ApplicationReplies>
  <ApplicationReply name="ics_auth">
    ...
  </ApplicationReply>
  <ApplicationReply name="ics_bill">
    ...
  </ApplicationReply>
</ApplicationReplies>
```

<ApplicationReply>

The report includes an <ApplicationReply> element for each application in your request: ics_auth, ics_bill, ics_credit, ics_pay_subscription_create, ics_ecp_credit, and ics_void.

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

Syntax

```
<ApplicationReply name=CDATA>
  (Decision)
  (ICS_RCode)
  (ICS_RFlag)
  (ReasonCode)
  (ICS_RMsg)?
</ApplicationReply>
```

Table 59 Attributes of <ApplicationReply>

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

Table 60 Child Elements of <ApplicationReply>

Element Name	Description	Data Type and Length
<Decision>	Summarizes the result of the overall request. The field can contain one of the following values: <ul style="list-style-type: none"> ■ ACCEPT: success ■ REJECT: failure ■ ERROR: failure 	String (6)
<ICS_RCode>	One-digit code that indicates whether the entire request was successful. The field contains one of the following values: <ul style="list-style-type: none"> ■ 1: success ■ 0: declined ■ -1: error 	Integer (1)

Table 60 Child Elements of <ApplicationReply> (Continued)

Element Name	Description	Data Type and Length
<ICS_RFlag>	<p>One-word description of the result of the entire request:</p> <p>DDUPLICATE: This order is a duplicate of a previous order.</p> <p>DINVALIDCARD: The account number does not pass CyberSource basic checks.</p> <p>DINVALIDDATA: Data provided is not consistent with the request. For example, you requested a product with negative cost.</p> <p>DMISSINGFIELD: The request is missing a required field.</p> <p>DRESTRICTED: One or more of the following problems:</p> <ul style="list-style-type: none"> ■ The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. ■ The U.S. government maintains economic embargoes against the country indicated in the billing or shipping address. <p>DSCORE: Score exceeds threshold.</p> <p>ESYSTEM: System error. Wait a few minutes, then try sending your request again.</p> <p>ETIMEOUT: The request timed out.</p> <p>SOK: Transaction was successful.</p>	String (50)
<ICS_RMsg>	<p>Message that explains the reply flag for the application and summarizes the result of the request and the specific applications that you requested.</p>	String (255)

Table 60 Child Elements of <ApplicationReply> (Continued)

Element Name	Description	Data Type and Length
<ReasonCode>	<p>Numeric value corresponding to the result of the overall request. CyberSource reserves the right to add new reason codes at any time. If your error handler receives a reason code that it does not recognize, it uses the decision field to determine the result. This field can contain one of the following values:</p> <ul style="list-style-type: none"> ■ 100: Successful transaction. ■ 101: The request is missing one or more required fields. Possible action: See the reply fields missingField_0...N for which fields are missing. Resend the request with the complete information. ■ 102: One or more fields in the request contains invalid data. Possible action: See the reply fields invalidField_0...N for which fields are invalid. Resend the request with the correct information. ■ 150: Error: General system failure. Possible action: Wait a few minutes and resend the request. ■ 151: 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: Wait a few minutes and resend the request. ■ 152: Error: The request was received but there was a service time-out. Possible action: Wait a few minutes and resend the request. ■ 234: There is a problem with your CyberSource merchant configuration. Possible action: Do not resend the request. Contact Customer Support to correct the configuration problem. ■ 400: The Advanced Fraud Screen score exceeds your threshold. Possible action: Review the customer's order. ■ 700: The customer is on a list issued by the U.S. government containing entities with whom trade is restricted. Possible action: Reject the customer's order. 	Integer (5)

Example <ApplicationReply> Element for a successful reply

```
<ApplicationReply name="ics_score">
  <ics_RCode>1</ics_RCode>
  <ics_RFlag>SOK</ics_RFlag>
  <ics_RMsg>score service was successful</ics_RMsg>
</ApplicationReply>
```

If <ApplicationReply> does not run, the fields are empty.

<PaymentData>

The <PaymentData> element contains reply information about the authorization.

Syntax

```
<PaymentData>
  (AuthorizationCode)
  (OrderAmount)?
  (AVSCode)?
  (CVCode)
  (AuthFactorCode)?
</PaymentData>
```

Table 61 Child Elements of <PaymentData>

Element Name	Description	Data Type and Length
<OrderAmount>	Total amount of the transaction.	Amount (19)
<AuthorizationCode>	Authorization code returned only if a value is returned by the processor or if you entered a verbal authorization code.	String (6)
<AVSCode>	Results of address verification. For a list of possible values, see "AVS Codes," page 181 .	String (5)
<CVCode>	Results of processing the card verification number. For a list of codes, see "Card Verification Number (CVN) Codes," page 183 .	String (1)
<AuthFactorCode>	Smart Authorization factor code that is returned only if you use Smart Authorization. Multiple codes are separated by carets as follows: M^N^O^U. For a list of possible values, see "Advanced Smart Authorization Factor Codes," page 184 .	String (100)

Example <PaymentData> Element

```
<PaymentData>
  <OrderAmount>10.00</OrderAmount>
  <AuthorizationCode>123456</AuthorizationCode>
  <AVSCode>Y</AVSCode>
  <CVCode>M</CVCode>
  AuthFactorCode> </AuthFactorCode>
</PaymentData>
```

<MerchantDefinedData>

The <MerchantDefinedData> element contains the fields that you use to report additional or optional data.

Syntax

```
<MerchantDefinedData>
  (field1)?
  (field2)?
  (field3)?
  (field4)?
</MerchantDefinedData>
```

Table 62 Child Elements of <MerchantDefinedData>

Element Name	Description	Data Type and Length
<field1>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
<field2>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
<field3>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)
<field4>	Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments.	String (64)

Example <MerchantDefinedData> Element

```
<MerchantDefinedData>
  <field1> </field1>
  <field2> </field2>
  <field3> </field3>
  <field4> </field4>
</MerchantDefinedData>
```

Payment Events Report

This report contains information about events that occur for electronic check debits and credits if your processor is TeleCheck or AmeriNet. For all other information that you need to reconcile your account, see the Order Detail Report.

The report comprises many sections. Each element and attribute is described below.

<Report>

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

Syntax

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

Table 63 Attributes of <Report>

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

Table 64 Child Elements of <Report>

Element Name	Description
<Requests>	Contains all of the requests in the report. See <Requests> for a list of child elements.

Example <Report> Element

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

<Requests>

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

Syntax

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

Table 65 Child Elements of <Requests>

Element Name	Description
<Request>	Information about a single request. See <Request> for a list of child elements and attributes.

Example <Requests> Element

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

<Request>

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

Syntax

```
<Request RequestID=CDATA
      MerchantReferenceNumber=CDATA>
  (Check)
</Request>
```

Table 66 Attributes of <Request>

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)
Application	Describes the type of transaction. Multiple applications can be associated with a request and are separated by a comma.	String (50)

Table 67 Child Elements of <Request>

Element Name	Description
<Check>	Information about a check transaction. See <Check> for a list of child elements and attributes.

Example <Request> Element

```
<Request RequestID="0004223530000167905139">
  MerchantReferenceNumber="3C515C71D48F631">
  Application="ics_auth">
  <Check>...</Check>
</Request>
```

<Check>

The <Check> element contains information about a check transaction.

Syntax

```
<Check Event=CDATA
      EventDate=NMTOKEN>
  (TransactionReferenceNumber)
  (MerchantCurrencyCode)
  (MerchantAmount)
```

```

(ConsumerCurrencyCode)
(ConsumerAmount)
(FeeCurrencyCode)
(FeeAmount)
(ProcessorMessage)?
</Check>

```

Table 68 Attributes of <Check>

Attribute Name	Description	Data Type and Length
Event	<p>Type of event that occurred for the check transaction.</p> <p><i>Preliminary values (immediately after transaction submission):</i></p> <ul style="list-style-type: none"> ■ Payment: The payment has been received by the bank. The value is always positive. ■ Refund: The refund (credit) occurred. The value is always negative. <p><i>Final value for successful transactions:</i></p> <ul style="list-style-type: none"> ■ Completed: The transaction was completed. Wells Fargo ACH Service: After three days, if the bank does not notify Wells Fargo ACH of problems in transferring the funds, Wells Fargo ACH considers the check cleared. However, CyberSource does not guarantee that the check has truly cleared. Bank of America ACH Service: The event type is not automatically updated to Completed. To have your account configured to display the Completed event, contact Customer Support. However, CyberSource does not recommend using this event type because it does not indicate reliably that the check has cleared. <p><i>Final values for failed transactions (check returned by processor):</i></p> <ul style="list-style-type: none"> ■ Correction: A positive or negative correction was made to a payment or refund. ■ Declined: The account was invalid or disabled. For more details about the decline, see <ProcessorMessage>. ■ Error: An error occurred. For more details about the error, see <ProcessorMessage>. ■ Failed: The account was invalid or disabled. For more details about the decline, see <ProcessorMessage>. ■ Final NSF: The final instance of insufficient funds occurred. ■ First NSF: The bank will attempt to re-deposit the funds. ■ NSF: The bank returned the check because of insufficient funds. ■ Other: The processor reported an unanticipated event. ■ Second NSF: The bank will attempt to re-deposit the funds for the second time. ■ Stop Payment: The customer stopped the payment. ■ Void: The check was successfully voided. <p>Important Contact your processor to understand the implications of each event type for your payment process.</p>	String (20)

Table 68 Attributes of <Check> (Continued)

Attribute Name	Description	Data Type and Length
EventDate	Date in GMT format that the event occurred. This field is empty for some event types, such as Declined.	DateTime (25)

Table 69 Child Elements of <Check>

Element Name	Description	Data Type and Length
<TransactionReferenceNumber>	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)
<MerchantCurrencyCode>	ISO currency code of the merchant's currency. This field contains the value USD.	String (5)
<MerchantAmount>	The amount deposited or withdrawn from the merchant's account for the event.	Amount (19)
<ConsumerCurrencyCode>	ISO currency code of the customer's currency. This field contains the value USD.	String (5)
<ConsumerAmount>	The amount deposited or withdrawn from the customer's account for the event.	Amount (19)
<FeeAmount>	The processor's fee for the transaction.	Amount (19)
<FeeCurrencyCode>	ISO currency code of the assessed fee. This field contains the value USD.	String (5)
<ProcessorMessage>	Additional information from the processor about the event, such as a success or an error message or reason. For electronic check transaction reversals with the CyberSource ACH Service, this field contains a banking reversal code. See "Banking Reversal Codes in the Payment Events Report," page 193.	String (255)

Example <Check> Element

```

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

```

Single Transaction Report

This report contains summary information about your card and check transactions.



Note

Make sure to download from the Business Center the DTD version that corresponds to the report version that you choose (1.1, 1.5 or 1.7).

<Report>

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

Syntax

```
<Report MerchantID=CDATA
      Name=CDATA
      ReportStartDate=CDATA
      ReportEndDate=CDATA
      Version=CDATA
      xmlns=CDATA>
```

(Requests)

```
</Report>
```

Table 70 Attributes of <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. The current version number is 1.1.	Numeric (10)
xmlns	XML namespace for the report. The namespace for the different versions <ul style="list-style-type: none"> ■ https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_1.dtd ■ https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_5.dtd ■ https://ebctest.cybersource.com/ebctest/reports/dtd/tdr_1_7.dtd 	String (100)

Table 71 Child Elements of <Report>

Element Name	Description
<Requests>	Contains all of the requests in the report. See <Requests> for a list of child elements.

Example <Report> Element

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

<Requests>

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

Syntax

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

Table 72 Child Elements of <Requests>

Element Name	Description
<Request>	Information about a single request. See <Request> for a list of child elements and attributes.

Example <Requests> Element

```
<Requests>
  <Request MerchantReferenceNumber="3C515C71D48F631"
    RequestDate="2001-08-16T09:42:03-08:00"
    RequestID="0004223530000167905139">
    ...
  </Request>
</Requests>
```

<Request>

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

Syntax

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

Table 73 Attributes of <Request>

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)
Source	Source of the transaction. This is an implied attribute. If present, the value is <code>Virtual Terminal</code> .	String (50)
Comments	If present, brief description of the order or comment that was added to the order.	String (255)

Table 74 Child Elements of <Request>

Element Name	Description
<BillTo>	Information about the billing address and purchaser for the order. For a list of child elements, see <BillTo>.
<ShipTo>	Information about the shipping address and recipient for the order. For a list of child elements, see <ShipTo>.
<Shipping>	Information about the shipping method and shipping carrier for the order. For a list of child elements, see <Shipping>.
<PaymentMethod>	Information about the payment method for the order. For a list of child elements, see <PaymentMethod>.
<LineItems>	Line items for the order. For a list of child elements, see <LineItems>.
<ApplicationReplies>	Reply information for all applications in the request. For a list of child elements, see <ApplicationReplies>.
<PaymentData>	Detailed information about the result of a payment transaction. For a list of child elements, see <PaymentData>.
<MerchantDefinedData>	Optional information that you added to the order. For a list of child elements, see <MerchantDefinedData>.
<RiskData>	Detailed information about the result of a risk transaction. For a list of child elements, see <RiskData>.
<ProfileList>	Information about the profile used for the order. For a list of child elements, see <ProfileList>.

Example <Request> Element

```

<Request MerchantReferenceNumber="3C515C71D48F631"
  RequestDate="2001-08-16T09:42:03-08:00"
  RequestID="0004223530000167905139">
  <BillTo>...</BillTo>
  <ShipTo>...</ShipTo>
  <Shipping>...</Shipping>
  <PaymentMethod>...</PaymentMethod>
  <LineItems>...</LineItems>
  <ApplicationReplies>...</ApplicationReplies>
  <PaymentData>...</PaymentData>
  <MerchantDefinedData>...</MerchantDefinedData>
  <RiskData>...</RiskData>
  <ProfileList>...</ProfileList>
</Request>

```

<BillTo>

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

Syntax

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

Table 75 Child Elements of <BillTo>

Element Name	Description	Data Type and Length
<FirstName>	First name of the billed customer.	String (60)
<LastName>	Last name of the billed customer.	String (60)
<MiddleName>	Middle name of the billed customer.	String (60)
<NameSuffix>	Suffix of the billed customer's name.	String (60)
<Address1>	First line of the billing address.	String (60)
<Address2>	Second line of the billing address.	String (60)
<City>	City of the billing address.	String (50)
<State>	State, province, or territory of the billing address.	String (20)
<Zip>	Postal code of the billing address.	String (10)
<CompanyName>	Company name of the billing address.	String (60)
<Email>	Email address of the bill-to customer.	String (255)
<Country>	<i>ISO Standard Country Codes</i> of the billing address.	String (2)
<Title>	Title of the billed customer.	String (30)
<Phone>	Phone number of the billed customer.	String (15)

Table 75 Child Elements of <BillTo> (Continued)

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

Example <BillTo> Element

```

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

```

<ShipTo>

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

Syntax

```

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

```

Table 76 Child Elements of <ShipTo>

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

Example <ShipTo> Element

```

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

```

<Shipping>

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

Syntax

```

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

```

Table 77 Child Elements of <Shipping>

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

Example <Shipping> Element

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

<PaymentMethod>

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

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

Syntax

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

Table 78 Child Elements of <PaymentMethod>

Element Name	Description
<Card>	Information used to process a credit card. See "<Card>," page 107 for a list of child elements.
<Check>	Information used to process an electronic check. See "<Check>," page 131 for a list of child elements.

Example <PaymentMethod> Element

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

<Card>

The <Card> element contains information used to process a credit card. For requests that do not include payment information, all child elements of <Card> will be empty.

Syntax

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

Table 79 Child Elements of <Card>

Element Name	Description	Data Type and Length
<AccountSuffix>	Last four digits of the customer's credit card number.	String (4)
<ExpirationMonth>	Expiration month (<i>MM</i>) of the credit card.	String (2)
<ExpirationYear>	Expiration year (<i>YYYY</i>) of the credit card.	String (4)
<StartMonth>	Start month (<i>MM</i>) of the credit card. Used for Maestro (UK Domestic) cards.	String (2)
<StartYear>	Start year (<i>YYYY</i>) of the credit card. Used for Maestro (UK Domestic) cards.	String (4)
<IssueNumber>	Issue number of the credit card. Used for Maestro (UK Domestic) cards.	String (5)
<CardType>	Type of card or bank account. For the possible values, see Appendix J, "Types of Cards and Bank Accounts," on page 197.	String (50)

Example <Card> Element

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

<Check>

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

Syntax

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

Table 80 Child Elements of <Check>

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

Example <Check> Element

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

<LineItems>

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



Note

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

Syntax

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

Table 81 Child Elements of <LineItems>

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

This example includes two separate line items.

Example <LineItems> Element

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

<LineItem>

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

Syntax

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

Table 82 Attributes of <LineItem>

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 83 Child Elements of <LineItem>

Element Name	Description	Data Type and Length
<FulfillmentType>	Information about the product code used for the line item. This element can contain one of the following values: <ul style="list-style-type: none"> ■ E: The product code is <code>electronic_software</code>. ■ P: The product code is not <code>electronic_software</code>. 	String (2)
<Quantity>	Quantity of the product being purchased.	Numeric (10)
<UnitPrice>	Per-item price of the product.	Amount (19)

Table 83 Child Elements of <LineItem> (Continued)

Element Name	Description	Data Type and Length
<TaxAmount>	Tax amount associated with this item.	Amount (19)
<MerchantProductSKU>	Product identifier code.	String (30)
<ProductName>	Name of the product.	String (20)
<ProductCode>	Type of product that the offer contains. For detailed information about this field, see the Credit Card Services Using the Simple Order API . For a list of product codes used by the ics_tax application, see the U.S. Tax Product Code User Guide .	String (30)

Example <LineItem> Element

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

<ApplicationReplies>

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

Syntax

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

Table 84 Child Elements of <ApplicationReplies>

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

The following example shows replies for a request that included the **ics_auth** and **ics_score** applications.

Example <ApplicationReplies> Element

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

<ApplicationReply>

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

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

Syntax

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

Table 85 Attributes of <ApplicationReply>

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

Table 86 Child Elements of <ApplicationReply>

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

Example <ApplicationReply> Element For a Successful Reply

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

For more information, see "[<ApplicationReply>](#)," page 112.

Example <ApplicationReply> Element 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.

Syntax



The <ACHVerificationResult> and <ACHVerificationResultMapped> elements are available only in version 1.5 and greater.

```
<PaymentData>
  (PaymentRequestID)
  (PaymentProcessor)
  (Amount)
  (CurrencyCode)
  (TotalTaxAmount)?
  (AuthorizationType)?
  (AuthorizationCode)?
  (AVSResult)?
  (AVSResultMapped)?
  (CVResult)?
  (ProcessorResponseCode)?
  (PayerAuthenticationInfo)?
  (ACHVerificationResult)?
  (ACHVerificationResultMapped)?
  (BalanceAmount)?
  (BalanceCurrencyCode)?
  (RequestedAmount)?
  (RequestedAmountCurrencyCode)?
</PaymentData>
```

Table 87 Child Elements of <PaymentData>

Element Name	Description	Data Type and Length
<PaymentRequestID>	Original request ID for the purchase. <ul style="list-style-type: none"> ■ For authorizations and stand-alone credits, this element contains the request ID for the transaction. ■ For captures, this element contains the request ID for the corresponding authorization. 	Numeric (26)
<PaymentProcessor>	Payment processor used for the transaction. For the possible values, see Appendix I, "Payment Processors," on page 196.	String (40)
<Amount>	Total amount of the authorization, capture, debit, or credit.	Amount (19)
<CurrencyCode>	Currency used for the transaction.	String (5)
<TotalTaxAmount>	Total tax amount for all of the line items in the transaction.	Amount (19)
<AuthorizationType>	Type of authorization. This element can contain one of these values: <ul style="list-style-type: none"> ■ O: Online authorization. Successful authorization that was captured normally or was not captured at all. ■ V: Verbal authorization. Authorization captured with a verbal authorization code. <p>If the authorization was not successful, or if the processor did not return an authorization code, this element is empty.</p>	String (1)
<AuthorizationCode>	Authorization code.	String (15)
<AVSResult>	Address verification result code returned directly from the processor.	String (10)
<AVSResultMapped>	CyberSource standardized result of address verification. For a list of possible values, see the Credit Card Services Using the Simple Order API	String (5)
<CVResult>	Results of processing the card verification number. For a list of possible values, see the Credit Card Services Using the Simple Order API	String (1)
<ProcessorResponseCode>	Response code returned directly from the processor.	String (60)
<PayerAuthenticationInfo>	Results of the Payer Authentication service. For more information, see the <PayerAuthenticationInfo> element.	

Table 87 Child Elements of <PaymentData> (Continued)

Element Name	Description	Data Type and Length
<ACHVerificationResult>	<p>Raw result of the ACH Verification service, which is returned in the ecDebitReply_verificationCodeRaw and ecCreditReply_verificationCodeRaw fields:</p> <ul style="list-style-type: none"> ■ 1: Accepted: Routing number is valid. Account number is valid. ■ 2: Accepted: Routing number is valid. Account number is invalid; use corrected account number. ■ 3: Accepted: Routing number is valid. Account number is valid. ■ 4: Accepted: Routing number is valid. Account number structure not recognized; account may be valid. ■ 5: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is valid. ■ 6: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is invalid; use corrected account number. ■ 7: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number is valid. ■ 8: Accepted: Routing number is not usable for ACH; use corrected routing number. Account number structure not recognized; account may be valid. ■ 9: Declined: Routing number is not usable for ACH; no corrected routing number available. ■ 10: Declined: Routing number not found. ■ 11: Declined: Invalid routing number 	String (2)
<ACHVerificationResultMapped>	<p>Mapped result of the ACH Verification service, which is returned in the ecDebitReply_verificationCode and ecCreditReply_verificationCode fields:</p> <ul style="list-style-type: none"> ■ 00: Success: Account number and routing number are OK. ■ 01: Success: Account number was corrected; routing number is OK. ■ 02: Success: Routing number was corrected; account number is OK. ■ 03: Success: Account number and routing number were corrected. ■ 04: Declined: Routing number did not pass verification. ■ 98: Unavailable: Unable to perform ACH verification. ■ 99: Invalid: Response from ACH verification is invalid. 	String (2)

Table 87 Child Elements of <PaymentData> (Continued)

Element Name	Description	Data Type and Length
<BalanceAmount>	Remaining balance on the prepaid card.	Amount (19)
<BalanceCurrencyCode>	Currency of the remaining balance on the prepaid card.	String (5)
<RequestedAmount>	Amount you requested to be authorized.	Amount (19)
<RequestedAmount CurrencyCode>	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>smartfdc</PaymentProcessor>
  <Amount>20.00</Amount>
  <CurrencyCode>USD</CurrencyCode>
  <AuthorizationType>O</AuthorizationType>
  <AuthorizationCode>123456</AuthorizationCode>
  <AVSResult>YYY</AVSResult>
  <AVSResultMapped>Y</AVSResultMapped>
  <CVResult>M</CVResult>
  <ProcessorResponseCode>A</ProcessorResponseCode>
  <PayerAuthenticationInfo></PayerAuthenticationInfo>
</PaymentData>

```

<PayerAuthenticationInfo>

The <PayerAuthenticationInfo> element contains optional information about the Payer Authentication service. For detailed information about the possible values and their usage, see [Payer Authentication Using the Simple Order API](#) and [Payer Authentication Using the SCMP API](#).

Syntax

```

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

```

Table 88 Child Elements of <PayerAuthenticationInfo>

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

Example <PayerAuthenticationInfo> element for a MasterCard card

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

<MerchantDefinedData>

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

Syntax

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

Table 89 Attribute of <MerchantDefinedData>

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 90 Child Elements of <MerchantDefinedData>

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

Example <MerchantDefinedData> element

```

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

```

<RiskData>

The <RiskData> element contains detailed information about the result of a risk transaction.

If you use Smart Authorization, some reply fields for the **ics_auth** application are returned as child elements of the <RiskData> element.

Syntax

```

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

```

Table 91 Child Elements of <RiskData>

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

Table 91 Child Elements of <RiskData> (Continued)

Element Name	Description	Data Type and Length
<AppliedCategoryGift>	Importance of billing and shipping addresses in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (1)
<AppliedCategoryTime>	Importance of time of day in assessing the order. If you do not specify a value in your request, the server uses the default value for your merchant ID.	String (6)
<AppliedAVS>	Reserved for future use.	String (5)
<AppliedCV>	Reserved for future use.	String (1)

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>
</RiskData>

```

<ProfileList>

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

Syntax

```

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

```

Table 92 Child Elements of <ProfileList>

Element Name	Description	Data Type and Length
<Profile>	Profile used to evaluate an order. See <Profile> for a list of child elements.	String (255)

Example <ProfileList> element

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

<Profile>

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

Syntax

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

Table 93 Attributes of <Profile>

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

Table 94 Child Elements of <Profile>

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

Example <Profile> element

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

<RuleList>

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

Syntax

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

Table 95 Child Elements of <RuleList>

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

Example <RuleList> element

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

<Rule>

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

Syntax

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


Table 96 Child Elements of <Rule>

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

Example <Rule> element

```

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

```

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 data of your follow-on transactions, such as captures and credits.

<Report>

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

Syntax

```

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

```

```
</Report>
```

Table 97 Attributes of <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 DTD: https://ebctest.cybersource.com/ebctest/reports/dtd/tedr.dtd.	String (100)
MerchantID	CyberSource merchant ID used for the transaction.	String (30)
ReportStartDate	First date included in the report.	DateTime (25)
ReportEndDate	Last date included in the report.	DateTime (25)

Table 98 Child Element of <Report>

Element Name	Description
<Requests>	Contains all of the requests in the report. See <Requests> for a list of child elements.

Example <Report> Element

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

<Requests>

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

Syntax

```
<Requests>
```

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

Table 99 Child Elements of <Requests>

Element Name	Description
<Request>	Information about a single request. See <Request> for a list of child elements and attributes.

Example <Requests> Element

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

<Request>

The <Request> element contains information about a single request.

**Note**

A request can include many CyberSource applications.

Syntax

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

Table 100 Child Elements of <Request>

Element Name	Description
<BasicInformation>	Information that identifies the request (such as the request ID). For a list of child elements, see <BasicInformation> .
<PaymentData>	Includes the amount and currency of the payment. For a list of child elements, see <PaymentData> .
<PaymentMethod>	Information about the payment method for the order. For a list of child elements, see <PaymentMethod> .

Table 100 Child Elements of <Request> (Continued)

Element Name	Description
<ErrorInformation>	Information about the error that occurred. For a list of child elements, see <ErrorInformation> .
<BillTo>	Information about the billing address and purchaser for the order. For a list of child elements, see <BillTo> .
<ShipTo>	Information about the shipping address and recipient for the order. For a list of child elements, see <ShipTo> .

Example <Request> Element

```

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

```

<BasicInformation>

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

Syntax

```

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

```

Table 101 Child Elements of <BasicInformation>

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

Table 101 Child Elements of <BasicInformation> (Continued)

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

```

<PaymentData>

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

Syntax

```

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

```

Table 102 Child Elements of <PaymentData>

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

Table 102 Child Elements of <PaymentData> (Continued)

Element Name	Description	Data Type and Length
<CurrencyCode>	Optional <i>ISO Standard Currency Codes</i> used for the transaction.	String (5)

Example <PaymentData> Element

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

<PaymentMethod>

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

Syntax

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

Table 103 Child Elements of <PaymentMethod>

Element Name	Description	Data Type and Length
<AccountSuffix>	Last four characters of the account number.	String (4)
<BankCode>	If a bank account was used for the transaction, the bank code or sort code for the account.	String (15)
<BankAccountName>	Name of account holder.	String (60)
<ExpirationMonth>	If a credit card was used for the transaction, expiration month of the card (<i>MM</i>).	Numeric (2)
<ExpirationYear>	If a credit card was used for the transaction, expiration year of the card (<i>YYYY</i>).	Numeric (4)

Table 103 Child Elements of <PaymentMethod> (Continued)

Element Name	Description	Data Type and Length
<CardType>	Type of card. This field can contain one of these values: <ul style="list-style-type: none"> ■ American Express ■ JCB ■ Diners Club ■ MasterCard ■ Discover ■ Visa 	String (50)

Example <PaymentMethod> Element for a card transaction

```

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

```

<ErrorInformation>

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

Syntax

```

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

```

Table 104 Child Elements of <ErrorInformation>

Element Name	Description	Data Type and Length
<PaymentProcessor>	Payment processor used for the transaction.	String (40)
<Action>	Brief description of the action. You can see one of these values: <ul style="list-style-type: none"> ■ ERROR ■ FAILED ■ CANCELLED 	String (15)

Table 104 Child Elements of <ErrorInformation> (Continued)

Element Name	Description	Data Type and Length
<ErrorCategory>	Type of error. You can see one of these values: <ul style="list-style-type: none"> ■ Data Error ■ Failure ■ Processor Error ■ Settlement Error 	String (20)
<ErrorMessage>	Description of the error.	String (255)
<ReasonCode>	Reason code for the error that occurred. This reason code is the same one that you receive in the reply or transaction receipt. See Appendix F, "Reason Codes in the Transaction Exception Detail Report," on page 185.	Numeric (3)
<ProcessorResponseCode>	Code returned directly from the processor for the error that occurred.	String (60)

Example <ErrorInformation> Element

```

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

```

<BillTo>

The <BillTo> element contains information about the billing address of the purchaser.

Syntax

```

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

```


Table 105 Child Elements of <BillTo>

Element Name	Description	Data Type and Length
<FirstName>	First name of the billed customer.	String (60)
<LastName>	Last name of the billed customer.	String (60)
<Address1>	First line of the billing address.	String (60)
<Address2>	Second line of the billing address.	String (60)
<City>	City of the billing address.	String (50)
<State>	State, province, or territory of the billing address.	String (20)
<PostalCode>	Postal code of the billing address.	String (10)
<Country>	<i>ISO Standard Country Codes</i> of the billing address.	String (2)
<CompanyName>	Company name of the billing address.	String (60)
<Email>	Email address of the billed customer.	String (255)
<Phone>	Phone number of the billed customer.	String (15)

Example <BillTo> Element

```

<BillTo>
  <FirstName>John</FirstName>
  <LastName>Doe</LastName>
  <Address1>1295 Charleston Rd.</Address1>
  <City>Mountain View</City>
  <State>CA</State>
  <PostalCode>94043</PostalCode>
  <Country>US</Country>
  <Email>example@cybersource.com</Email>
  <Phone>555-999-9999</Phone>
</BillTo>

```

<ShipTo>

The <ShipTo> element contains information about the shipping address of the recipient.

Syntax

```

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

```

```
</ShipTo>
```

Table 106 Child Elements of <ShipTo>

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

Example <ShipTo> Element

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

DTDs for the Reports in XML Format

This appendix describes the fields contained in the XML format for these reports:

- [Batch Files Detail Report](#)
- [Exported Search Results](#)
- [Order Detail Report](#)
- [Payment Events Report](#)
- [Single Transaction Report](#)
- [Transaction Exception Detail Report](#)

Batch Files Detail Report

```
<!ELEMENT Report (BatchFiles)>
<!ATTLIST Report Name CDATA #REQUIRED
                Version NMTOKEN #REQUIRED
                xmlns CDATA #REQUIRED
                MerchantID CDATA #REQUIRED
                ReportStartDate CDATA #REQUIRED
                ReportEndDate CDATA #REQUIRED>
<!ELEMENT BatchFiles (BatchFile)*>
<!ELEMENT BatchFile (PaymentProcessor)*>
<!ATTLIST BatchFile BatchFileID CDATA #REQUIRED>
<!ELEMENT PaymentProcessor (Request)*>
<!ATTLIST PaymentProcessor PaymentProcessorName CDATA #REQUIRED>
<!ELEMENT Request (TransactionReferenceNumber, MerchantReferenceNumber,
                  TransactionStatus, Amount, CurrencyCode, PaymentStatus)>
<!ATTLIST Request RequestID CDATA #REQUIRED>
<!ELEMENT TransactionReferenceNumber (#PCDATA)>
<!ELEMENT MerchantReferenceNumber (#PCDATA)>
<!ELEMENT TransactionStatus (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT PaymentStatus (#PCDATA)>
```

Exported Search Results

```

<!ELEMENT Result (Requests)>
<!ATTLIST Result
    xmlns CDATA #REQUIRED
    startDate CDATA #REQUIRED
    endDate CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo?, ShipTo?, PaymentMethod?, ApplicationReplies,
PaymentData, MerchantDefinedData?)>
<!ATTLIST Request requestID CDATA #REQUIRED
    transactionDate CDATA #REQUIRED
    orderNumber CDATA #REQUIRED
    source CDATA #IMPLIED
    user CDATA #IMPLIED
    reconciliationID CDATA #IMPLIED
    eCommerceIndicator CDATA #IMPLIED
    customerID CDATA #IMPLIED
    comments CDATA #IMPLIED>
<!ELEMENT BillTo (firstName, lastName, street1?, street2?, city, state,
postalCode?, country, company?, email, title?, phoneNumber, ipAddress?)>
<!ELEMENT firstName (#PCDATA)>
<!ELEMENT lastName (#PCDATA)>
<!ELEMENT street1 (#PCDATA)>
<!ELEMENT street2 (#PCDATA)>
<!ELEMENT city (#PCDATA)>
<!ELEMENT state (#PCDATA)>
<!ELEMENT postalCode (#PCDATA)>
<!ELEMENT country (#PCDATA)>
<!ELEMENT company (#PCDATA)>
<!ELEMENT email (#PCDATA)>
<!ELEMENT title (#PCDATA)>
<!ELEMENT phoneNumber (#PCDATA)>
<!ELEMENT ipAddress (#PCDATA)>
<!ELEMENT ShipTo (firstName?, lastName?, street1?, street2?, city?,
state?, postalCode?, country?, phoneNumber?)>
<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (accountNumber, expirationMonth, expirationYear, cardType)>
<!ELEMENT accountNumber (#PCDATA)>
<!ELEMENT expirationMonth (#PCDATA)>
<!ELEMENT expirationYear (#PCDATA)>
<!ELEMENT cardType (#PCDATA)>
<!ELEMENT Check (accountType, accountNumber, routingNumber, ecpRefNum)>
<!ELEMENT accountType (#PCDATA)>
<!ELEMENT routingNumber (#PCDATA)>
<!ELEMENT ecpRefNum (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (decision, ics_RCode, ics_RFlag, reasonCode,
ics_RMsg?)>
<!ATTLIST ApplicationReply name CDATA #REQUIRED>
<!ELEMENT decision (#PCDATA)>
<!ELEMENT ics_RCode (#PCDATA)>

```

```

<!ELEMENT ics_RFlag (#PCDATA)>
<!ELEMENT reasonCode (#PCDATA)>
<!ELEMENT ics_RMsg (#PCDATA)>
<!ELEMENT PaymentData (orderAmount, authorizationCode?, avsCode?, cvCode?,
authFactorCode?)>
<!ELEMENT orderAmount (#PCDATA)>
<!ELEMENT avsCode (#PCDATA)>
<!ELEMENT authorizationCode (#PCDATA)>
<!ELEMENT cvCode (#PCDATA)>
<!ELEMENT authFactorCode (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?)>
<!ELEMENT field1 (#PCDATA)>
<!ELEMENT field2 (#PCDATA)>
<!ELEMENT field3 (#PCDATA)>
<!ELEMENT field4 (#PCDATA)>

```

Order Detail Report

```

<!ELEMENT Report (Requests)>
<!ATTLIST Report Name CDATA #REQUIRED
Version NMOKEN #REQUIRED
xmlns CDATA #REQUIRED
merchantID CDATA #REQUIRED
ReportStartDate CDATA #REQUIRED
ReportEndDate CDATA #REQUIRED>
<!ELEMENT Requests (Request)*>
<!ELEMENT Request (BillTo, ShipTo?, PaymentMethod, LineItems?,
ApplicationReplies, PaymentData, MerchantDefinedData?)>
<!ATTLIST Request requestID CDATA #REQUIRED
transactionDate CDATA #REQUIRED
orderNumber CDATA #REQUIRED
customerID CDATA #IMPLIED
source CDATA #IMPLIED
user CDATA #IMPLIED
reconciliationID CDATA #IMPLIED
eCommerceIndicator CDATA #IMPLIED
comments CDATA #IMPLIED>
<!ELEMENT BillTo (firstName, lastName, street1?, street2?, city, state,
postalCode?, country, company?, email, title?, phoneNumber, ipAddress?)>
<!ELEMENT firstName (#PCDATA)>
<!ELEMENT lastName (#PCDATA)>
<!ELEMENT street1 (#PCDATA)>
<!ELEMENT street2 (#PCDATA)>
<!ELEMENT city (#PCDATA)>
<!ELEMENT state (#PCDATA)>
<!ELEMENT postalCode (#PCDATA)>
<!ELEMENT country (#PCDATA)>
<!ELEMENT company (#PCDATA)>
<!ELEMENT email (#PCDATA)>

```

```

<!ELEMENT title (#PCDATA)>
<!ELEMENT phoneNumber (#PCDATA)>
<!ELEMENT ipAddress (#PCDATA)>
<!ELEMENT ShipTo (firstName?, lastName?, street1?, street2?, city?,
state?, postalCode?, country?, phoneNumber?)>
<!ELEMENT PaymentMethod (Card | Check)>
<!ELEMENT Card (accountNumber, expirationMonth, expirationYear, cardType)>
<!ELEMENT accountNumber (#PCDATA)>
<!ELEMENT expirationMonth (#PCDATA)>
<!ELEMENT expirationYear (#PCDATA)>
<!ELEMENT cardType (#PCDATA)>
<!ELEMENT Check (accountType, accountNumber, routingNumber, ecpRefNum)>
<!ELEMENT accountType (#PCDATA)>
<!ELEMENT routingNumber (#PCDATA)>
<!ELEMENT ecpRefNum (#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 productName (#PCDATA)>
<!ELEMENT productCode (#PCDATA)>
<!ELEMENT ApplicationReplies (ApplicationReply)*>
<!ELEMENT ApplicationReply (decision, ics_RCode, ics_RFlag, reasonCode,
ics_RMsg?)>
<!ATTLIST ApplicationReply name CDATA #REQUIRED>
<!ELEMENT decision (#PCDATA)>
<!ELEMENT ics_RCode (#PCDATA)>
<!ELEMENT ics_RFlag (#PCDATA)>
<!ELEMENT reasonCode (#PCDATA)>
<!ELEMENT ics_RMsg (#PCDATA)>
<!ELEMENT PaymentData (orderAmount, authorizationCode?, avsCode?, cvCode?,
authFactorCode?)>
<!ELEMENT orderAmount (#PCDATA)>
<!ELEMENT avsCode (#PCDATA)>
<!ELEMENT authorizationCode (#PCDATA)>
<!ELEMENT cvCode (#PCDATA)>
<!ELEMENT authFactorCode (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?)>
<!ELEMENT field1 (#PCDATA)>
<!ELEMENT field2 (#PCDATA)>
<!ELEMENT field3 (#PCDATA)>
<!ELEMENT field4 (#PCDATA)>

```

Payment Events Report



Note

Although the DTD contains sections for bank transfer, direct debit, and credit card transactions, the report shows only the fields for check transactions.

Version 1.0

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

Version 1.1

```
<!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 PayPal (TransactionReferenceNumber, MerchantCurrencyCode?,
              MerchantAmount, ConsumerCurrencyCode,

```



```

        ConsumerAmount, FeeCurrencyCode, FeeAmount,
        ProcessorMessage?, PaymentTypeDescription)>
<!ATTLIST PayPal Event CDATA #REQUIRED
        EventDate NMTOKEN #REQUIRED>

```

Version 1.2

```

<!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, 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 1.3

```

<!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?,
        BolettoNumber?, 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 BoletNumber (#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, 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>

```

Single Transaction Report

Version 1.1

```

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

<!ATTLIST Request MerchantReferenceNumber CDATA #REQUIRED
                  RequestDate CDATA #REQUIRED
                  RequestID CDATA #REQUIRED
                  SubscriptionID CDATA #IMPLIED
                  Source CDATA #IMPLIED>
                  Comments CDATA #IMPLIED>
<!ELEMENT BillTo (FirstName, LastName, MiddleName?, NameSuffix?,
                  Address1?, Address2?, City, State?, Zip?,
                  CompanyName?, Email, Country, Title?, Phone,
                  IPAddress?, Hostname?, Username?), CustomerID?)>
<!ELEMENT FirstName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT NameSuffix (#PCDATA)>
<!ELEMENT Address1 (#PCDATA)>
<!ELEMENT Address2 (#PCDATA)>
<!ELEMENT City (#PCDATA)>
<!ELEMENT State (#PCDATA)>
<!ELEMENT Zip (#PCDATA)>
<!ELEMENT CompanyName (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Country (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT Phone (#PCDATA)>
<!ELEMENT IPAddress (#PCDATA)>
<!ELEMENT Hostname (#PCDATA)>
<!ELEMENT Username (#PCDATA)>
<!ELEMENT CustomerID (#PCDATA)>
<!ELEMENT ShipTo (FirstName?, LastName?, Address1?, Address2?, City?,
                  State?, Zip?, CompanyName?, Country?, Phone?)>
<!ELEMENT Shipping (Method, Carrier)>
<!ELEMENT Method (#PCDATA)>
<!ELEMENT Carrier (#PCDATA)>
<!ELEMENT PaymentMethod (Card | Check)>

```

```

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

<!ELEMENT PaymentRequestID (#PCDATA)>
<!ELEMENT PaymentProcessor (#PCDATA)>
<!ELEMENT Amount (#PCDATA)>
<!ELEMENT CurrencyCode (#PCDATA)>
<!ELEMENT TotalTaxAmount (#PCDATA)>
<!ELEMENT AuthorizationType (#PCDATA)>
<!ELEMENT AuthorizationCode (#PCDATA)>
<!ELEMENT AVSResult (#PCDATA)>
<!ELEMENT AVSResultMapped (#PCDATA)>
<!ELEMENT CVResult (#PCDATA)>
<!ELEMENT ProcessorResponseCode (#PCDATA)>
<!ELEMENT PayerAuthenticationInfo (ECI?, AAV_CAVV?, XID?)>
<!ELEMENT ECI (#PCDATA)>
<!ELEMENT AAV_CAVV (#PCDATA)>
<!ELEMENT XID (#PCDATA)>
<!ELEMENT MerchantDefinedData (field1?, field2?, field3?, field4?,
                                field5?, field6?, field7?, field8?)>

```

```

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

```

```

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

```

Version 1.5

```

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

```

```

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

```



```

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

```

```

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

```

```

<!ELEMENT AppliedCV (#PCDATA)>
<!ELEMENT ProfileList (Profile)+>
<!ELEMENT Profile (ProfileMode, ProfileDecision, RuleList)>
<!ATTLIST Profile Name CDATA #REQUIRED>
<!ELEMENT ProfileMode (#PCDATA)>
<!ELEMENT ProfileDecision (#PCDATA)>
<!ELEMENT RuleList (Rule)*>
<!ELEMENT Rule (RuleName, RuleDecision)>
<!ELEMENT RuleName (#PCDATA)>
<!ELEMENT RuleDecision (#PCDATA)>

```

Version 1.7

```

<!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, BoletNumber?)>
<!ELEMENT AccountSuffix (#PCDATA)>
<!ELEMENT ExpirationMonth (#PCDATA)>
<!ELEMENT ExpirationYear (#PCDATA)>
<!ELEMENT StartMonth (#PCDATA)>
<!ELEMENT StartYear (#PCDATA)>
<!ELEMENT IssueNumber (#PCDATA)>
<!ELEMENT CardType (#PCDATA)>
<!ELEMENT BoletNumber (#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 PassengerPhone (#PCDATA)>
<!ELEMENT PassengerEmail (#PCDATA)>

```

Transaction Exception Detail Report

Version 1.0

```

<!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?)>

```

Version 1.1

```

<!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?)>

```

https_url.java

```
/*
 * Java Application to download contents of an url to a txt file.
 * The input parameters are read from an input file (in.txt in this case).
 * username,password,url,output file destination are the required fields
 * which need to be in the input file.
 */

import java.net.*;
import java.io.*;
import java.util.*;
import java.net.Authenticator;
import java.net.PasswordAuthentication;

    public class https_url {

public static void main(String[] args) throws Exception {

String inputLine;

Hashtable hash = new Hashtable();

    // Reading and parsing the input file
    try{
FileReader fr = new FileReader ("in.txt");
BufferedReader inFile = new BufferedReader (fr);
inputLine = inFile.readLine();

while (inputLine != null){
    hash.put(inputLine.substring(0,inputLine.indexOf((char)0x20)).trim(),
        inputLine.substring(inputLine.indexOf((char)0x20)).trim());
    inputLine = inFile.readLine();
}
}
```

```

inFile.close();
}
catch (FileNotFoundException exception){
    throw exception;
}
    catch (IOException exception){
System.out.println (exception);
}

        String strUser = (String)hash.get("username");
String password = (String)hash.get("password");
String myUrl = (String)hash.get("url");
String outFileName = (String)hash.get("outfile");

// Dynamic registration of JSSE provider
java.security.Security.addProvider(
    new com.sun.net.ssl.internal.ssl.Provider());
// Need to be set
System.setProperty(
    "java.protocol.handler.pkgs",
    "com.sun.net.ssl.internal.www.protocol");

// --- PasswordAuthenticator class

class PasswordAuthenticator extends Authenticator {
    String username;
    String password;
public PasswordAuthenticator(String uid, String pwd) {
    this.username = uid;
    this.password = pwd;
}

    protected PasswordAuthentication getPasswordAuthentication() {
//System.out.println("Content from https connection!!!");
return new PasswordAuthentication(username, password.toCharArray());
//return new PasswordAuthentication(username,
"password".toCharArray());
    }
}

// Install Authenticator
Authenticator.setDefault (new
PasswordAuthenticator(strUser,password));

```

```
URL url = new URL(myUrl);
BufferedReader in = new BufferedReader(
new InputStreamReader(url.openStream(), "UTF-8"));

    FileOutputStream fout = new FileOutputStream(outFileName);
    OutputStreamWriter myOutput = new OutputStreamWriter(fout, "UTF-8");
    //PrintStream myOutput = new PrintStream(fout);

    // output into the output file specified
    while ((inputLine = in.readLine()) != null) {
        myOutput.write(inputLine+"\r\n");
        //myOutput.println(inputLine);
    }
    myOutput.flush();
    in.close();

    }

}
```

AVS, CVN, and Factor Codes

This appendix describes result codes for the Address Verification Service (AVS), card verification numbers (CVN), and the factor codes returned by Smart Authorization. You can see these results in the Order Detail Report.

AVS Codes

When you request a credit card authorization, the customer's issuing bank may use the Address Verification Service (AVS) to confirm that your customer has provided the correct billing address. If the customer provides incorrect information, the transaction might be fraudulent. AVS is requested for the following payment processors and card types:

Chase Paymentech Solutions	<ul style="list-style-type: none"> ■ Visa—The billing country must be the U.S., Canada, or Great Britain. ■ American Express—The billing country must be the U.S. or Canada. ■ MasterCard, Discover, Diners Club—The billing country must be the U.S.
Concord EFS	<p>Visa, MasterCard, American Express, Discover, Diners Club</p>
FDC Compass	<ul style="list-style-type: none"> ■ Visa, MasterCard, and American Express—The billing country must be the U.S., Canada, or Great Britain. ■ Discover and Diners Club—The billing country must be the U.S.
First Data Merchant Services - Nashville	<p>Visa, MasterCard, American Express, Discover</p>
First Data Merchant Services - South	<p>Visa, MasterCard, American Express, Discover, Diners Club</p>
TSYS Acquiring Systems	<p>Visa, MasterCard, American Express, Diners Club—The billing country must be the U.S.</p>

The following table describes each AVS code.

Table 107 Address Verification Service Codes

Code	Summary	Description
A	Partial match	Street address matches, but 5- and 9-digit postal codes do not match.
B	Partial match	Street address matches, but postal code not verified. Returned only for Visa cards not issued in the U.S.
C	No match	Street address and postal code do not match. Returned only for Visa cards not issued in the U.S.
D	Match	Street address and postal code match. Returned only for Visa cards not issued in the U.S.
E	Invalid	AVS data is invalid or AVS is not allowed for this card type.
F	Partial match	Card member's name does not match, but postal code matches. Returned only for the American Express card type.
G	Not supported	Issuing bank outside the U.S. does not support AVS.
H	Partial match	Card member's name does not match. Street address and postal code match. Returned only for the American Express card type.
I	No match	Address not verified. Returned only for Visa cards not issued in the U.S.
K	Partial match	Card member's name matches but billing address and billing postal code do not match. Returned only for the American Express card type.
L	Partial match	Card member's name and billing postal code match, but billing address does not match. Returned only for the American Express card type.
N	No match	Street address and postal code do not match. <i>or</i> Card member's name, street address and postal code do not match. Returned only for the American Express card type.
O	Partial match	Card member's name and billing address match, but billing postal code does not match. Returned only for the American Express card type.
P	Partial match	Postal code matches, but street address not verified. Returned only for Visa cards not issued in the U.S.
R	System unavailable	System unavailable.
S	Not supported	Issuing bank in the U.S. does not support AVS.
T	Partial match	Card member's name does not match, but street address matches. Returned only for the American Express card type.
U	Not supported	Issuing bank in the U.S. does not support AVS.
V	Partial match	Card member's name, billing address, and billing postal code match. Returned only for the American Express card type.
W	Partial match	Street address does not match, but 9-digit postal code matches.
X	Match	Exact match. Street address and 9-digit postal code match.
Y	Match	Exact match. Street address and 5-digit postal code match.
Z	Partial Match	Street address does not match, but 5-digit postal code matches.

Table 107 Address Verification Service Codes (Continued)

Code	Summary	Description
1	Not supported	CyberSource AVS code. AVS is not supported for this processor or card type.
2	Invalid	CyberSource AVS code. The processor returned an unrecognized value for the AVS response.

Card Verification Number (CVN) Codes

When you request a credit card authorization, you can include the customer's card verification number, a three-digit number printed on the back of Visa and MasterCard credit cards near the cardholder's signature. If the customer cannot provide the correct number, the transaction may be fraudulent.

These payment processors support card verification numbers for Visa and MasterCard:

- Chase Paymentech Solutions
- FDC Compass
- FDMS Nashville
- FDMS South
- TSYS Acquiring Solutions

The following table describes each card verification result code.

Table 108 CVN Codes

Code	Description
D	The transaction was determined to be suspicious by the issuing bank.
I	The CVN failed the processor's data validation check.
M	The CVN matched.
N	The CVN did not match.
P	The CVN was not processed by the processor for an unspecified reason.
S	The CVN is on the card but was not included in the request.
U	Card verification is not supported by the issuing bank.
X	Card verification is not supported by the payment card company.
1	Card verification is not supported for this processor or card type.
2	An unrecognized result code was returned by the processor for the card verification response.

Table 108 CVN Codes (Continued)

Code	Description
3	No result code was returned by the processor.

Advanced Smart Authorization Factor Codes

If you use Smart Authorization to evaluate the risk of your orders, you receive factor codes that show which parts of an order appeared to be risky. You receive factor codes for any order that shows risk, even if Smart Authorization does not decline the order.

The following table describes each factor code that Smart Authorization can return. To use Smart Authorization, define your settings in the Business Center. For detailed information about how to choose which factor codes result in a Smart Authorization decline, see the [Business Center User Guide](#).

Table 109 Smart Authorization Factor Codes

Code	Description
J	Billing and shipping address do not match.
M	Cost of the order exceeds the maximum transaction amount.
N	Nonsensical input in the customer name or address fields.
O	Obscenities in the order form.
U	Unverifiable billing or shipping address.
X	Order does not comply with the USA PATRIOT Act.

Reason Codes in the Transaction Exception Detail Report

[Table 110](#) lists the reason codes that can be returned in the Transaction Exception Detail Report. If present, the codes appear in the `reason_code` field in the CSV version of the report and the `<ReasonCode>` element in the XML version of the report. In addition, the reason codes that you will receive depend on the information returned by your processor.

Table 110 Reason Codes in the Transaction Exception Detail Report

Reason Code	Description
101	<p>The request is missing one or more required fields.</p> <p>Possible action: See the reply fields missingField_0...N for the missing fields. Resend the request with the complete information.</p>
102	<p>One or more fields in the request contains invalid data.</p> <p>Possible action: See the reply fields invalidField_0...N for the invalid fields. If you use the Hosted Order Page, see InvalidField_0...N and MissingField_0...N. Resend the request with the correct information.</p>
104	<p>The transaction is declined because the merchant reference number sent matches the merchant reference number of another transaction sent in the last 15 minutes.</p> <p>Possible action: Ensure that the merchant reference number is unique.</p>
150	<p>Error: General system failure.</p> <p>See the documentation for your CyberSource client (SDK) for information about how to handle retries in the case of system errors.</p>
151	<p>Error: The request was received but a server time-out occurred. This error does not include time-outs between the client and the server.</p> <p>Possible action: To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center.</p>
202	<p>Expired card. You might also receive this if the expiration date you provided does not match the date the issuing bank has on file.</p> <p>Note The credit card service 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.</p> <p>Possible action: Request a different card or other form of payment.</p>
203	<p>The card was declined. No other information was provided by the issuing bank.</p> <p>Possible action: Request a different card or other form of payment.</p>

Table 110 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code	Description
204	The account has insufficient funds. Possible action: Request a different card or other form of payment.
205	The card was stolen or lost. Possible action: Review the customer's information and determine if you want to request a different card from the customer.
207	The issuing bank was unavailable. Possible action: Wait a few minutes and resend the request.
208	The card is inactive or not authorized for card-not-present transactions. Possible action: Request a different card or other form of payment.
209	American Express Card Identification Digits (CID) did not match. Possible action: Request a different card or other form of payment.
210	The credit limit for the card has been reached. Possible action: Request a different card or other form of payment.
231	Invalid account number. Possible action: Request a different card or other form of payment.
233	The processor declined the request based on an issue with the request itself. Possible action: Request a different card or other form of payment.
235	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. Possible action: Wait a few minutes and resend the request.
237	The authorization has already been reversed. Possible action: No action required.
238	The authorization has already been captured. Possible action: No action required.
239	The requested transaction amount must match the previous transaction amount. Possible action: Correct the amount and resend the request.
240	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. Possible action: Verify the request ID is valid and resend the request.

Table 110 Reason Codes in the Transaction Exception Detail Report (Continued)

Reason Code	Description
242	<p>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.</p> <p>Possible action: Request a new authorization, and if successful, proceed with the capture.</p>
243	<p>The transaction has already been settled or reversed.</p> <p>Possible action: No action required.</p>
246	<p>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.</p> <p>Possible action: No action required.</p>
247	<p>You requested a credit for a capture that was previously voided.</p> <p>Possible action: No action required.</p>
250	<p>Error: The request was received, but a time-out occurred at the payment processor.</p> <p>Possible action: To avoid duplicating the transaction, do not resend the request until you have reviewed the transaction status in the Business Center.</p>
342	<p>An error occurred during settlement.</p> <p>Suggested action: Verify the information in your request and resend the order.</p>

Correspondence Between the Business Center and its Components

This table shows how the field names and the XML elements that appear in the Order Detail Report are related to the user interface of the Business Center.

Business Center Location and Use	XML Element	Simple Order API Field Name
Section or line that represents a specific order. You see this field in the Order Detail Report but not in the exportable search results.	request	row_Descriptor
CyberSource merchant ID that you use for evaluation, testing, and production.	merchantID	merchantID
Unique identifier generated by CyberSource for the transaction. You can use the request ID when searching for transactions.	requestID	requestID
Date of the transaction.	transactionDate	transactionDate
Order reference or tracking number that you generate for each order. You can use the order number when searching for transactions.	orderNumber	orderNumber
Customer's account ID, tracking number or other number that you can use as you wish.	customerID	customerID
Type of connection that you used to place the order: Virtual Terminal, Hosted Order Page, or Simple Order API. You can see the source identified in the Transaction Search Details page of each transaction.	source	source
Person in your organization who requested the report; may be the same as merchant ID. You can see the user identified in the Transaction Search Details page of each transaction.	user	user
Reference number for the transaction.	reconciliation ID	reconciliationID
Source of transaction that you select in the Virtual Terminal: Internet or MOTO.	eCommerce Indicator	eCommerce Indicator
Brief description of the order or comment you wish to add to the order.	comments	comments
Customer's first name as it appears on the card. Part of the Customer Billing Information section in the Virtual Terminal.	BillTo: firstName	billto_firstName

Business Center Location and Use	XML Element	Simple Order API Field Name
Customer's last name as it appears on the card. Part of the Customer Billing Information section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	BillTo: lastName	billTo_lastName
Street address of the customer as it appears in the account issuer's records; part of the Customer Billing Information section in the Virtual Terminal that you can see in the Transaction Search Details page.	BillTo: street1	billTo_street1
Additional address information	BillTo: street2	billTo_street2
City of the billing address; part of the Customer Billing Information section in the Virtual Terminal that you can see in the Transaction Search Details page.	BillTo: city	billTo_city
State or province of the customer's address; part of the Customer Billing Information section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	BillTo: state	billTo_state
Credit card billing postal code; part of the Customer Billing Information section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	BillTo: postalCode	billTo_postalCode
Billing country for the account; part of the Customer Billing Information section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	BillTo: country	billTo_country
Name of the customer's company; part of the Customer Billing Information if you use a customized Hosted Order Page, and you can see it in the Transaction Search Details page.	BillTo: company	billTo_company
Customer's complete email address, for example, jdoe@sample.com; part of the Customer Billing Information section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	BillTo: email	billTo_email
Prefix to the customer's name, such as Mrs., Mr., Ms., Dr.	BillTo: title	billTo_title
Billing phone number; part of the Customer Billing Information section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	BillTo: phoneNumber	billTo_phoneNumber
IP address of the customer, for example, 10.1.27.63.	BillTo: ipAddress	billTo_ipAddress
First name of the person receiving the shipment; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: firstName	shipTo_firstName
Last name of the person receiving the shipment; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: lastName	shipTo_lastName
First line of the address to which to ship the product; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: street1	shipTo_street1
Second line of the address to which to ship the product.	ShipTo: street2	shipTo_street2

Business Center Location and Use	XML Element	Simple Order API Field Name
City where to ship the product; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: city	shipTo_city
Country of the shipping address; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: country	shipTo_country
State or province of the shipping address; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: state	shipTo_state
Postal code of the address where to ship the product; part of the Customer Shipping Address section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	ShipTo: postalCode	shipTo_postalCode
Phone number for the person receiving the shipment, and you can see it in the Transaction Search Details page.	ShipTo: phoneNumber	shipTo_phoneNumber
Method of payment: card or check	PaymentMethod	na
Credit card number of the customer; you enter the information in the Payment Details section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	Card: accountNumber	card_accountNumber
Expiration month of the credit card; you select the month in the Payment Details section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	Card: expirationMonth	card_expirationMonth
Expiration year of the credit card; you select the year in the Payment Details section in the Virtual Terminal, and you can see it in the Transaction Search Details page.	Card: expirationYear	card_expirationYear
Type of card to authorize, such as Visa or MasterCard; you select the cards to authorize in the Virtual Terminal Settings page, and you can see it in the Transaction Search Details page.	Card: cardType	card_cardType
Type of checking account used for the transaction. The required field can contain one of the following values (although in the API, you used the values c, s, or x): <ul style="list-style-type: none"> ■ Checking ■ Savings (U.S. dollars only) ■ Corporate checking (U.S. dollars only) 	Check: accountType	check_accountType
Checking account number of the customer.	Check: accountNumber	check_accountNumber
Bank routing number (also known as transit number).	Check: routingNumber	check_bankTransitNumber
Identifier that you use to track the request through the payment processor. If you do not send this field in your request, CyberSource generates a unique value and returns it in the field reconciliationID . For TeleCheck, the maximum length is 25.	Check: EcpRefNum	check_ReferenceNumber

Business Center Location and Use	XML Element	Simple Order API Field Name
Type of transaction that you requested in the Payment Details section in the Virtual Terminal: authorization or sale.	na	paymentAction
Product code that indicates whether or not the item is electronic software.	LineItem: fullfillment Type	na
Quantity of the item purchased.	LineItem: quantity	na
Unit price of the item purchased.	LineItem: unitPrice	na
Tax amount for the item purchased.	LineItem: taxAmount	na
Your product identifier code.	LineItem: merchantProduct SKU	na
Name of the product.	LineItem: productName	na
Type of product.	LineItem: productCode	na
One word that indicates success, failure, or error; you can see this word as Authorization Status on the Transaction Search Detail Page.	Application Reply: decision	decision
Code that indicates success, failure, or error; similar to decision .	Application Reply: icsRCode	icsRCode
Code word that summarizes more specifically than decision the outcome of the order.	Application Reply: ics_ RFlag	icsRFlag
Numeric code the that summarizes more specifically than icsRCode the outcome of the order.	Application Reply: reasonCode	reasonCode
Message that explains icsRFlag .	Application Reply: ics_RMsg	na
Reason for the authorization failure that you can see on the Transaction Search Detail Page.	na	authFailureReason
Message that describes the reply for the authorization. The report can contain only one reply reason for each service.	na	authReplyMessage
Reason for the capture failure that you can see on the Transaction Search Detail Page.	na	captureFailure Reason
Message that describes the reply for the capture. The report can contain only one reply reason for each service.	na	captureReply Message
Reason for the credit failure that you can see on the Transaction Search Detail Page.	na	creditFailureReason

Business Center Location and Use	XML Element	Simple Order API Field Name
Message that describes the reply for the credit. The report can contain only one reply reason for each service.	na	creditReplyMessage
Message that describes the reply for the debit. The report can contain only one reply reason for each service.	na	ecpDebitReply Message
Message that describes the reply for the credit. The report can contain only one reply reason for each service.	na	ecpCreditReply Message
Authorization amount or total amount of the order that you can see in the Virtual Terminal and on the Transaction Search Detail Page.	PaymentData: orderAmount	paymentData_orderAmount
Authorization AVS code; a reply code that you see on the Transaction Search Detail page for each transaction.	PaymentData: avsCode	paymentData_avsCode
Authorization code (listed as Auth code) that you see on the Transaction Search Detail page for each transaction.	PaymentData: authorization Code	paymentData_authorizationCode
Authorization card verification result; a reply code that you can see on the Transaction Search Detail Page.	PaymentData: cvCode	paymentData_cvCode
A reply code that you can see on the Transaction Detail Page.	PaymentData: authFactorCode	paymentData_authFactorCode
Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments. You can select this field in the Virtual Terminal.	MerchantDefinedData: field1	merchantDefined DataField1
Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments. You can select this field in the Virtual Terminal.	MerchantDefinedData: field2	merchantDefined DataField2
Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments. You can select this field in the Virtual Terminal.	MerchantDefinedData: field3	merchantDefined DataField3
Field that you use to report additional or optional data, such as a reference number, the customer's ID, or comments. You can select this field in the Virtual Terminal.	MerchantDefinedData: field4	merchantDefined DataField4

Banking Reversal Codes in the Payment Events Report

For direct debit reversals with CyberSource ACH Service, the processor returns a banking reversal code that CyberSource includes in the processor message field in the Payment Events Report. This table describes the possible values for the banking reversal code. For more information about the report, see ["Payment Events Report," page 117](#) (XML format) or see ["Payment Events Report," page 71](#) (CSV format).

Table 111 CyberSource ACH Service Banking Reversal 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.

Table 111 CyberSource ACH Service Banking Reversal Codes (Continued)

Code	Description
R22	Error. Invalid individual ID number.
R23	Declined. Credit entry refused by receiver.
R24	Error. Duplicate entry.
R25	Error. Addenda record error.
R26	Error. Mandatory field error.
R27	Error. Trace number error.
R28	Error. Routing number check digit error.
R29	Stop Payment. Corporate customer advises not authorized.
R30	Declined. RDFI not participant in check truncation program.
R31	Declined. Permissible return entry.
R32	Declined. RDFI non-settlement.
R33	Declined. Return of XCK entry.
R34	Declined. Limited participation DFI.
R35	Declined. Return of improper debit entry.
R36	Declined. Return of improper credit entry.
R37	Declined. Source document presented for payment.
R38	Stop Payment. Stop payment on source document.
R39	Declined. Improper source document.
R40	Declined. Return of ENR entry by federal government agency.
R41	Error. Invalid transaction code.
R42	Error. Routing or transit number check digit error.
R43	Error. Invalid account number.
R44	Error. Invalid individual ID number.
R45	Error. Invalid individual name or company name.
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.

Table 111 CyberSource ACH Service Banking Reversal Codes (Continued)

Code	Description
R71	Declined. Misrouted dishonored return.
R72	Declined. Untimely dishonored return.
R73	Declined. Timely original return.
R74	Declined. Corrected return.
R75	Declined. Original return not a duplicate.
R76	Declined. No errors found.
R80	Error. Cross-Border Payment Coding Error.
R81	Declined. Non-Participant in Cross-Border Program.
R82	Error. Invalid Foreign Receiving DFI Identification.
R83	Error. Foreign Receiving DFI Unable to Settle.
R84	Declined. Cross-border entry not processed by originating gateway operator.
R94	Declined. Administrative return item was processed and resubmitted as a photocopy.
R95	Declined. Administrative return item was processed and resubmitted as MICR-Split.
R97	Declined. Administrative return item was processed and resubmitted with corrected dollar amount.
R98	Declined. Indicates a returned PAC (pre-authorized check).
R99	Declined. Indicates a returned PAC (pre-authorized check).

Payment Processors

Many reports include a payment processor value:

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

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

Raw Values for Payment Processor Fields

Refer to [Processor Names](#) for a list of the raw values for payment processor fields.

Mapped Values for Payment Processor Fields

Refer to [Processor Names](#) for a list of the mapped values for payment processor fields.

Types of Cards and Bank Accounts

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

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

Values for Types of Cards and Bank Accounts

- American Express
- Carte Blanche
- Checking
- China Cash On Order
- Corporate Checking
- Delta
- Diners Club
- Discover
- EnRoute
- GE Money
- JAL
- JCB
- Maestro (International)

- MasterCard
- MBNA-LOAN
- PayPal
- Savings
- Solo
- Maestro (UK Domestic)
- 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.

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