

Order Update API User Documentation



AbeBooks.com®

INTRODUCTION

The Order Update API may be used to retrieve and update new orders for a bookseller, and is based on industry standards including XML and HTTPS. There is no software for the bookseller to install, only this specification document that can be used to create an interface with the Order Update service using an appropriate software development language that supports TLS and XML.

XML API

The following sections describe valid incoming requests, possible successful responses, and error responses that may be encountered while using the Order Update API.

Minimum Requirements

- An AbeBooks bookseller account with a valid username and password.
- In-depth understanding of XML. For more information, see <http://www.w3.org/XML/>
- Appropriate system access to open port 443 for bi-directional TLS traffic.
- Ability to work with and deploy a programming language that supports TLS and XML.
- Because each XML request contains your username and API Key, you must use a TLS certified secure client.
- Operation through a proxy server is not supported.

Service Address

Server: <https://orderupdate.abebooks.com>
Port: 10003

Security

Security is based on TLS and valid client (vetted bookseller) sign on credentials.

Testing:

At this time, AbeBooks has no test environment for the Order Update API.

You will be responsible for ensuring that your client software is performing as required. We suggest that you create (as a buyer) one or more orders against "dummy" books in your AbeBooks inventory. (If you don't have dummy books in your inventory, you can upload a few (no more than 5) with whatever process you usually use to maintain your book inventory with AbeBooks.) You can then run tests against these orders without affecting real buyers.

Important Notes

⚠ When you submit an order to our API server for processing as "Shipped", we will attempt to charge the buyer's card immediately, and the API will respond with the new status of each item in the order. **It is critical to examine the "status" tags for each item in the response, as they will indicate whether the items should be shipped or not. Note that it is possible for orders to be partially cancelled by the buyer (i.e. only some items in the order should be shipped).**

⚠ **Requests for extra charges cannot be made via the OrderUpdate API.** If you would like to request extra charges for an order, please go directly to your AbeBooks account to submit the request. You will receive an email notification once the buyer has accepted or rejected the charges, at which point you can process the order normally via the OrderUpdate API.

⚠ **AbeBooks provides fraud protection only for orders where the payment method is Credit Card.** Should a buyer contact you with a change to their payment or shipping information after an order has been placed, please review this information carefully.

AbeBooks.com Purchase Orders

The core of the Order Update service is the AbeBooks.com Purchase Order (ABEPO). All successful requests to the Order Update server will return a single ABEPO instance or a list of ABEPOs, depending on the call. ABEPOs provide name and address information for the buyer, shipping information, as well as order currency and total value. Each ABEPO has a unique number (the "ABEPOID").

Each ABEPO includes one or more Purchase Order Items (ABEPOITEMs). Each ABEPOITEM references exactly one book sold. Book title, seller's book ID, description, author, and item price are typical fields in the ABEPOITEM record. All items in an order will be from the same bookseller to the same book buyer. Each ABEPOITEM has a unique number (the "ABEPOITEMID"), as well as a reference to the parent ABEPO (ABEPOID).

The API is flexible in that the client need not always explicitly refer to the ABEPOITEMs. Some calls allow access to the order itself, without reference to the items included. For example, a single call allows the client to set the status of the entire ABEPO and all the included items.

Note that both ABEPOs and ABEPOITEMs pass through a number of standard order statuses during sales processing. These statuses and the values that can be set are defined in detail below.

This documentation defines standard XML tag sets for both ABEPOs and ABEPOITEMs.

XML Requests

Four types of requests can be sent to the Order Update server:

- getOrder
- getAllNewOrders
- update
- updateShipping

This section lists example XML requests made to the Order Update server. The first section covers common request elements, while the following sections describe each XML request in detail.

Common Request Elements

All order update requests follow XML standards and should include the standard XML header:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
```

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateRequest version="1.0">
  <action name="getOrder">
    <username>jsinclair</username>
    <password>123abc</password>
  </action>
</orderUpdateRequest>
```

XML Code 4-1 XML Elements common to all requests

orderUpdateRequest Tag

This tag encompasses the entire order update request. It has one parameter that indicates the version of the XML request. Currently the only valid version is "1.0".

action Tag

This tag tells the Order Update server which action to take and which user should execute the action. The tag has one parameter and two elements: The parameter "name" may have the value of "getAllNewOrders", "getOrder", "update" or "updateShipping", indicating which action to take. The value of the elements "username" and "password" must represent a valid AbeBooks.com bookseller, and this bookseller must be the owner of the purchase order being processed by the action.

getAllNewOrders Request

This request returns all new orders that are available for processing (all ABEPs that are in the status "seller notified").

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateRequest version="1.0">
  <action name="getAllNewOrders">
    <username>jsinclair</username>
    <password>123abc</password>
  </action>
</orderUpdateRequest>
```

XML Code 4-2 Example getAllNewOrders Request

All orders returned by the getAllNewOrdersRequest may be processed by the update request shown in this document. The output is limited to 500 orders. Repeated calls to this request will return the same orders until the individual orders are processed, or change status for some other reason, such as buyer cancellation.

getOrder Request

If you specify an order number with this request, the order details can be retrieved. This request will return processed and unprocessed purchase orders. Retrieval is limited to purchase orders on which you are the seller.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateRequest version="1.0">
  <action name="getOrder">
    <username>jsinclair</username>
    <password>123abc</password>
  </action>
  <purchaseOrder id="1234"/>
</orderUpdateRequest>
```

XML Code 4-3 Example getOrder Request

update and updateShipping Request

The update request is used to change the status of the purchase order and each of the books in the purchase order. Marking a book as "shipped" results in a credit card transaction on the buyer's card. An update request can take one of two forms: A single status that is applied to all items in the order, or a status for individual items. Each item in the order must be set to one of the statuses found in Table 4-8. Failure to update the status of all items in an order will result in the update request failing! Note that the update request only processes one order at a time.

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateRequest version="1.0" >
  <action name="update">
    <username>jsinclair</username>
    <password>123abc</password>
  </action>
  <purchaseOrder id="3425234">
    <shipping>
      <company>FEDEX</company>
      <trackingCode>12343456231341234</trackingCode>
    </shipping>
    <status>shipped</status>
  </purchaseOrder>
</orderUpdateRequest>

```

XML Code 4-4 Example update Request with status applied to all items

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateRequest version="1.0" >
  <action name="update">
    <username>jsinclair</username>
    <password>abc123</password>
  </action>
  <purchaseOrder id="3425234">
    <purchaseOrderItemList>
      <purchaseOrderItem id="1212">
        <status>shipped</status>
      </purchaseOrderItem>
      <purchaseOrderItem id="1212">
        <status>rejected</status>
      </purchaseOrderItem>
    </purchaseOrderItemList>
  </purchaseOrder>
</orderUpdateRequest>

```

XML Code 4-5 Example update Request

If you do not have the shipping information at the time the order status is updated, you can use the orderUpdateRequest with the updateShipping action at a later time. This request is useful for minimizing returns made for "item did not arrive" as well as reducing the number of customer service contacts made as a result of buyers inquiring about their shipments. Please note that the shipping company field is limited to 25 characters, and the tracking number is limited to 50.

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateRequest version="1.0" >
  <action name="updateShipping">
    <username>jsinclair</username>
    <password>abc123</password>
  </action>
  <purchaseOrder id="xxxxxxx">
    <shipping>
      <company>FEDEX</company>
      <trackingCode>12343456231341234</trackingCode>
    </shipping>
  </purchaseOrder>
</orderUpdateRequest>

```

XML Code 4-6 Example updateShipping Request

purchaseOrder Tag

This tag identifies the order to update. The ID is the AbeBooks.com purchase order ID, or ABEPOID. The user specified in the action tag must own the purchase order for this request to be successful.

shipping Tag (optional)

The shipping tag can be used to inform the buyer of the shipping company used and the tracking number.

status Tag (applied to all items)

This status tag applies to all items in the order. If it is present, all item specific statuses are ignored! It may have the following values displayed in the following table:

Status	Definition
Shipped	Bookseller will ship the item
Rejected	Bookseller rejected the item
PreviouslySold	Bookseller already sold the item
CreditCardDeclined	The buyers credit card was declined

Table 4-7 Valid Order Statuses

purchaseOrderItemList Tag

This tag contains the list of items in the order.

purchaseOrderItem Tag

This tag identifies the item within the order to alter. The ID must be set to the AbeBooks.com purchase order item ID or ABEPOITEMID.

Note: For an order update request to be accepted, all items within the order must be included!

status Tag (applied to individual items)

Set the status of each item. The status field may contain one of the values from the following table:

Status	Definition
Shipped	Bookseller will ship the item
Rejected	Bookseller rejected the item
PreviouslySold	Bookseller already sold the item

Table 4-8 Valid Item Statuses

XML Responses

The Purchase Order Response (getOrder/update Request)

The requests "getOrder" and "update" return a single purchase order in the format outlined on the following page. In the case of an "update" request, the statuses of each item in the order will be updated and the order totals re-calculated. The "getAllNewOrdersRequest" returns a list of purchase orders as shown in XML Code 4-14. Failures will return an error response as defined in Table 4-17. **Note:** there are two places that a "status" tag appears – one relating to the purchaseOrder, which encompasses the order as a whole, and one relating to each purchaseOrderItem in the order, which indicates the status of individual items. **It is possible for some items in an order to be in "Buyer Cancelled" status, while others are "shipped". In this case, it's important that only the "shipped" items are physically shipped to the buyer, as no payment is collected for cancelled items.** For partially cancelled orders, the purchaseOrder status will appear as "Processed", so it's important to examine the status of each individual purchaseOrderItem.

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateResponse version="1.0">
  <purchaseOrder id="1121066">
    <buyer id="877723">
      <email>blah@somewhere.com</email>
      <mailingAddress>
        <city>Vancouver</city>
        <code>V8T 1Z1</code>
        <country>Canada</country>
        <name>John Doe</name>
        <phone>604-123-1234</phone>
        <region></region>
        <street>123 John Avenue</street>
        <street2></street2>
      </mailingAddress>
    </buyer>
    <domain id="1">
      <name>abebooks.com</name>
    </domain>
    <orderDate>
      <date>
        <day>2</day>
        <month>8</month>
        <year>2002</year>
      </date>
      <time>
        <hour>1</hour>
        <minute>13</minute>
        <second>38</second>
      </time>
    </orderDate>
    <orderTotals>
      <gst currency="USD">0.0</gst>
      <handling currency="USD">0.0</handling>
      <shipping currency="USD">8.5</shipping>
      <subtotal currency="USD">25.0</subtotal>
      <tax currency="USD">0.0</tax>
      <total currency="USD">33.5</total>
    </orderTotals>
    <purchaseMethod>CC</purchaseMethod>
    <purchaseOrderItemList>
      <purchaseOrderItem id="2077519">
        <book id="63511185">
          <author>Irving, Washington</author>
          <description>Robert A. Reynolds 8vo, 357p Klikitat Edition.</description>
          <price currency="USD">25.0</price>
          <title>Adventures of Captain Bonneville</title>
          <vendorKey>000073</vendorKey>
        </book>
        <orderDate>
          <date>
            <day>2</day>
            <month>8</month>
            <year>2002</year>
          </date>

```

XML Code 4-8 Example getOrder/update Response

```

    <time>
      <hour>1</hour>
      <minute>13</minute>
      <second>38</second>
    </time>
  </orderDate>
  <purchaseOrder id="1121066" />
  <sellerTotal currency="USD">0.0</sellerTotal>
  <status code="05">Ordered</status>
</purchaseOrderItem>
</purchaseOrderItemList>
<reseller id="15">
  <name>abebooks</name>
</reseller>
<seller id="6158" />
<shipmentManifest>
  http://www.abebooks.com/servlet/ShipmentManifest?abepoid=1121066
</shipmentManifest>
<shipping>
  <extraItemShippingCost currency="USD">4.25</extraItemShippingCost>
  <firstItemShippingCost currency="USD">8.5</firstItemShippingCost>
  <maxDeliveryDays>42</maxDeliveryDays>
  <minDeliveryDays>28</minDeliveryDays>
  <company>FEDEX</company>
  <trackingCode>12343456231341234</trackingCode>
</shipping>
<specialInstructions>Deliver express</specialInstructions>
<status code="05">Ordered</status>
</purchaseOrder>
</orderUpdateResponse>

```

XML Code 4-8 (cont'd) Example getOrder/update Response

purchaseOrder Tag

This encompasses the entire order and indicates the AbeBooks.com ABEPOID.

buyer Tag

The buyer tag lists the buyer specifics including name and address. The ID listed is the AbeBooks.com ClientID for this buyer. The buyer's e-mail address is included under the email tag.

domain Tag

This tag shows the originating domain for the order. The tag includes a numeric ID attribute, and an inner name element. The current values used are listed in the table below.

Domain Id	Domain Name
1	abebooks.com
46	abebooks.co.uk
47	abebooks.de
48	abebooks.fr
51	abebooks.it
52	iberlibro.com

Table 4-9 Current AbeBooks Domains

orderDate Tag

This tag lists the date the order was placed.

orderTotals Tag

This tag lists the order totals displayed to the buyer in the bookseller's currency, and contains the information outlined in the table below.

Tag	Definition
subtotal	The total of all items unprocessed or shipped
tax	The total tax on the order
gst	The total GST on the order
shipping	total shipping on the order
total	The total of all items, taxes, and shipping

Table 4-10 Details Included in the orderTotals Tag

purchaseMethod Tag

This tag displays the purchase method in use for the purchase order. It may have the following values:

Purchase Method	Definition
SD	Seller Direct
CC	AbeBooks.com processed credit card
UNK	Unknown (Please contact inventory@abebooks.com if you receive this code.)

Table 4-11 Available Purchase Methods

The Purchase Order Item

Each order can contain one or more items. Each item contains book data (title, author etc.) and data that associates the item with the original order. Additionally, an item has a status that determines if the book's price and shipping are added into the order totals.

purchaseOrderItemsList Tag

This tag encompasses all the items in the order. An order may be made up of one or more items.

purchaseOrderItem Tag

This tag contains the item specific information. The ID specifies the purchase order item ID, or ABEPOITEMID.

book Tag

This tag contains the book information in the order including author, description, title, ISBN, bookseller book price (in the booksellers currency) and bookseller's BookID.

orderDate Tag

This tag shows the order date of the purchase order item.

purchaseOrder Tag

This tag identifies the purchase order that owns this item.

sellerTotal Tag

This tag contains the seller total in the bookseller's currency for this item. This value is zero on seller direct orders (when the bookseller is processing the buyer's payment, rather than AbeBooks).

status Tag

This is the status of the item, and is distinct from the status of the purchaseOrder. **It is important to examine the status of each individual purchaseOrderItem in the order.** The status may be any one of the values outlined in the following table.

Status	Definition
Buyer Cancelled	The buyer cancelled the item
Cancelled	The bookseller cancelled the item
Expired	The item expired because it was not processed in a timely manner
Ordered	The item is ready for processing
Previously Sold	The item was already sold by the bookseller
Rejected	The item was rejected by the credit card processor used by AbeBooks
shipped	The item was shipped by the bookseller

Table 4-12 Possible Item Statuses

The status tag includes the code attribute. This is the AbeBooks internal item status code.

seller Tag

This tag lists the seller's AbeBooks client ID and currency.

shipmentManifest Tag

This tag shows the AbeBooks.com shipment manifest URL and is present once the purchase order is in a processed status.

shipping Tag

This tag lists the shipping used for this order. Shipping consists of a first item cost (the amount of money given to ship one book) and an extra item cost (the amount of money given to ship each additional book in the order).

specialInstructions Tag

This tag contains the buyer's special instructions to the bookseller, if any.

status Tag

This tag shows the status of the entire order. **This is distinct from the status of the individual purchaseOrderItems in the order, and should not be relied upon to determine the status of individual items.** The status may be any of the values in the following table.

Status	Definition
Ordered	The order is ready for processing
Processed	The order has been processed by the bookseller
Expired	The order expired because it was not processed in a timely manner
Cancelled	The bookseller cancelled the order
Rejected – Credit Card	The item was rejected by the credit card processor used by AbeBooks

Table 4-13 Possible Order Statuses

The status tag includes the code attribute. This is the AbeBooks internal order status code.

The Purchase Order List Response (getAllNewOrders Request)

The "getAllNewOrders request" returns a list of all orders ready for processing by the bookseller. An order will not be returned by this request after it has been processed or has expired.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateResponse version="1.0">
  <purchaseOrderList>
    <purchaseOrder id="1121066">
      .
      .
      .
    </purchaseOrder>
    <purchaseOrder id="1121076">
      .
      .
      .
    </purchaseOrder>
  </purchaseOrderList>
</orderUpdateResponse>
```

XML Code 4-14 Example purchaseOrderList Response

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<orderUpdateResponse version="1.0">
  <purchaseOrderList />
</orderUpdateResponse>
```

XML Code 4-15 Example Empty purchaseOrderList Response

XML Error Responses

The server can respond with a number of error messages. These messages are either Order Update server responses or generic server error responses, which are listed in Appendix A. Error responses take the following format:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<requestError version="1.0">
  <code>501</code>
  <message lang="en">English Error Message</message>
</requestError>
```

XML Code 4-16 Example Error Response

The possible error codes that may be returned are outlined in the table below, along with the suggested action that should be taken if you receive one of these errors.

Code	Message	Solution
199	This is a generic error	Please try the request again
501	The purchase order was not found	Correct the purchase order ID (ABEPOID) you specified in your request
502	A purchase order ID is a required field for this action	The action you are doing requires a purchase order ID (ABEPOID). Specify the ID (ABEPOID) or correct the spelling in your request.
503	You are not the seller of this purchase order	The purchase order ID (ABEPOID) you specified is incorrect. Correct the purchase order ID you specified in your request.
504	The purchase order is not in an updatable status	The purchase order has already been processed by order update or is being processed by AbeBooks.com. A purchase order can only be processed once.
505	You are not a bookseller	The user ID you provided in the action is not correct. Correct the spelling and try again.
506	Invalid update status specified	The item status provided in the update action is not correct. Correct

		the spelling and try again.
507	You must provide a status for all items	Provide an update status for all items in the order.
508	The credit card transaction failed	The credit card provider used by AbeBooks.com is down. Please wait and try again.
509	The status <i>STATUS</i> is invalid on purchase order item <i>NNN</i>	You have specified an invalid status. Correct the status and re-send.
510	An ID attribute is a required element of a purchase order item	Correct the update request and re-send.
511	The purchase item ID <i>NNN</i> is missing from the update request	You have incorrectly specified an item or missed an item in an order. Add the item to the update request and resend.
512	Unable to lock purchase order for processing	Some other part of the AbeBooks.com system is already processing the order. Wait and review the status of the order later.
513	The status <i>X</i> is invalid on a purchase order	You have not used one of the valid statuses when updating an order.
514	You are attempting to update a non-seller direct purchase order to a status available only for seller direct	You cannot use the status <i>CreditCardDeclined</i> on transactions where payment is accepted by AbeBooks.com.
519	An Order Update server error has occurred	An internal error has occurred and AbeBooks.com staff has been notified. Please wait and try again.

Table 4-17 Response Error Codes

Appendix

Appendix A: General Server Error Codes

AbeBooks uses a generic XML server framework that may return the error codes listed below:

Code	Message	Solution
100	Database Unavailable	A database error has occurred. Contact Premium Technical Support at AbeBooks.
103	Network Error	Some form of network error has occurred. Try again later.
104	Invalid XML	The XML sent to the server is invalid. Please verify your XML.
106	External Server Unavailable	An error has occurred at AbeBooks.com. Try again later.
108	Unauthorized Action	You are attempting to perform an action you do not have permission to perform. Please verify the "action name" in your XML
109	Unknown Action	You have sent an action that is not valid. Correct your XML and try again.
110	User is invalid. Either is is unknown or has an incorrect password	Correct the user name and password (API Key) in your XML request and try again.
111	There was an error validating the user	The server was unable to validate the user in the action. Try again later.