China Payment Processing

Using the Simple Order API
or the SCMP API

September 2019
CyberSource Contact Information

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

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

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

Copyright

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

Restricted Rights Legends

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

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 Unpublished rights reserved under the copyright laws of the United States.

Trademarks

Authorize.Net, eCheck.Net, and The Power of Payment are registered trademarks of CyberSource Corporation. CyberSource, CyberSource Payment Manager, CyberSource Risk Manager, CyberSource Decision Manager, and CyberSource Connect are trademarks and/or service marks of CyberSource Corporation.

All other brands and product names are trademarks or registered trademarks of their respective owners.
Contents

Recent Revisions to This Document 6

Chapter 1  PayEase China Processing 7
Overview of Payment Processing 7
  Credit Cards, China Bank Transfers, and China eWallet 7
  Cash on Order 8
Overview of Refund Processing 10
Terminology 11
Requirements 12
  Business Requirements 12
  Web Site Requirements 13
    Payment Selection Page 13
    Technical Connection to the Customer 13
  Technical Requirements 14
Limitations 14
Supported Currencies 14
Payer Authentication 14
Decision Manager 15
Obtaining Information About Your Transactions 15
  Reply Messages 15
  Reports 16
    Payment Submission Detail Report 16
    Payment Events Report 16
    Transaction Exception Detail Report 16
Query Results 17
  Transaction Details 17
Chargebacks 17
API Versions for the XML Schema 18
Order Tracking 18
  Reconciliation ID and Transaction Reference Number 18
  Request IDs 18
Chapter 2  Requesting Services Using the Simple Order API  19
  Processing Payments in China  19
    Sending a Payment Request to CyberSource  19
    Sending the Form Data to the Processor  20
    Verifying the Response from the Processor  21
    Tracking the Transaction  22
  Processing a China Refund  22

Chapter 3  Requesting Services Using the SCMP API  24
  Processing Payments in China  24
    Sending a Payment Request to CyberSource  24
    Sending the Form Data to the Processor  25
    Verifying the Response from the Processor  26
    Tracking the Transaction  27
  Processing a China Refund  28

Chapter 4  Simple Order API Examples  29
  Name-Value Pair Examples  29
    Payment Examples  29
    Refund Examples  30
  XML Examples  31
    Payment Examples  31
    Refund Examples  33

Chapter 5  SCMP API Examples  34
  Payment Examples  34
  Refund Examples  36

Chapter 6  Testing Your Implementation  37
  Using the Simulator  37
  Simulator Scenarios  39
Recent Revisions to This Document

<table>
<thead>
<tr>
<th>Release</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2019</td>
<td>Fixed the broken links to <em>Reason Codes</em> and <em>Reply Flags</em>.</td>
</tr>
<tr>
<td>August 2019</td>
<td>Moved reason codes for the Simple Order API to <em>Reason Codes</em>. Adam moved reply flags for the SCMP API to <em>Reply Flags</em>.</td>
</tr>
<tr>
<td>June 2019</td>
<td>Updated terminology:</td>
</tr>
<tr>
<td></td>
<td>• Mastercard SecureCode to Mastercard Identity Check</td>
</tr>
<tr>
<td></td>
<td>• Verified by Visa to Visa Secure</td>
</tr>
<tr>
<td></td>
<td>Deleted information about unfunded and funded transaction reports.</td>
</tr>
<tr>
<td></td>
<td>Added &quot;Numbered Elements,&quot; page 41.</td>
</tr>
<tr>
<td>July 2016</td>
<td>This revision contains only editorial changes and no technical updates.</td>
</tr>
<tr>
<td>December 2014</td>
<td>Updated the following API fields:</td>
</tr>
<tr>
<td></td>
<td>• purchaseTotals_grandTotalAmount. See Table 7, page 42.</td>
</tr>
<tr>
<td></td>
<td>• item_##_unitPrice. See Table 7, page 42 and Table 9, page 49.</td>
</tr>
<tr>
<td></td>
<td>• grand_total_amount. See Table 12, page 54.</td>
</tr>
<tr>
<td></td>
<td>• offerN: amount. See Table 12, page 54 and Table 14, page 60.</td>
</tr>
</tbody>
</table>
Overview of Payment Processing

**Credit Cards, China Bank Transfers, and China eWallet**

Credit card, China bank transfer, and China eWallet processing occurs as follows:

1. You host a payment selection page on your web site.
2. The customer selects a payment method and enters the payment information.
3. You forward the payment information to CyberSource as a China payment request.
4. CyberSource sends you a reply message that includes PayEase verification values and a fully formatted PayEase payment request.
5. You redirect the customer’s browser to PayEase and send the fully formatted payment request to PayEase.
6. PayEase redirects the customer’s browser to the customer’s financial institution where the customer logs in and approves the payment.
7. The financial institution sends the customer’s payment information to PayEase.
8. PayEase redirects the customer’s browser to you along with a response indicator.
9. You verify the response message from PayEase by using verification values from CyberSource and PayEase.
10. During the business day, PayEase periodically sends CyberSource payment status.
11. At the end of the business day, CyberSource queries PayEase for transaction information for incomplete orders.
12. You monitor the progress of the transaction in CyberSource reports and in the Business Center.
For detailed information about this sequence, see:

**Cash on Order**

As shown in Figure 1, page 9, cash on order transactions occur as follows:

1. You host a payment selection page on your web site.
2. The customer selects the cash on order payment method and enter the payment information.
3. You forward the payment information to CyberSource as a China payment request.
4. CyberSource sends you a reply message that includes PayEase verification values and a fully formatted PayEase payment request.
5. You redirect the customer’s browser to PayEase and send the fully formatted payment request to PayEase.
6. PayEase launches a GUI that enables the customer to verify that the address entered on your payment page is the location from which the cash will be retrieved.
7. If the address is not correct, PayEase redirects the customer’s browser to you. Otherwise, this process continues.
8. PayEase evaluates the customer’s postal code by comparing it to a list of postal codes for which cash on order is supported.
   
   If the customer’s postal code does not qualify for cash on order, PayEase displays an apology to the customer and redirects the customer’s browser back to you so that they can choose a different payment method. Otherwise, this process continues.
9. In the PayEase GUI, the customer chooses either cash or Chinese Debit Card as the payment method and indicates an appointment date and time.
10. PayEase redirects the customer’s browser to you along with a response indicator. The transaction status is Pending.
11. You verify the response message from PayEase by using verification values from CyberSource and PayEase.
12. You suspend the order while you wait for notification of payment.
13. A courier picks up the cash at the appointed time.
14. The courier transfers the money to PayEase.
7 PayEase sends a transaction status of Paid to CyberSource.

8 CyberSource indicates the transaction status as Settled.

9 You query CyberSource daily for changes in status for all pending cash on order transactions. When the transaction status is Settled, you proceed with the order.

10 PayEase transfers the funds to your account.

11 During the business day, PayEase periodically sends CyberSource payment status; and CyberSource updates the transaction status in the Business Center.

12 At the end of the business day, CyberSource queries PayEase for transaction information for incomplete orders.

13 You monitor the progress of the transaction in CyberSource reports and in the Business Center.

For detailed information about this sequence, see:
- Simple Order API—“Processing Payments in China,” page 19
- SCMP API—“Processing Payments in China,” page 24

**Figure 1  Information Flow for Cash on Order—Method 2**
Overview of Refund Processing

PayEase China Processing supports only follow-on refunds; it does not support stand-alone refunds. A follow-on refund is a refund that corresponds to a specific payment. You can request:

- A full refund
- A partial refund
- Multiple partial refunds

However, some financial institutions do not support all of these types of refunds. Each financial institution has its own refund requirements and restrictions. Contact PayEase for this information.

Before a refund can be processed, the corresponding payment must be settled, which means that funds are reserved for future distribution to you. The ways to request a refund are:

- Through the API with a request message
- Through the Business Center

When you request a refund, CyberSource always accepts the request without checking for errors in the values. PayEase determines whether requests contain errors. You receive no immediate indication when something is wrong with a request; therefore, to ascertain whether requests contain errors, you must monitor reports in the Business Center.

As shown in the Figure 2, the refund process occurs as follows:

1. You send the refund information to CyberSource as a China refund request.
2. CyberSource returns a confirmation message that the refund request has been received.
   
   The refund request is validated only for proper format in real time. At the end of the business day, the refund request is matched to the payment. If the refund request cannot be matched, CyberSource posts the error in the Transaction Exception Detail Report, which is described in "Reports," page 16.

3. If the refund request is valid, CyberSource sends the refund request to PayEase.
4. PayEase sends the refund status information to CyberSource.
5. You monitor the progress of the transaction in CyberSource reports and in the Business Center.

For detailed information about this sequence, see:

- Simple Order API—"Processing a China Refund," page 22.
**Figure 2  Information Flow for Refund Processing**

![Information Flow for Refund Processing Diagram]

---

**Terminology**

PayEase China Processing supports the following payment methods and payment types. The following table shows the correspondence between the two sets of values.

**Table 1  Payment Methods and Payment Types**

<table>
<thead>
<tr>
<th>Payment Method</th>
<th>Payment Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Express</td>
<td>Credit card</td>
<td>International credit card</td>
</tr>
<tr>
<td>JCB</td>
<td>Credit card</td>
<td>International credit card</td>
</tr>
<tr>
<td>Mastercard</td>
<td>Credit card</td>
<td>International credit card</td>
</tr>
<tr>
<td>Visa</td>
<td>Credit card</td>
<td>International credit card</td>
</tr>
<tr>
<td>China bank transfer</td>
<td>Bank transfer</td>
<td>Chinese bank cards</td>
</tr>
<tr>
<td>Cash on order</td>
<td>Bank transfer</td>
<td>PayEase cash on order</td>
</tr>
<tr>
<td>China eWallet</td>
<td>Bank transfer</td>
<td>PayEase eWallet</td>
</tr>
</tbody>
</table>

PayEase China Processing supports numerous payment modes. For a list of PayEase bank names, see *Banks Supported by PayEase*. Contact PayEase for the mapping of the supported payment system names to the PayEase payment mode values. Ask for the report titled *Banks & Payment Channels Supported by PayEase Payment Platform*.

The following table describes additional terminology for PayEase China Processing.

**Table 2  Terminology for PayEase China Processing**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
<td>Action performed by the processor to transfer value for transactions to your bank account.</td>
</tr>
<tr>
<td>Payment</td>
<td>PayEase uses this term for <em>settlement</em>.</td>
</tr>
</tbody>
</table>
Table 2  Terminology for PayEase China Processing (Continued)

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement</td>
<td>Financial institution’s commitment to you that a particular payment event reserved funds for future distribution to you.</td>
</tr>
<tr>
<td>Wire or Wire Transfer</td>
<td>A method of funds transfer that PayEase uses to refer to the funding event.</td>
</tr>
</tbody>
</table>

Requirements

Business Requirements

You must have:

- License to do business in China.
- License to sell goods and services over the Internet.
- Chinese bank account.
- Business relationship with PayEase—while you are establishing your business relationship with PayEase, you must submit an initial sheet to them. As a result, PayEase will provide you with your PayEase merchant ID and an operator number for the person at PayEase who will handle your refunds.
- Public key—while you are establishing your business relationship with PayEase, you must ask them for the public key. You will use this public key to verify the PayEase payment response.
Web Site Requirements

Payment Selection Page

All payment methods are optional. You decide which payment methods to support. Your payment selection page must include all the payment methods that you support. The following table describes these payment methods.

Table 3 Payment Methods

<table>
<thead>
<tr>
<th>Payment Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash on order</td>
<td>Include this payment method if you support it.</td>
</tr>
<tr>
<td>China bank transfer</td>
<td>Include the names of all payment modes that you support.</td>
</tr>
<tr>
<td>China eWallet</td>
<td>Include this payment method if you support it.</td>
</tr>
<tr>
<td>Credit card</td>
<td>The credit cards are optional: You decide which credit cards</td>
</tr>
<tr>
<td></td>
<td>to support. Your payment selection page must include all the</td>
</tr>
<tr>
<td></td>
<td>credit cards that you support.</td>
</tr>
<tr>
<td></td>
<td>You can support these card types with or without payer</td>
</tr>
<tr>
<td></td>
<td>authentication:</td>
</tr>
<tr>
<td></td>
<td>• Visa</td>
</tr>
<tr>
<td></td>
<td>• Mastercard</td>
</tr>
<tr>
<td></td>
<td>• JCB</td>
</tr>
<tr>
<td></td>
<td>You can support this card type without payer authentication:</td>
</tr>
<tr>
<td></td>
<td>• American Express</td>
</tr>
</tbody>
</table>

Technical Connection to the Customer

When you redirect the customer’s browser to PayEase, you must maintain a close technical connection to the customer to ensure transaction continuity. It is especially important in the event of unexpected actions resulting from the Internet or customer behavior.

To maintain this connection, use iframe technology. iframe technology creates a content area on a web page, which can receive content from various sources, including PayEase and other financial institutions. If you cannot use iframe technology, program your web site to open additional browser windows as needed.
Chapter 1  PayEase China Processing

Technical Requirements

You must:

- Contact CyberSource Customer Support to configure your CyberSource account to use PayEase China Processing. You must provide your PayEase merchant ID, which you obtained while establishing your business relationship with PayEase as described in "Business Requirements," page 12.

- Install a client. See Getting Started with CyberSource Advanced for the Simple Order API or Getting Started with CyberSource Advanced for the SCMP API depending on which API you are using.

Limitations

The only service that can be called with the China payment service is Decision Manager. No services can be called with the China refund service.

Supported Currencies

Table 4 identifies the supported currencies:

Table 4  Supported Currencies

<table>
<thead>
<tr>
<th>Currency</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese yuan renminbi</td>
<td>CNY</td>
</tr>
<tr>
<td>Hong Kong dollar</td>
<td>HKD</td>
</tr>
<tr>
<td>United States dollar</td>
<td>USD</td>
</tr>
</tbody>
</table>

Payer Authentication

PayEase supports these types of payer authentication in China:

- JCB J/Secure
- Mastercard Identity Check
- Visa Secure
You have these choices:

- Always opt-in for payer authentication for the supported card types.
- Always opt-out for payer authentication for the supported card types.
- Determine whether to opt-in or opt-out for each separate transaction.

For more information, see *Payer Authentication Using the Simple Order API* or *Payer Authentication Using the SCMP API* depending on which API you are using.

**Decision Manager**

The Decision Manager behaves uniquely for PayEase China Processing, where the authorization and capture services do not exist. These services have been replaced with the payment service. As a result:

- Decision Manager results are returned to you with the payment results.
- When a transaction is rejected by Decision Manager, the reply message from CyberSource does not include the China payment reply fields that are required for sending the payment request to PayEase. The omission of these fields prevents you from requesting a payment for a rejected transaction.
- When Decision Manager determines that a transaction requires review, and it is subsequently rejected, CyberSource automatically issues a refund request to reimburse the customer.

**Obtaining Information About Your Transactions**

You can obtain information about your PayEase China Processing transactions from several sources:

- Reply messages that are sent in response to your service requests.
- Reports that you can view in and download from the Business Center.
- Query results that you can request using the POST method.
- Transaction details that you can view in the Business Center.

**Reply Messages**

After you send a request message for a PayEase China Processing service, CyberSource responds with a reply message that contains the status of your request. Any errors in your request are indicated in the reply message. Additional status information is specific to each service.
Reports

Chinese characters can be included in reports. For you to read these characters, your system must be capable of processing UTF-8.

Reports that include your PayEase China Processing transactions are available through the Business Center or for download in CSV or XML formats. The following CyberSource daily reports include information about your PayEase China Processing transactions.

Payment Submission Detail Report

Lists your transactions that were sent to the processor during the previous processing day. The report includes transactions for all payment types that you are processing with CyberSource. To view this report, you must subscribe to it in the Business Center.

Payment Events Report

The Payment Events report lists payment events that occurred after a transaction was sent to the processor but occurred within the reporting period for the report. All PayEase China Processing transactions previously submitted to the processor – and thus previously reported in the Payment Submission Detail Report – are reported in the Payment Events Report as updates to the status.

The Payment Events report also includes chargebacks. The transaction status is reported in the event_type column. A payment status reported as successful is equivalent to settled, which means that you can expect to be funded for the transaction. To view this report, you must subscribe to it in the Business Center.

Transaction Exception Detail Report

Provides details about transactions that were flagged by CyberSource or the processor because of errors in your request. Errors reported by the processor are included in both the Payment Events Report and the Transaction Exception Detail Report. You are automatically subscribed to this report.
Query Results

Chinese characters can be included in query results. For you to read these characters, your system must be capable of processing UTF-8.

The Single Transaction Query indicates the status of the PayEase China Processing transaction within the transaction lifetime. The query results include:

- Summary information about your PayEase China Processing transactions.
- Detailed information about Decision Manager.

Transaction Details

You can view the details of all your transactions, including your PayEase China Processing transactions, in the Business Center. You can search for transactions by date, application type, customer name, and other transaction identifiers.

Chargebacks

For PayEase China Processing, banks become involved in resolving disputes only for international credit cards. In such cases:

- The standard chargeback policies are followed as governed by American Express, JCB, Mastercard International, and Visa International.

- PayEase notifies you about these chargebacks; they appear in the Payment Events Report.

For all other forms of payment, you and the customer must reach agreement about reimbursements for problems with products and services.
API Versions for the XML Schema

For general information about the API versions, see Getting Started with CyberSource Advanced for the Simple Order API or Getting Started with CyberSource Advanced for the SCMP API depending on which API you are using.

The following table shows which Simple Order API version to use for the China payment methods.

<table>
<thead>
<tr>
<th>Payment Method</th>
<th>Simple Order API Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit cards and bank transfers</td>
<td>1.34 or later</td>
</tr>
<tr>
<td>Cash on order</td>
<td>1.45 or later</td>
</tr>
</tbody>
</table>

Order Tracking

For general information about order tracking, see Getting Started with CyberSource Advanced for the Simple Order API or Getting Started with CyberSource Advanced for the SCMP API depending on which API you are using.

Reconciliation ID and Transaction Reference Number

In reply messages for the China payment service, the reconciliation ID or transaction reference number is returned in these fields:
- Simple Order API—chinaPaymentReply_reconciliationID
- SCMP API—china_payment_trans_ref_no

Request IDs

In the reply messages for all CyberSource services, the request ID is returned in these fields:
- Simple Order API—requestID
- SCMP API—request_id

In request messages for the China refund service, the request ID is sent in these fields:
- Simple Order API—chinaRefundService_chinaPaymentRequestID
- SCMP API—china_payment_request_id
CHAPTER 2

Requesting Services Using the Simple Order API

Processing Payments in China

This section provides detailed information about processing payments in China. For a simpler overview, see "Credit Cards, China Bank Transfers, and China eWallet," page 7.

Sending a Payment Request to CyberSource

To request a payment:

**Step 1** Create a request message that includes the required fields for the `chinaPaymentService` service.

"Payment Request Fields," page 42, describes the required and optional fields to include in the request.

**Step 2** Send the message to CyberSource.

In response, CyberSource sends you a payment reply message with the fields described in "Payment Reply Fields," page 46.
Sending the Form Data to the Processor

The payment reply message from CyberSource includes the `chinaPaymentReply_formData` field. The form data is fully formatted text that you must send to the processor. The form data uses the GBK character set.

To send the form data:

**Step 1** Decode the form data.

An example of code you can use to decode the form data:

```java
String clear_data = new String(com.cybersource.security.util.Base64.base64decode(encoded_data),"UTF-8");
```

where:

- `encoded_data` is a `java.lang.String` object that contains the `form_data` response field value.
- The `Base64` class is in the SCMP client library.

**Step 2** Send the decoded form data to the processor.

An example of a POST operation you can use to send the form data to the processor:

```html
<HTML>
  <meta http-equiv='Content-Type' content='text/html; charset=gbk'>
  <BODY onload='document.forms[0].submit();'>
    <Include the decoded form data here... >
  </BODY>
</HTML>
```

The POST operation sends the form data to the URL that is included in the form data.

The processor responds by sending you a payment response message with the fields described in Appendix C, "PayEase Response Fields," on page 64.
Verifying the Response from the Processor

Use an MD5 algorithm to verify the PayEase response.

The MD in MD5 stands for Message Digest. An MD5 algorithm can be used with any data and it always produces a string of the same size. This string is called a digest. When a public/private key pair is used to create a digest for a given text, the digest is called a signature. The recipient of the text can authenticate the text by using the signature, the MD5 digest of the text, and the public half of the key pair.

To verify a response from the processor:

Step 1 Use the v_pstatus value from the PayEase response to determine which CyberSource verification value to use. For example:

```java
String verify;
if ("1".equals(v_pstatus)) verify = chinaPaymentReply_verifyInProcess;
else if ("20".equals(v_pstatus)) verify = chinaPaymentReply_verifySuccess;
else if ("30".equals(v_pstatus)) verify = chinaPaymentReply_verifyFailure;
else throw IllegalArgumentException("invalid v_pstatus value");
```

Step 2 Create an MD5 object. For example:

```java
RSA_MD5 md5 = new RSA_MD5();
```

Step 3 Invoke the MD5 object's `publicVerifyMD5` method with the following values:

- Public key—the value you obtained from PayEase when you established your business relationship with them as described in "Business Requirements," page 12.
- Signature—the v_sign value from the PayEase response.
- CyberSource verification value—the value that was selected in Step 1. It is the text from which the digest is created. For example:

```java
int verify_result = md5.publicVerifyMD5(payeasePublicKey, v_sign, verify);
```
Example    Verifying the Response from the Processor

String verify;

if ("1".equals(v_pstatus)) verify = chinaPaymentReply_verifyInProcess;

else if ("20".equals(v_pstatus)) verify = chinaPaymentReply_verifySuccess;

else if ("30".equals(v_pstatus)) verify = chinaPaymentReply_verifyFailure;

else throw IllegalArgumentException("invalid v_pstatus value");

RSA_MD5 md5 = new RSA_MD5();

int verify_result = md5.publicVerifyMD5(payeasePublicKey,v_sign, verify);

Tracking the Transaction

Track the transaction as described in "Obtaining Information About Your Transactions," page 15.

Processing a China Refund

This section provides detailed information about processing a China refund using the Simple Order API. For a simpler overview, see "Overview of Refund Processing," page 10.

PayEase China Processing supports only follow-on refunds; it does not support stand-alone refunds. A follow-on refund is a refund that corresponds to a specific payment. You can request:

- A full refund
- A partial refund
- Multiple partial refunds

However, some financial institutions do not support all of these types of refunds. Each financial institution has its own refund requirements and restrictions. Contact PayEase for this information.

Before a refund can be processed, the corresponding payment must be settled, which means that funds have been reserved for future distribution to you. The ways to request a refund are:

- Through the API with a request message
- Through the Business Center
When you request a refund, CyberSource always accepts the request without checking for errors in the values. PayEase determines whether requests contain errors. You receive no immediate indication when something is wrong with a request; therefore, to ascertain whether requests contain errors, you must monitor reports on the Business Center.

**To process a China refund:**

**Step 1**  
Create a request message that includes the required fields for `chinaRefundService`.  
"Refund Request Fields," page 49, describes the required and optional fields to include in the request.

**Step 2**  
Send the message to CyberSource.  
CyberSource responds with a refund reply message containing the fields described in "Refund Reply Fields," page 51.

**Step 3**  
Track the transaction as described in "Obtaining Information About Your Transactions," page 15.
Processing Payments in China

This section provides detailed information about processing a China payment. For a simpler overview, see "Credit Cards, China Bank Transfers, and China eWallet," page 7.

Sending a Payment Request to CyberSource

To request a payment:

**Step 1** Create a request message that includes the required fields for `ics_china_payment` service.

"Payment Request Fields," page 54, describes the required and optional fields to include in the request.

**Step 2** Send the message to CyberSource.

CyberSource responds with a payment reply message containing the fields described in "Payment Reply Fields," page 58.
Sending the Form Data to the Processor

The payment reply message from CyberSource includes the `china_payment_form_data` field. The form data is fully formatted text that you must send to the processor. The form data uses the GBK character set.

To send the form data:

**Step 1** Decode the form data.

An example of code you can use to decode the form data:

```java
String clear_data = new String(com.cybersource.security.util.Base64.base64decode(encoded_data), "UTF-8");
```

where:

- `encoded_data` is a `java.lang.String` object that contains the `form_data` response field value.
- The Base64 class is in the SCMP client library.

**Step 2** Send the decoded form data to the processor.

An example of a POST operation you can use to send the form data to the processor:

```html
<HTML>
<meta http-equiv='Content-Type' content='text/html; charset=gbk'>
<BODY onload='document.forms[0].submit();'>
   <Include the decoded form data here... >
</BODY>
</HTML>
```

The POST operation sends the form data to the URL that is included in the form data.

The processor responds by sending you a payment response message with the fields described in Appendix C, "PayEase Response Fields," on page 64.
Verifying the Response from the Processor

Use an MD5 algorithm to verify the PayEase response.

The MD in MD5 stands for Message Digest. An MD5 algorithm can be used with any data and it always produces a string of the same size. This string is called a digest. When a public/private key pair is used to create a digest for a given text, the digest is called a signature. The recipient of the text can authenticate the text by using the signature, the MD5 digest of the text, and the public half of the key pair.

To verify a response from the processor:

**Step 1** Use the `v_pstatus` value from the PayEase response to determine which CyberSource verification value to use. For example:

```java
String verify;
if ("1".equals(v_pstatus)) verify = chinaPaymentReply_verifyInProcess;
else if ("20".equals(v_pstatus)) verify = chinaPaymentReply_verifySuccess;
else if ("30".equals(v_pstatus)) verify = chinaPaymentReply_verifyFailure;
else throw IllegalArgumentException("invalid v_pstatus value");
```

**Step 2** Create an MD5 object. For example:

```java
RSA_MD5 md5 = new RSA_MD5();
```
**Step 3** Invoke the MD5 object's `publicVerifyMD5` method with the following values:

- **Public key**—you obtained this value from PayEase when you established your business relationship. See "Business Requirements," page 12.
- **Signature**—the `v_sign` field value from the PayEase response.
- **CyberSource verification value**—the value that you selected in Step 1 and is the text from which the digest is created. For example:

  ```java
  int verify_result = md5.publicVerifyMD5(payeasePublicKey, v_sign, verify);
  ```

**Example** Verifying the Response from the Processor

```java
String verify;
if ("1".equals(v_pstatus)) verify = chinaPaymentReply_verifyInProcess;
else if ("20".equals(v_pstatus)) verify = chinaPaymentReply_verifySuccess;
else if ("30".equals(v_pstatus)) verify = chinaPaymentReply_verifyFailure;
else throw IllegalArgumentException("invalid v_pstatus value");
RSA_MD5 md5 = new RSA_MD5();
int verify_result = md5.publicVerifyMD5(payeasePublicKey, v_sign, verify);
```

---

**Tracking the Transaction**

Track the transaction as described in "Obtaining Information About Your Transactions," page 15.
Processing a China Refund

This section provides detailed information about processing a China refund using the SCMP API. For a simpler overview, see "Overview of Refund Processing," page 10.

PayEase China Processing supports only follow-on refunds; it does not support stand-alone refunds. A follow-on refund is a refund that corresponds to a specific payment. You can request:

- A full refund
- A partial refund
- Multiple partial refunds

However, some financial institutions do not support all of these types of refunds. Each financial institution has its own refund requirements and restrictions. Contact PayEase for this information.

Before a refund can be processed, the corresponding payment must be settled, which means that funds have been reserved for future distribution to you. The ways to request a refund are:

- Through the API with a request message
- Through the Business Center

When you request a refund, CyberSource always accepts the request without checking for errors in the values. PayEase determines whether requests contain errors. You receive no immediate indication when something is wrong with a request; therefore, to ascertain whether requests contain errors, you must monitor reports on the Business Center.

To process a China refund:

**Step 1** Create a request message that includes the required fields for the ics_china_refund service.

"Refund Request Fields," page 60, describes the required and optional fields to include in the request.

**Step 2** Send the message to CyberSource.

CyberSource responds with a refund reply message containing the fields described in "Refund Reply Fields," page 62.

**Step 3** Track the transaction as described in "Obtaining Information About Your Transactions," page 15.
Simple Order API Examples

Name-Value Pair Examples

Payment Examples

Example 1  Payment Request

```html
merchantID=nwtest1
merchantReferenceCode=1231231
billTo_lastName=smith
purchaseTotals_currency=usd
chinaPaymentService_run=true
chinaPaymentService_paymentMode=13
chinaPaymentService_returnURL=http://development.cybersource.com
item_0_unitPrice=1.11
```

Example 2  Payment Reply

```html
requestID=1999344622160011017746
requestToken=Ahj3LwKFspfr832sLPhItQMMdBwwYsWF9i2cNL7No0bMmTFswYMWLbi3btGxgopU7cOGTSA+99Jh2xxR8q6qO6DQA5A5hF
merchantReferenceCode=1231231
purchaseTotals_currency=usd
reasonCode=100
decision=ACCEPT
chinaPaymentReply_amount=1.11
chinaPaymentReply_reasonCode=100
chinaPaymentReply_reconciliationID=20080110_1684_34462216001101774611.111
chinaPaymentReply_verifySuccess=20080110_1684_3446221600110177461201.111
chinaPaymentReply_verifyFailure=20080110_1684_3446221600110177463201.111
chinaPaymentReply_formData=PGZvcm0gbmFtZTQ0Iz9y9ybSIGW0aG9kPSJb3N0
```

---

China Processing Implementation Guide | September 2019
Refund Examples

Example 3   Refund Request

```
chinaRefundService_run=true
cchinaRefundService_chinaPaymentRequestID=1999344622160011017746
chinaRefundService_chinaPaymentRequestToken=Ahyp3LwKPsYnr832sLPhItQMMDBwwY
sWF9i2cNL7No0bMmTFsYMWLBi3btGxgopU7cOGTSA+99Jhk2xxRr8qJo6DQAA5hFj
cchinaRefundService_refundReason=Shoes don't fit
merchantID=nwtest1
item_0_unitPrice=1.11
purchaseTotals_currency=usd
merchantReferenceCode=1231231
```

Example 4   Refund Reply

```
chinaRefundReply_amount=1.11
decision=ACCEPT
cchinaRefundReply_reasonCode=100
requestID=199995673830011017746
purchaseTotals_currency=usd
requestToken=Ahyp3LwKPsavnR5xCA+hItQMMDBwwYsW7No0bMmTFsYMWLBi3btGxgopU7c
OHfSA+99Khk2xxRr8qJo6jQAA5hFv
reasonCode=100
merchantReferenceCode=1231231
```
XML Examples

Payment Examples

Example 5  Payment Request

```xml
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.34">
  <merchantID>nwtest1</merchantID>
  <merchantReferenceCode>12345667</merchantReferenceCode>
  <billTo>
    <lastName>smith</lastName>
  </billTo>
  <purchaseTotals>
    <currency>usd</currency>
    <grandTotalAmount>1.00</grandTotalAmount>
  </purchaseTotals>
  <chinaPaymentService run="true">
    <paymentMode>1</paymentMode>
    <returnURL>http://localhost/</returnURL>
  </chinaPaymentService>
</requestMessage>
```
Example 6  Payment Reply

```xml
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.34">
  <c:requestID>1993226690011017746</c:requestID>
  <c:decision>ACCEPT</c:decision>
  <c:requestCode>100</c:requestCode>
  <c:token>Ahj3LwKPsYizYG/sgShI7QmDMbWwYsWF9i2cNL7NkybMmz2ywYMWLb
  i3btGxgopU7cOGSHA+R9Jhk2xxRx8qJo6A9AA99GDC</c:token>
  <c:purchaseTotals>
    <c:currency>usd</c:currency>
  </c:purchaseTotals>
  <c:chinaPaymentReply>
    <c:requestCode>100</c:requestCode>
    <c:amount>1.00</c:amount>
    <c:reconciliationID>2008110_1684_3226266900110177461.001</c:reconciliationID>
    <c:verifyInProcess>2008110_1684_3226266900110177461.001</c:verifyInProcess>
    <c:verifySuccess>2008110_1684_3226266900110177462.001</c:verifySuccess>
    <c:verifyFailure>2008110_1684_3226266900110177463.001</c:verifyFailure>
    <c:formData>PGZvcm0gbmFtZTU1Zm9yb1IgbWW0aG9kPSJwbnB3N0I1bHz3Rpb249Imh0dHAlLy9td
  nFzMDA0LmN5YmVyc291cmN1LmNvb20t4MTI0L3JhewWVhcv2Zvaw1ibGFF0b3Ivc2VydmlkZC9NWXJjaGFudF
  NlcnZsZXQ1PjxpbnB1dCB0eXB1PSJoawRkZUV41G5hbWU9InZvZmZv1MTY4NCI+PGlucHV
  0IHR5cGU9IImhpZGR1biIgbmFtZTU0id19vaWQiIHZhZHV1PSiyMDA4MDE5MTExNjg0OXZyMjY5MDAx
  MTAxNzcinUI+PGlucHV0IHR5cGU9IImhpZGR1biIgbmFtZTU0id9yIHZhZHV1PSiyMDA4MDE5MTExNz
  zU1L2Y1PSI2IiA9GDI</c:formData>
</c:chinaPaymentReply>
</c:replyMessage>
```
Appendix  Simple Order API Examples

Refund Examples

Example 7  Refund Request

```xml
<requestMessage xmlns="urn:schemas-cybersource-com:transaction-data-1.37">
  <merchantID>pttest</merchantID>
  <merchantReferenceCode>12345667</merchantReferenceCode>
  <billTo>
    <lastName>smith</lastName>
  </billTo>
  <purchaseTotals>
    <currency>usd</currency>
    <grandTotalAmount>1.00</grandTotalAmount>
  </purchaseTotals>
  <chinaRefundService run="true">
    <chinaPaymentRequestID>1999322626690011017746</chinaPaymentRequestID>
    <refundReason>Shoes don't fit</refundReason>
    <chinaPaymentRequestToken>Ahj3LwKPsYizYG/sGshItQMmDBwwYsWF9i2cNL7NkybMmzZywYMWLbi3btGxgopU7cOGlSA+R9Jhk2xxRx8qJo6AQAAA9gGD</chinaPaymentRequestToken>
  </chinaRefundService>
</requestMessage>
```

Example 8  Refund Reply

```xml
<c:replyMessage xmlns:c="urn:schemas-cybersource-com:transaction-data-1.37">
  <c:requestID>1999332455690011017746</c:requestID>
  <c:decision>ACCEPT</c:decision>
  <c:reasonCode>100</c:reasonCode>
  <c:requestToken>Ahj3LwKPsYk/DiCCGAItQMmDBwwYsWF9i2cNL7NkybMmzZywYMWLbi3btGxgopU7cOGlSA+R9Jhk2xxRx8qJo6AQAAA9gGD</c:requestToken>
  <c:purchaseTotals>
    <c:currency>usd</c:currency>
  </c:purchaseTotals>
  <c:chinaRefundReply>
    <c:reasonCode>100</c:reasonCode>
    <c:amount>1.00</c:amount>
  </c:chinaRefundReply>
</c:replyMessage>
```
Payment Examples

Example 9    Payment Request

bill_state=CA
customer_lastname=Doe
bill_city=Mountain View
bill_country=US
bill_zip=94043-1307
merchant_id=nwtest1
ics_applications=ics_china_payment
currency=usd
customer_firstname=James
bill_address1=1295 Charleston Road
return_url=http://localhost/
merchant_ref_number=3355779921
payment_mode=1
customer_phone=650-965-6000
customer_email=james.doe@example.com
offer0=amount:1.00
Example 10  Payment Reply

```plaintext
china_payment_rcode=1
request_
token=Ahj3LwKPsXpPAZvMpfTBwwQMdBwwYW9i2cNL7BszZtmTFuwYt2TEm0YN2xg
msPE+LW91D5HOMGTL13/H3jGsaQ0XR/
currency=usd
request_id=1999063362170172034076
cChina_payment_rmsg=China payment service was successful
china_payment_verify_in_process=20080110_1684_06336217017203407611.001
china_payment_verify_success=20080110_1684_063362170172034076201.001
china_payment_verify_failure=20080110_1684_063362170172034076301.001
china_payment_amount=1.00
china_payment_trans_ref_no=20080110_1684_063362170172034076076
ics_rmsg=Request was processed successfully.
china_payment_form_data=PGZvcm0gqbMFTZT0iZm9ybSIgbWV0aG9kPSJwb3N0IiBhY
3Rpb249Imh0dHA6Ly9wYXkuYmVqaW5nLmNvbS5jbi9jXO0b211ci9nYi9wYX1fYmFuay5q
c3AiPjpbnB1dCB0eXB1PSJoawRkZW4lIG5hbWU9InZfbWlkIiB2YWx1ZT0iMTY4NCI+PG1
ucHV0IHR5cGU9ImhpPGZvcm0gbmFtZT0iZm9ybSIgbWV0aG9kPSJwb3N0IiBhY3Rpb24bWV
0aG9kPSJwb3N0IiBhY3Rpb24bWV0aG9kPSJwb3N0IiBhY3Rpb24bWV0aG9kPSJwb3N0IiBh
Y3Rpb24bWV0aG9kPSJwb3N0IiBhY3Rpb24bWV0aG9kPSJwb3N0IiBhY3Rpb24bWV0aG9kPSJwb
3N0IiBhY3Rpb24bWV0aG9kPSJwb3N0IiBhY3Rpb24bWV0aG9kPSJwb3N0IiBhY3Rpb24bWV0aG9kPSJwb
ics_rflag=SOK
china_payment_rflag=SOK
merchant_ref_number=3355779921
ics_rcode=1
```

Refund Examples

Example 11  Refund Request

```plaintext
china_payment_request_id=1999063362170172034076
ics_applications=ics_china_refund
china_payment_request_token=Ahj3LwKPsXpPAZvMqTBwtQMMDbwYsWF9i2cN7L7BszZtmTF
merchant_ref_number=23984987
merchant_id=pttest
refund_reason=Shoes do not fit
offer0=amount:1.00
```

Example 12  Refund Reply

```plaintext
china_refund_amount=1.00
ics_rcode=1
ics_rmsg=Request was processed successfully.
request_id=1999065385780172034076
china_refund_rmsg=China refund service was successful
china_refund_rflag=SOK
currency=USD
request_token=Ahj3LwKPsXprw3V5gEBwttQMMDbwYsWF9i2cN7L7BszZtmTFwYt2TBm0YN2x
gmsPE+LXNID5H0mGTSRHwohySAYE6wJn
ics_rflag=SOK
merchant_ref_number=23984987
china_refund_rcode=1
```
Using the Simulator

To send a payment request to CyberSource:

**Step 1** Create a request message that includes the required fields for the payment service:

- Simple Order API—"Payment Request Fields," page 42, describes the required and optional fields to include in the request.
- SCMP API—"Payment Request Fields," page 54, describes the required and optional fields to include in the request.

**Step 2** Send the message to CyberSource.

CyberSource responds with a payment reply message that includes the form data:

- Simple Order API—"Payment Reply Fields," page 46, describes the fields in the reply. The form data is in the `chinaPaymentReply_formData` field.
- SCMP API—"Payment Reply Fields," page 46, describes the fields in the reply. The form data is in the `china_payment_form_data` field.

**Step 3** Send the form data to the simulator. The form data uses the GBK character set.

**Step 4** Decode the form data.

An example of code you can use to decode the form data:

```java
String clear_data = new String(com.cybersource.security.util.Base64.base64decode(encoded_data),"UTF-8");
```

where:

- `encoded_data` is a `java.lang.String` object that contains the `form_data` response field value.
- The `Base64` class is in the SCMP client library.
Step 5  Send the decoded form data to the simulator.

An example of a POST operation you can use to send the form data to the processor:

```html
<HTML>
<meta http-equiv='Content-Type' content='text/html; charset=gbk'>
<BODY onload='document.forms[0].submit();'>
  <Include the decoded form data here... >
</BODY>
</HTML>
```

The POST operation sends the form data to the URL that is included in the form data.

The simulator responds by sending you a payment response message that contains the fields described in Appendix C, "PayEase Response Fields," on page 64.

The simulator redirects you to a scenario-selection page that lists an account number for each scenario.

Step 6  Choose a scenario.

Click the account number that corresponds to the scenario you want to run. The scenarios are described in "Simulator Scenarios," page 39.

The simulator runs the scenario as described in Table 5, page 39, and sends you a simulated PayEase response.

Step 7  Verify the scenario results.

The Business Center receives periodic updates for the simulated transactions. You can retrieve information about the transactions in reports, query results, and transaction details as described in "Obtaining Information About Your Transactions," page 15.
Simulator Scenarios

The “Payment Status” column lists the `v_pstatus` value that is in the simulated PayEase response.

<table>
<thead>
<tr>
<th>Scenario Number</th>
<th>Account Number</th>
<th>Payment Processing</th>
<th>Refund Processing</th>
<th>Payment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XX-000</td>
<td>A transaction failure is simulated.</td>
<td>A transaction failure is simulated.</td>
<td>(none)</td>
</tr>
<tr>
<td>2</td>
<td>XX-001</td>
<td>A settled payment transaction is simulated.</td>
<td>A successful refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>3</td>
<td>XX-002</td>
<td>An unsettled payment is simulated.</td>
<td>An unsubmitted refund is simulated.</td>
<td>1 (in process)</td>
</tr>
<tr>
<td>4</td>
<td>XX-003</td>
<td>Refusal of payment by the financial institution is simulated.</td>
<td>An unsubmitted refund is simulated.</td>
<td>30 (failure)</td>
</tr>
<tr>
<td>5</td>
<td>XX-007</td>
<td>A chargeback is simulated. The payment is settled but not funded.</td>
<td>An unsubmitted refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>6</td>
<td>XX-101</td>
<td>A settled and funded payment is simulated.</td>
<td>A normal refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>7</td>
<td>XX-107</td>
<td>A chargeback is simulated. The payment will be settled and funded.</td>
<td>An unsubmitted refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>8</td>
<td>XX-041</td>
<td>A settled payment is simulated.</td>
<td>A pending refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>9</td>
<td>XX-141</td>
<td>A settled and funded payment is simulated.</td>
<td>A pending refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>10</td>
<td>XX-061</td>
<td>A settled payment is simulated.</td>
<td>A rejected refund is simulated.</td>
<td>20 (success)</td>
</tr>
<tr>
<td>11</td>
<td>XX-161</td>
<td>A settled and funded payment is simulated.</td>
<td>A rejected refund is simulated.</td>
<td>20 (success)</td>
</tr>
</tbody>
</table>
Simple Order API Fields

Formatting Restrictions

Unless otherwise noted, all of the field names listed are case sensitive, and the fields accept special characters such as @, #, and %.

The values of the item_#_ fields must not contain carets (^) or colons (:) because these characters are reserved for use by CyberSource services. The values of all request fields must not contain new lines or carriage returns. However, they can contain embedded spaces and any other printable characters. All leading and trailing spaces will be removed.

Data Types

For more information about these data types, see the World Wide Web Consortium (W3C) XML Schema Part 2: Data Types specification.

Table 6  Data Types for the Simple Order API

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integer</td>
<td>Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...}.</td>
</tr>
<tr>
<td>String</td>
<td>Sequence of letters, numbers, spaces, and special characters, such as @ and #.</td>
</tr>
</tbody>
</table>
Numbered Elements

The CyberSource XML schema includes several numbered elements. You can include these complex elements more than once in a request. For example, when a customer order includes more than one item, you must include multiple `<item>` elements in your request. Each item is numbered, starting with 0. The XML schema uses an `id` attribute in the item’s opening tag to indicate the number. For example:

```xml
<item id="0">
  <unitPrice>
    <quantity>
</item>
```

As a name-value pair field name, this tag is called `item_0`. In this portion of the field name, the underscore before the number does not indicate hierarchy in the XML schema. The item fields are generically referred to as `item_#_<element name>` in the documentation.

Below is an example of the numbered `<item>` element and the corresponding name-value pair field names. If you are using the Simple Object Access Protocol (SOAP), the client contains a corresponding `Item` class.

**Example 13  Numbered XML Schema Element Names and Name-Value Pair Field Names**

<table>
<thead>
<tr>
<th>XML Schema Element Names</th>
<th>Corresponding Name-Value Pair Field Names</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;item id=&quot;0&quot;&gt;</code></td>
<td><code>item_0_unitPrice</code></td>
</tr>
<tr>
<td><code>&lt;unitPrice&gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>&lt;quantity&gt;</code></td>
<td><code>item_0_quantity</code></td>
</tr>
<tr>
<td><code>&lt;/item&gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>&lt;item id=&quot;1&quot;&gt;</code></td>
<td><code>item_1_unitPrice</code></td>
</tr>
<tr>
<td><code>&lt;unitPrice&gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>&lt;quantity&gt;</code></td>
<td><code>item_1_quantity</code></td>
</tr>
<tr>
<td><code>&lt;/item&gt;</code></td>
<td></td>
</tr>
</tbody>
</table>

Important

When a request is in XML format and includes an `<item>` element, the element must include an `id` attribute. For example: `<item id="0">`. 
## Payment Request Fields

### Table 7  Payment Request Fields for the Simple Order API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>billTo_city</td>
<td>Billing city as it appears in the financial institution’s records.</td>
<td>Optional.</td>
<td>String (50)</td>
</tr>
<tr>
<td>billTo_country</td>
<td>Billing country as it appears in the financial institution’s records. Use the two-character country codes.</td>
<td>Optional.</td>
<td>String (2)</td>
</tr>
<tr>
<td>billTo_email</td>
<td>Customer’s email address, including the full domain name. Example: <a href="mailto:jdoe@example.com">jdoe@example.com</a></td>
<td>Optional.</td>
<td>String (255)</td>
</tr>
</tbody>
</table>
| billTo_firstName| Customer’s entire name or first name. This value should be the same as the one that appears in the financial institution’s records. 
**Note** A name must be provided. You can do one of the following: 
- Provide the entire name in the first-name field. 
- Provide the entire name in the last-name field. 
- Provide the first name in the first-name field and the last name in the last-name field. | Optional if the customer’s first and last name are combined as a single value in the last-name field; otherwise, required by the processor. | String (60) |
| billTo_lastName | Customer’s entire name or last name. This value should be the same as the one that appears in the financial institution’s records. 
**Note** A name must be provided. You can do one of the following: 
- Provide the entire name in the first-name field. 
- Provide the entire name in the last-name field. 
- Provide the first name in the first-name field and the last name in the last-name field. | Optional if the customer’s first and last name are combined as a single value in the first-name field; otherwise, required by the processor. | String (60) |

* If one shipping field is included, they all must be included, except `shipTo_street2`, which is always optional.
### Simple Order API Fields

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>billTo_postalCode</td>
<td>Postal code for the billing address. If the billing country is not the U.S. or Canada, any string up to 9 characters is accepted. If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</td>
<td>Optional.</td>
<td>String (9)</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: 12345-6789</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: A1B 2C3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>billTo_street1</td>
<td>Billing street address as it appears in the financial institution's records.</td>
<td>Optional.</td>
<td>String (60)</td>
</tr>
<tr>
<td>billTo_street2</td>
<td>Additional address information.</td>
<td>Optional.</td>
<td>String (60)</td>
</tr>
<tr>
<td>chinaPaymentService_paymentMode</td>
<td>Payment Mode. Contact PayEase for the mapping of the supported payment system names to the PayEase payment mode values. Ask for the report titled <em>Banks &amp; Payment Channels Supported by PayEase Payment Platform.</em></td>
<td>Required by the processor.</td>
<td>Integer (3)</td>
</tr>
<tr>
<td>chinaPaymentService_returnURL</td>
<td>URL that will be used to return the customer to your web site after the transaction. Do not include parameters at the end of the URL. Example of correct URL: <a href="http://example.com/checkout.jsp">http://example.com/checkout.jsp</a> Example of incorrect URL: <a href="http://example.com/checkout.jsp?orderID=12345">http://example.com/checkout.jsp?orderID=12345</a></td>
<td>Required by the processor.</td>
<td>String (512)</td>
</tr>
<tr>
<td>chinaPaymentService_run</td>
<td>Whether to include <code>chinaPaymentService</code> in your request. Possible values: true: include the service in your request. false (default): do not include the service in your request.</td>
<td>Required for CyberSource front-end processing; not used by the processor.</td>
<td>String (5)</td>
</tr>
</tbody>
</table>

*If one shipping field is included, they all must be included, except `shipTo_street2`, which is always optional.*
### Table 7  Payment Request Fields for the Simple Order API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>item_#_unitPrice</td>
<td>Per-item price of the product. You must include either this field or purchaseTotals_grandTotalAmount in your request. The maximum amount is 50000.00. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount is truncated at the request level to the correct number of decimal places.</td>
<td>Required by the processor if purchaseTotals_grandTotalAmount is not in the request.</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>merchantID</td>
<td>Your CyberSource merchant ID. Use the same merchant ID for evaluation, testing, and production. Your CyberSource merchant ID must correspond to only one PayEase merchant ID. Likewise, your PayEase merchant ID must correspond to only one CyberSource merchant ID.</td>
<td>Required for CyberSource front-end processing; not used by the processor.</td>
<td>String (30)</td>
</tr>
<tr>
<td>merchantReference Code</td>
<td>Merchant-generated order reference or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction on the Business Center and in CyberSource reports. For more information about tracking orders, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>Required for CyberSource front-end processing; not used by the processor.</td>
<td>String (50)</td>
</tr>
</tbody>
</table>
| purchaseTotals_currency  | Currency used for the order. Possible values:  
- CNY (RMB)  
- USD: USD can be used only for international cards and only for products and services that are priced in USD. CyberSource verifies that the value is either CNY or USD and that it is active in your CyberSource merchant configuration. | Required by the processor.                                                       | String (5)        |
| purchaseTotals_grandTotalAmount | Grand total for the order. You must include either this field or item_0_unitPrice. The maximum amount is 50000.00.                                                                                                      | Required by the processor if there are no offer lines in the request.           | Decimal (15)      |

* If one shipping field is included, they all must be included, except shipTo_street2, which is always optional.
### Table 7  Payment Request Fields for the Simple Order API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>shipTo_city</td>
<td>City of the shipping address.</td>
<td>If any shipping information is in the request and if the shipping country is the U.S. or Canada, this field is required for CyberSource front-end processing.*</td>
<td>String (50)</td>
</tr>
<tr>
<td>shipTo_country</td>
<td>Country of the shipping address. Use the two-character ISO Standard Country Codes.</td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (2)</td>
</tr>
<tr>
<td>shipTo_firstName</td>
<td>Entire name or first name of the recipient.</td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (60)</td>
</tr>
<tr>
<td>shipTo_lastName</td>
<td>Last name of the recipient.</td>
<td>Optional if the recipient’s first name and last name are combined as a single value in the ship-to first-name field; otherwise, required for CyberSource front-end processing if any shipping information is in the request.*</td>
<td>String (60)</td>
</tr>
<tr>
<td>shipTo_phone</td>
<td>Phone number for the shipping address. Include the country code.</td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (20)</td>
</tr>
</tbody>
</table>

* If one shipping field is included, they all must be included, except `shipTo_street2`, which is always optional.
### Table 7  Payment Request Fields for the Simple Order API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>shipTo_postalCode</td>
<td>Postal code for the shipping address. The postal code must consist of 5 to 9 digits. When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <strong>Example</strong> 12345-6789 When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] <strong>Example</strong> A1B 2C3 If the shipping country is not the U.S. or Canada, any string up to 9 characters is accepted.</td>
<td>If any shipping information is in the request and if the shipping country is the U.S. or Canada, this field is required for CyberSource front-end processing.*</td>
<td>String (9)</td>
</tr>
<tr>
<td>shipTo_street1</td>
<td>First line of the shipping address. If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (60)</td>
</tr>
<tr>
<td>shipTo_street2</td>
<td>Second line of the shipping address. Optional.</td>
<td>Optional.</td>
<td>String (60)</td>
</tr>
</tbody>
</table>

* If one shipping field is included, they all must be included, except shipTo_street2, which is always optional.

### Payment Reply Fields

### Table 8  Payment Reply Fields for the Simple Order API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>chinaPaymentReply_amount</td>
<td>Total amount of the payment.</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>chinaPaymentReply_formData</td>
<td>Fully formatted text that you must send to the processor to request the payment transaction. See &quot;Sending the Form Data to the Processor,&quot; page 20.</td>
<td>String (2000)</td>
</tr>
<tr>
<td>chinaPaymentReply_reasonCode</td>
<td>Numeric value corresponding to the result of the China payment request. See Reason Codes.</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>chinaPaymentReply_reconciliationID</td>
<td>Value that identifies the transaction in the processor’s system. For more information about order tracking, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (60)</td>
</tr>
</tbody>
</table>
### Table 8 Payment Reply Fields for the Simple Order API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>chinaPaymentReply_requestDateTime</code></td>
<td>Time of the payment request in GMT. Format: <code>YYYY-MM-DDThh:mm:ssZ</code>&lt;br&gt;Example: <code>2019-03-22T22:47:57Z</code> is March 22, 2019, at 10:47:57 P.M. The <code>T</code> separates the date and the time. The <code>Z</code> indicates UTC, which is the same as GMT.</td>
<td>String (20)</td>
</tr>
<tr>
<td><code>chinaPaymentReply_verifyFailure</code></td>
<td>Verification value for a request that failed. Use this value to verify the response message from the processor. See &quot;Verifying the Response from the Processor,&quot; page 21.</td>
<td>String (82)</td>
</tr>
<tr>
<td><code>chinaPaymentReply_verifyInProcess</code></td>
<td>Verification value for a request that is in process. Use this value to verify the response message from the processor. See &quot;Verifying the Response from the Processor,&quot; page 21.</td>
<td>String (82)</td>
</tr>
<tr>
<td><code>chinaPaymentReply_verifySuccess</code></td>
<td>Verification value for a request that succeeded. Use this value to verify the response message from the processor. See &quot;Verifying the Response from the Processor,&quot; page 21.</td>
<td>String (82)</td>
</tr>
<tr>
<td><code>decision</code></td>
<td>Summarizes the result of the overall request. Possible values:&lt;br&gt;- ACCEPT&lt;br&gt;- ERROR&lt;br&gt;- REJECT&lt;br&gt;- REVIEW—returned only if you use CyberSource Decision Manager.&lt;br&gt;For more information about handling replies, see <em>Getting Started with CyberSource Advanced for the Simple Order API</em>.</td>
<td>String (6)</td>
</tr>
<tr>
<td><code>invalidField_0…N</code></td>
<td>Fields in the request that contained invalid data. These reply fields are included as an aid to software developers only. No attempt should be made to use these fields for end user interaction. For more information about missing and invalid fields, see <em>Getting Started with CyberSource Advanced for the Simple Order API</em>.</td>
<td>String (100)</td>
</tr>
<tr>
<td><code>merchantReferenceCode</code></td>
<td>Order reference or tracking number that you provided in the request. If you included multi-byte characters in this field in the request, the returned value might contain corrupted characters. For more information about order tracking, see <em>Getting Started with CyberSource Advanced for the Simple Order API</em>.</td>
<td>String (50)</td>
</tr>
</tbody>
</table>
### Table 8  Payment Reply Fields for the Simple Order API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>missingField_0….N</td>
<td>Required fields that were missing from the request. These reply fields are included as an aid to software developers only. No attempt should be made to use these fields for end user interaction. For more information about missing and invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (100)</td>
</tr>
<tr>
<td>purchaseTotals_currency</td>
<td>Currency used for the order. Possible values:</td>
<td>String (5)</td>
</tr>
<tr>
<td></td>
<td>• CNY (RMB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• USD</td>
<td></td>
</tr>
<tr>
<td>reasonCode</td>
<td>Numeric value corresponding to the result of the overall request. See Reason Codes.</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>requestID</td>
<td>Identifier for the request generated by the software client. For more information about request IDs, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (26)</td>
</tr>
<tr>
<td>requestToken</td>
<td>Request token data created by CyberSource for each reply. The field is an encoded string that contains no confidential information such as an account or card verification number. The string can contain a maximum of 256 characters. For more information about follow-on services, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (256)</td>
</tr>
</tbody>
</table>
# Refund Request Fields

## Table 9 Refund Request Fields for the Simple Order API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>chinaRefundService_chinaPaymentRequestID</td>
<td>The <em>requestID</em> field returned from a previous request for <em>chinaPaymentService</em>. Creates a follow-on refund by linking the refund to the previous payment. For more information about request IDs, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>Required for CyberSource front-end processing; not used by the processor.</td>
<td>String (26)</td>
</tr>
<tr>
<td>chinaRefundService_chinaPaymentRequestToken</td>
<td>The <em>requestToken</em> value returned from a previous request for <em>chinaPaymentService</em>. The field is an encoded string that contains no confidential information, such as an account number or card verification number. The string can contain a maximum of 256 characters.</td>
<td>Required for CyberSource front-end processing; not used by the processor.</td>
<td>String (256)</td>
</tr>
<tr>
<td>chinaRefundService_refundReason</td>
<td>Reason for the refund. Free-text explanation of why the refund is being processed. Banks prefer that the explanation be in Chinese so that bank employees can understand it easily.</td>
<td>Required by the processor.</td>
<td>String (80)</td>
</tr>
</tbody>
</table>
| chinaRefundService_run               | Whether to include *chinaRefundService* in your request. Possible values:  
  - true: include the service in your request.  
  - false (default): do not include the service in your request. | Required for CyberSource front-end processing; not used by the processor. | String (5) |
<p>| item_#_unitPrice                     | Per-item price of the product. You must include either this field or <em>purchaseTotals_grandTotalAmount</em> in your request. The maximum amount is 50000.00. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount will be truncated at the request level to the correct number of decimal places. | Required by the processor if <em>purchaseTotals_grandTotalAmount</em> is not in the request. | Decimal (15) |</p>
<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>merchantID</td>
<td>Your CyberSource merchant ID. Use the same <strong>merchantID</strong> field for evaluation, testing, and production. Your CyberSource merchant ID field must correspond to only one PayEase merchant ID. Likewise, your PayEase merchant ID must correspond to only one CyberSource merchant ID.</td>
<td>Required</td>
<td>String (30)</td>
</tr>
<tr>
<td>merchantReferenceCode</td>
<td>Merchant-generated order reference or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction on the Business Center and in CyberSource reports. For more information about order tracking, see <a href="#">Getting Started with CyberSource Advanced for the Simple Order API</a>.</td>
<td>Required</td>
<td>String (50)</td>
</tr>
<tr>
<td>purchaseTotals_grandTotalAmount</td>
<td>Grand total for the order. You must include either this field or <strong>item_0_unitPrice</strong>. The maximum amount is 50000.00.</td>
<td>Required by the processor if there are no offer lines in the request.</td>
<td>Decimal (15)</td>
</tr>
</tbody>
</table>
# Appendix A  Simple Order API Fields

## Table 10  Refund Reply Fields for the Simple Order API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>chinaRefundReply_amount</td>
<td>Total amount of the refund.</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>chinaRefundReply_reasonCode</td>
<td>Numeric value corresponding to the result of the China refund request. See Reason Codes.</td>
<td>Integer (5)</td>
</tr>
<tr>
<td>chinaRefundReply_requestDateTime</td>
<td>Time of the refund request in GMT. Format: YYYY-MM-DDThh:mm:ssZ</td>
<td>String (20)</td>
</tr>
<tr>
<td></td>
<td>Example: 2019-03-22T22:47:57Z is March 22, 2019, at 10:47:57 P.M. The T separates the date and the time. The Z indicates UTC, which is the same as GMT.</td>
<td></td>
</tr>
<tr>
<td>decision</td>
<td>Summarizes the result of the overall request. Possible values:</td>
<td>String (6)</td>
</tr>
<tr>
<td></td>
<td>• ACCEPT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ERROR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• REJECT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information about handling replies, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td></td>
</tr>
<tr>
<td>invalidField_0…N</td>
<td>Fields in the request that contained invalid data. These reply fields are included as an aid to software developers only. No attempt should be made to use these fields for end user interaction. For more information about missing and invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (100)</td>
</tr>
<tr>
<td>merchantReferenceCode</td>
<td>Order reference or tracking number that you provided in the request. If you included multi-byte characters in this field in the request, the returned value might contain corrupted characters. For more information about order tracking, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (50)</td>
</tr>
<tr>
<td>missingField_0…N</td>
<td>Required fields that were missing from the request. These reply fields are included as an aid to software developers only. No attempt should be made to use these fields for end user interaction. For more information about missing and invalid fields, see Getting Started with CyberSource Advanced for the Simple Order API.</td>
<td>String (100)</td>
</tr>
<tr>
<td>purchaseTotals_currency</td>
<td>Currency used for the order. Possible values:</td>
<td>String (5)</td>
</tr>
<tr>
<td></td>
<td>• CNY (RMB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• USD</td>
<td></td>
</tr>
<tr>
<td>reasonCode</td>
<td>Numeric value corresponding to the result of the overall request. See Reason Codes.</td>
<td>Integer (5)</td>
</tr>
</tbody>
</table>
Table 10  Refund Reply Fields for the Simple Order API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>requestID</td>
<td>Identifier for the request generated by the software client.</td>
<td>String (26)</td>
</tr>
<tr>
<td>requestToken</td>
<td>Request token data created by CyberSource for each reply. The field is an encoded string that contains no confidential information such as an account or card verification number. The string can contain a maximum of 256 characters.</td>
<td>String (256)</td>
</tr>
</tbody>
</table>
Formatting Restrictions

Unless otherwise noted, all of the fields listed are order and case insensitive, and the fields accept special characters, such as @, #, and %.

Request-level and offer-level field names and values must not contain carets (^) or colons (:). However, they can contain embedded spaces and any other printable characters. If you use more than one consecutive space, the extra spaces are removed.

Data Types

Table 11 Data Types for the SCMP API

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date and time</td>
<td>The format is YYYY-MM-DDThhmmssZ. For example, 2019-03-22T224757Z is equal to March 22, 2019, at 10:47:57 P.M. The T separates the date and the time. The Z indicates Coordinated Universal Time (UTC), which is also known as Greenwich Mean Time.</td>
</tr>
<tr>
<td>Decimal</td>
<td>Number that includes a decimal point. Examples: 23.45, -0.1, 4.0, 90809.0468.</td>
</tr>
<tr>
<td>Integer</td>
<td>Whole number {..., -3, -2, -1, 0, 1, 2, 3, ...}.</td>
</tr>
<tr>
<td>Non-negative integer</td>
<td>Whole number greater than or equal to zero {0, 1, 2, 3, ...}.</td>
</tr>
<tr>
<td>Positive integer</td>
<td>Whole number greater than zero {1, 2, 3, ...}.</td>
</tr>
<tr>
<td>String</td>
<td>Sequence of letters, numbers, spaces, and special characters, such as @ and #.</td>
</tr>
</tbody>
</table>
# Payment Request Fields

## Table 12  Payment Request Fields for the SCMP API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>bill_address1</td>
<td>Billing street address as it appears in the financial institution’s records.</td>
<td>Optional</td>
<td>String (60)</td>
</tr>
<tr>
<td>bill_address2</td>
<td>Additional address information.</td>
<td>Optional</td>
<td>String (60)</td>
</tr>
<tr>
<td>bill_city</td>
<td>Billing city as it appears in the financial institution’s records.</td>
<td>Optional</td>
<td>String (50)</td>
</tr>
<tr>
<td>bill_country</td>
<td>Billing country as it appears in the financial institution’s records. Use the two-character country codes.</td>
<td>Optional</td>
<td>String (2)</td>
</tr>
<tr>
<td>bill_zip</td>
<td>Postal code for the billing address. If the billing country is not the U.S. or Canada, any string up to 9 characters is accepted. If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <strong>Example</strong> Example: 12345-6789 If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] <strong>Example</strong> Example: A1B 2C3</td>
<td>Optional</td>
<td>String (9)</td>
</tr>
<tr>
<td>currency</td>
<td>Currency used for the order. Possible values:</td>
<td>Required by the processor.</td>
<td>String (5)</td>
</tr>
<tr>
<td></td>
<td>- CNY (RMB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- USD: USD can be used only for international cards and only for products and services that are priced in USD. CyberSource verifies that the value is either CNY or USD and that it is active in your CyberSource merchant configuration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>customer_email</td>
<td>Customer’s email address, including the full domain name. Example: <a href="mailto:jdoe@example.com">jdoe@example.com</a></td>
<td>Optional</td>
<td>String (255)</td>
</tr>
</tbody>
</table>

* If one shipping field is included, they all must be included, except ship_to_address2 which is always optional.
<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
</table>
| customer_firstname | Customer’s entire name or first name. This value should be the same as the one that appears in the financial institution’s records.  
**Note** A name must be provided. You can do one of the following:  
- Provide the entire name in the first-name field.  
- Provide the entire name in the last-name field.  
- Provide the first name in the first-name field and the last name in the last-name field.  
- Provide the first name in the first-name field and the last name in the last-name field. | Optional if the customer’s first and last name are combined as a single value in the last-name field; otherwise, required by the processor. | String (60) |
| customer_lastname | Customer’s entire name or last name. This value should be the same as the one that appears in the financial institution’s records.  
**Note** A name must be provided. You can do one of the following:  
- Provide the entire name in the first-name field.  
- Provide the entire name in the last-name field.  
- Provide the first name in the first-name field and the last name in the last-name field.  
- Provide the first name in the first-name field and the last name in the last-name field. | Optional if the customer’s first and last name are combined as a single value in the first-name field; otherwise, required by the processor. | String (60) |
| grand_total_amount | Grand total for the order. You must include either this field or offer0 and the offer-level field amount. The maximum amount is 50000.00. | Required by the processor if there are no offer lines in the request.                   | Decimal (15) |
| ics_applications | Service to process for the request. For a payment request, this value should be ics_china_payment.                                                                                                         | Required for CyberSource front-end processing; not used by the processor.             | String (255) |
| merchant_id       | Your CyberSource merchant ID. Use the same merchant_id field for evaluation, testing, and production. Your CyberSource merchant ID must correspond to only one PayEase merchant ID. Likewise, your PayEase merchant ID must correspond to only one CyberSource merchant ID. | Required for CyberSource front-end processing; not used by the processor.             | String (30) |

* If one shipping field is included, they all must be included, except ship_to_address2 which is always optional.
### Table 12  Payment Request Fields for the SCMP API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>merchant_ref_number</td>
<td>Merchant-generated order reference or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction on the Business Center and in CyberSource reports. For more information about order tracking, see <em>Getting Started with CyberSource Advanced for the SCMP API</em>.</td>
<td>Required for CyberSource front-end processing; not used by the processor.</td>
<td>String (50)</td>
</tr>
<tr>
<td>offerN: amount</td>
<td>Per-item price of the product. You must include either offer0 and this field, or the request-level field grand_total_amount in your request. The maximum amount is 50000.00. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount is truncated at the request level to the correct number of decimal places.</td>
<td>Required by the processor if grand_total_amount is not in the request.</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>payment_mode</td>
<td>Payment Mode. Contact PayEase for the mapping of the supported payment system names to the PayEase payment mode values. Ask for the report titled <em>Banks &amp; Payment Channels Supported by PayEase Payment Platform</em>.</td>
<td>Required by the processor.</td>
<td>Integer (3)</td>
</tr>
<tr>
<td>return_url</td>
<td>URL that is used to return the customer to your Web site after the transaction. Do not include parameters at the end of the URL. Example of correct URL: <a href="http://example.com/checkout.jsp">http://example.com/checkout.jsp</a> Example of incorrect URL: <a href="http://example.com/checkout.jsp?orderID=12345">http://example.com/checkout.jsp?orderID=12345</a></td>
<td>Required by the processor.</td>
<td>String (512)</td>
</tr>
<tr>
<td>ship_to_address1</td>
<td>First line of the shipping address. If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (60)</td>
<td></td>
</tr>
<tr>
<td>ship_to_address2</td>
<td>Second line of the shipping address. Optional.</td>
<td>String (60)</td>
<td></td>
</tr>
</tbody>
</table>

* If one shipping field is included, they all must be included, except ship_to_address2 which is always optional.
<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>ship_to_city</td>
<td>City of the shipping address.</td>
<td>If any shipping information is in the request and if the shipping country is the U.S. or Canada, this field is required for CyberSource front-end processing.*</td>
<td>String (50)</td>
</tr>
<tr>
<td>ship_to_country</td>
<td>Country of the shipping address. Use the two-character <em>ISO Standard Country Codes.</em></td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (2)</td>
</tr>
<tr>
<td>ship_to_firstname</td>
<td>Entire name or first name of the recipient.</td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (60)</td>
</tr>
<tr>
<td>ship_to_lastname</td>
<td>Last name of the recipient.</td>
<td>Optional if the recipient’s first name and last name are combined as a single value in the ship-to first-name field; otherwise, required for CyberSource front-end processing if any shipping information is in the request.*</td>
<td>String (60)</td>
</tr>
<tr>
<td>ship_to_phone</td>
<td>Phone number for the shipping address. Include the country code.</td>
<td>If any shipping information is in the request, this field is required for CyberSource front-end processing.*</td>
<td>String (20)</td>
</tr>
</tbody>
</table>

* If one shipping field is included, they all must be included, except ship_to_address2 which is always optional.
### Payment Request Fields for the SCMP API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>ship_to_zip</td>
<td>Postal code for the shipping address. The postal code must consist of 5 to 9 digits. When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <strong>Example</strong> 12345-6789 When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space] [numeric][alpha][numeric] <strong>Example</strong> A1B 2C3 If the shipping country is not the U.S. or Canada, any string up to 9 characters is accepted.</td>
<td>If any shipping information is in the request and if the shipping country is the U.S. or Canada, this field is required for CyberSource front-end processing.*</td>
<td>String (9)</td>
</tr>
</tbody>
</table>

* If one shipping field is included, they all must be included, except ship_to_address2 which is always optional.

### Payment Reply Fields

### Table 13 Payment Reply Fields for the SCMP API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>china_payment_amount</td>
<td>Total amount of the payment.</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>china_payment_form_data</td>
<td>Fully formatted text that you must send to the processor to request the payment transaction. Do not modify this data in any way. See &quot;Sending the Form Data to the Processor,&quot; page 25.</td>
<td>String (2000)</td>
</tr>
</tbody>
</table>
| china_payment_rcode         | One-digit code that indicates whether the ics_china_payment request was successful. Possible values:  
  - -1: An error occurred.  
  - 0: The request was declined.  
  - 1: The request was successful.  
For more information about handling replies, see Getting Started with CyberSource Advanced for the SCMP API.                                                                 | Integer (1)        |
| china_payment_request_time  | Time of the payment request in GMT. Format: YYYY-MM-DDThhmmssZ  
  **Example:** 2019-03-22T22:47:57Z is March 22, 2019, at 10:47:57 P.M. The T separates the date and the time. The Z indicates UTC, which is the same as GMT. | Date and time (20) |
## Table 13  Payment Reply Fields for the SCMP API ( Continued )

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>china_payment_rflag</td>
<td>One-word description of the result of the ics_china_payment request.</td>
<td>String (50)</td>
</tr>
<tr>
<td></td>
<td>See Reply Flags.</td>
<td></td>
</tr>
<tr>
<td>china_payment_rmsg</td>
<td>Message that explains the reply flag china_payment_rflag. Do not display this</td>
<td>String (255)</td>
</tr>
<tr>
<td></td>
<td>message to the customer and do not use this field to write an error handler.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information about handling replies, see Getting Started with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CyberSource Advanced for the SCMP API.</td>
<td></td>
</tr>
<tr>
<td>china_payment_trans_ref_no</td>
<td>Value that identifies the transaction in the processor's system. For more</td>
<td>String (60)</td>
</tr>
<tr>
<td></td>
<td>information about order tracking, see Getting Started with CyberSource</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced for the SCMP API depending on which API you are using.</td>
<td></td>
</tr>
<tr>
<td>china_payment_verify_failure</td>
<td>Verification value for a request that failed. Use this value to verify the</td>
<td>String (82)</td>
</tr>
<tr>
<td></td>
<td>response message from the processor. See &quot;Verifying the Response from the</td>
<td></td>
</tr>
<tr>
<td>china_payment_verify_in_process</td>
<td>Verification value for a request that is in process. Use this value to</td>
<td>String (82)</td>
</tr>
<tr>
<td></td>
<td>verify the response message from the processor. See &quot;Verifying the Response</td>
<td></td>
</tr>
<tr>
<td>china_payment_verify_success</td>
<td>Verification value for a request that succeeded. Use this value to verify</td>
<td>String (82)</td>
</tr>
<tr>
<td></td>
<td>the response message from the processor. See &quot;Verifying the Response from</td>
<td></td>
</tr>
<tr>
<td>currency</td>
<td>Currency used for the order. Possible values:</td>
<td>String (5)</td>
</tr>
<tr>
<td></td>
<td>• CNY (RMB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• USD</td>
<td></td>
</tr>
<tr>
<td>ics_rcode</td>
<td>One-digit code that indicates whether the entire request was successful.</td>
<td>Integer (1)</td>
</tr>
<tr>
<td></td>
<td>Possible values:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• -1 : An error occurred.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 0 : The request was declined.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 : The request was successful.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information about handling replies, see Getting Started with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CyberSource Advanced for the SCMP API.</td>
<td></td>
</tr>
<tr>
<td>ics_rflag</td>
<td>One-word description of the result of the entire request. See Reply Flags.</td>
<td>String (50)</td>
</tr>
<tr>
<td></td>
<td>Do not display this message to the customer and do not use this field to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>write an error handler. For more information about handling replies, see</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Getting Started with CyberSource Advanced for the SCMP API.</td>
<td></td>
</tr>
<tr>
<td>ics_rmsg</td>
<td>Message that explains the reply flag ics_rflag. Do not display this message</td>
<td>String (255)</td>
</tr>
<tr>
<td></td>
<td>to the customer and do not use this field to write an error handler. For</td>
<td></td>
</tr>
<tr>
<td></td>
<td>more information about handling replies, see Getting Started with CyberSource</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced for the SCMP API.</td>
<td></td>
</tr>
</tbody>
</table>
### Refund Request Fields

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>merchant_ref_number</td>
<td>Order reference or tracking number that you provided in the request. If you included multi-byte characters in this field in the request, the returned value might contain corrupted characters. For more information about order tracking, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>Optional</td>
<td>String (50)</td>
</tr>
<tr>
<td>request_id</td>
<td>Identifier for the request generated by the software client. For more information about request IDs, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>Optional</td>
<td>String (26)</td>
</tr>
<tr>
<td>request_token</td>
<td>Request token data created by CyberSource for each reply. The field is an encoded string that contains no confidential information such as an account or card verification number. The string can contain a maximum of 256 characters.</td>
<td>Optional</td>
<td>String (256)</td>
</tr>
<tr>
<td>china_payment_request_id</td>
<td>The request ID returned from a previous request for ics_china_payment. Creates a follow-on refund by linking the refund to the previous payment. For more information about request IDs, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>Required</td>
<td>String (26)</td>
</tr>
<tr>
<td>china_payment_request_token</td>
<td>The request_token value returned from a previous request for ics_china_payment. The field is an encoded string that contains no confidential information, such as an account number or card verification number. The string can contain a maximum of 256 characters.</td>
<td>Required</td>
<td>String (256)</td>
</tr>
<tr>
<td>grand_total_amount</td>
<td>Grand total for the order. You must include either this field or offer0 and the offer-level field amount. The maximum amount is 50000.00.</td>
<td>Required by the processor if there are no offer lines in the request.</td>
<td>Decimal (15)</td>
</tr>
</tbody>
</table>
### Table 14  Refund Request Fields for the SCMP API (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Required / Optional</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>ics_applications</td>
<td>Service to process for the request. For a refund request, this value should be ics_china_refund.</td>
<td>Required for CyberSource frontend processing; not used by the processor.</td>
<td>String (255)</td>
</tr>
<tr>
<td>merchant_id</td>
<td>Your CyberSource merchant ID. Use the same merchant_id field for evaluation, testing, and production. Your CyberSource merchant ID field must correspond to only one PayEase merchant ID. Likewise, your PayEase merchant ID must correspond to only one CyberSource merchant ID.</td>
<td>Required for CyberSource frontend processing; not used by the processor.</td>
<td>String (30)</td>
</tr>
<tr>
<td>merchant_ref_number</td>
<td>Merchant-generated order reference or tracking number. CyberSource recommends that you send a unique value for each transaction so that you can perform meaningful searches for the transaction on the Business Center and in CyberSource reports. For more information about order tracking, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>Required for CyberSource frontend processing; not used by the processor.</td>
<td>String (50)</td>
</tr>
<tr>
<td>offerN: amount</td>
<td>Per-item price of the product. You must include either offer0 and this field, or the request-level field grand_total_amount in your request. The maximum amount is 50000.00. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount is truncated at the request level to the correct number of decimal places.</td>
<td>Required by the processor if grand_total_amount is not in the request</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>refund_reason</td>
<td>Reason for the refund. Free-text explanation of why the refund is being processed. Banks prefer that the explanation be in Chinese so that bank employees can understand it easily.</td>
<td>Required by the processor.</td>
<td>String (80)</td>
</tr>
</tbody>
</table>
## Refund Reply Fields

Table 15  Refund Reply Fields for the SCMP API

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>china_refund_amount</td>
<td>Total amount of the refund.</td>
<td>Decimal (15)</td>
</tr>
<tr>
<td>china_refund_rcode</td>
<td>One-digit code that indicates whether the ics_china_refund request was successful. Possible values:</td>
<td>Integer (1)</td>
</tr>
<tr>
<td></td>
<td>-1: An error occurred.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0: The request was declined.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1: The request was successful.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information about handling replies, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td></td>
</tr>
<tr>
<td>china_refund_request_time</td>
<td>Time of the refund request in GMT. Format: YYYY-MM-DDThhmmssZ Example: 2019-03-22T224757Z is March 22, 2019, at 10:47:57 P.M. The T separates the date and the time. The Z indicates UTC, which is the same as GMT.</td>
<td>Date and time (20)</td>
</tr>
<tr>
<td>china_refund_rflag</td>
<td>One-word description of the result of the ics_china_refund request. See Reply Flags.</td>
<td>String (50)</td>
</tr>
<tr>
<td>china_refund_rmsg</td>
<td>Message that explains the reply flag china_refund_rflag. Do not display this message to the customer and do not use this field to write an error handler. For more information about handling replies, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>String (255)</td>
</tr>
<tr>
<td>currency</td>
<td>Currency used for the order. Possible values: CNY (RMB) USD</td>
<td>String (5)</td>
</tr>
<tr>
<td>ics_rcode</td>
<td>One-digit code that indicates whether the entire request was successful. Possible values:</td>
<td>Integer (1)</td>
</tr>
<tr>
<td></td>
<td>-1: An error occurred.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0: The request was declined.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1: The request was successful.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information about handling replies, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td></td>
</tr>
<tr>
<td>ics_rflag</td>
<td>One-word description of the result of the entire request. See Reply Flags.</td>
<td>String (50)</td>
</tr>
<tr>
<td>ics_rmsg</td>
<td>Message that explains the reply flag ics_rflag. Do not display this message to the customer and do not use this field to write an error handler. For more information about handling replies, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>String (255)</td>
</tr>
<tr>
<td>Field Name</td>
<td>Description</td>
<td>Data Type &amp; Length</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>merchant_ref_number</td>
<td>Order reference or tracking number that you provided in the request. If you included multi-byte characters in this field in the request, the returned value might contain corrupted characters. For more information about order tracking, see Getting Started with CyberSource Advanced for the SCMP API.</td>
<td>String (50)</td>
</tr>
<tr>
<td>request_id</td>
<td>Identifier for the request generated by the software client.</td>
<td>String (26)</td>
</tr>
<tr>
<td>request_token</td>
<td>Request token data created by CyberSource for each reply. The field is an encoded string that contains no confidential information such as an account or card verification number. The string can contain a maximum of 256 characters.</td>
<td>String (256)</td>
</tr>
</tbody>
</table>
The following table describes the fields that PayEase sends to you after you send the form data to PayEase.

### Table 16  Fields in the Payment Response from PayEase

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>v_amount</td>
<td>Total amount of the payment.</td>
<td>Numeric (9)</td>
</tr>
<tr>
<td>v_md5info</td>
<td>Fingerprint data. For internal processor use only.</td>
<td>String (32)</td>
</tr>
<tr>
<td>v_md5money</td>
<td>Fingerprint data. For internal processor use only.</td>
<td>String (16)</td>
</tr>
<tr>
<td>v_moneytype</td>
<td>Currency. Possible values:</td>
<td>Numeric (1)</td>
</tr>
<tr>
<td></td>
<td>0: CNY (RMB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1: USD</td>
<td></td>
</tr>
<tr>
<td>v_oid</td>
<td>Order ID. This value is the same as one of the values included in the payment reply message from CyberSource:</td>
<td>Numeric (60)</td>
</tr>
<tr>
<td></td>
<td>For the Simple Order API: <a href="#">cyberSource</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For the SCMP API: <a href="#">cyberSource</a></td>
<td></td>
</tr>
<tr>
<td>v_pmode</td>
<td>Payment method. Bank name and/or bank number, usually in Chinese.</td>
<td>String (40)</td>
</tr>
<tr>
<td>v_pstatus</td>
<td>Payment status. Possible values:</td>
<td>Numeric (2)</td>
</tr>
<tr>
<td></td>
<td>1: order is in process.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20: payment was successful.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30: payment failed.</td>
<td></td>
</tr>
</tbody>
</table>

All transactions except American Express transactions are processed online. For these online transactions, the only possible `v_pstatus` field values are 20 and 30.

Only American Express transactions are batched. A `v_pstatus` value of 1 indicates that the American Express transaction is waiting to be processed.
### Table 16  Fields in the Payment Response from PayEase (Continued)

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Data Type &amp; Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>v_pstring</td>
<td>Payment string. Description of the payment status. Possible values:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>submitted: order is in process (v._\text{pstatus} = 1).</td>
<td>String (800)</td>
</tr>
<tr>
<td></td>
<td>payment successful: payment was successful (v._\text{pstatus} = 20).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A string describing the reason for the payment failure: payment failed (v._\text{pstatus} = 30).</td>
<td></td>
</tr>
<tr>
<td>v_sign</td>
<td>Verification value. Use this value to verify the response message from the processor:</td>
<td>String (256)</td>
</tr>
<tr>
<td></td>
<td>For the Simple Order API: see &quot;Verifying the Response from the Processor,&quot; page 21.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For the SCMP API: see &quot;Verifying the Response from the Processor,&quot; page 26.</td>
<td></td>
</tr>
<tr>
<td>v_url</td>
<td>Return URL. Value that you included in your original payment request to CyberSource.</td>
<td>String (512)</td>
</tr>
</tbody>
</table>
Index

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

B
bank transfers 7

C
characters
  in form data
    SCMP API 25
    Simple Order API 20
    simulator 37
chargebacks 17
credit cards 7
currencies 14

D
data types
  SCMP API 53
  Simple Order API 40
Decision Manager 15

E
eWallet 7
examples
  SCMP API 34
  Simple Order API 29

F
form data
  response fields from PayEase 64
    SCMP API 25
    Simple Order API 20
funding, defined 11

G
GBK character set
  SCMP API 25
  Simple Order API 20
  simulator 37

L
licenses 12

O
order tracking 18
Index

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

P
payer authentication 14
Payment Events Report 16
payment methods
  described 13
  listed 11
Payment Submission Detail Report 16
payment types 11
payments
  defined 11
  examples
    SCMP API 34
    Simple Order API-NVP 29
    Simple Order API-XML 31
procedure
  SCMP API 24
  Simple Order API 19
reply fields
  SCMP API 58
  Simple Order API 46
request fields
  SCMP API 54
  Simple Order API 42
response fields from PayEase 64
public keys 12

R
reconciliation 18
refunds
  overview 10
  examples
    SCMP API 36
    Simple Order API-NVP 30
    Simple Order API-XML 33
procedure
  SCMP API 28
  Simple Order API 22
reply fields
  SCMP API 62
  Simple Order API 51
request fields
  SCMP API 60
  Simple Order API 49
reply messages 15
reports
  Payment Events Report 16
  Payment Submission Detail Report 16
  Transaction Exception Detail Report 16
request IDs 18
requirements 12
## Index

<table>
<thead>
<tr>
<th>Alphabet</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>16</td>
</tr>
<tr>
<td>B</td>
<td>34</td>
</tr>
<tr>
<td>C</td>
<td>29</td>
</tr>
<tr>
<td>D</td>
<td>40</td>
</tr>
<tr>
<td>E</td>
<td>53</td>
</tr>
<tr>
<td>F</td>
<td>54</td>
</tr>
<tr>
<td>G</td>
<td>58</td>
</tr>
<tr>
<td>H</td>
<td>60</td>
</tr>
<tr>
<td>I</td>
<td>62</td>
</tr>
<tr>
<td>J</td>
<td>49</td>
</tr>
<tr>
<td>K</td>
<td>51</td>
</tr>
<tr>
<td>L</td>
<td>50</td>
</tr>
<tr>
<td>M</td>
<td>52</td>
</tr>
<tr>
<td>N</td>
<td>54</td>
</tr>
<tr>
<td>O</td>
<td>62</td>
</tr>
<tr>
<td>P</td>
<td>46</td>
</tr>
<tr>
<td>Q</td>
<td>42</td>
</tr>
<tr>
<td>R</td>
<td>40</td>
</tr>
<tr>
<td>S</td>
<td>53</td>
</tr>
<tr>
<td>T</td>
<td>34</td>
</tr>
<tr>
<td>U</td>
<td>42</td>
</tr>
<tr>
<td>V</td>
<td>46</td>
</tr>
<tr>
<td>W</td>
<td>51</td>
</tr>
<tr>
<td>X</td>
<td>52</td>
</tr>
<tr>
<td>Y</td>
<td>54</td>
</tr>
<tr>
<td>Z</td>
<td>62</td>
</tr>
</tbody>
</table>

### S

SCMP API
- data types 53
- examples 34
- payments
  - reply fields 58
  - request fields 54
- refunds
  - reply fields 62
  - request fields 60
- restrictions 53
- settlement, defined 11

Simple Order API
- data types 40
- examples 29
- payments
  - reply fields 46
  - request fields 42
- refunds
  - reply fields 51
  - request fields 49
- restrictions 40
- simulator 37

### T

- testing 37
- Title 1
- tracking orders 18
- Transaction Exception Detail Report 16
- transaction reference numbers 18

### W

- wire transfer, defined 11

### X

- XML schema versions 18