

Pubhub Web Service

E-Book Integration Guide

Retailer Customers

April 2013

v1.4

TABLE OF CONTENTS

Revision history.....	3
Definition of Terms	3
How To Access The Web Service	3
Integration Overview	4
Detailed Description	4
Initial Full Metadata Feed – Alternative 1	4
Error Messages	5
Initial Full Metadata Feed – Alternative 2	5
Error Messages	5
Nightly Metadata Updates (Delta Feed) – Alternative 1	6
Error Messages	6
Nightly Metadata Updates (Delta Feed) – Alternative 2	6
Error Messages	7
Create Order	7
Error Messages	8
Cancel Order	9
Error Messages	9
Support	9
Error Messages	9
Subjects.....	10
Appendix A – Pubhub Metadata Format Description	10
Description of fields	12
Identifier Types	12
Appendix B – Error Format	13
Appendix C – Code Samples (C#)	13

REVISION HISTORY

Date	Version	Comment
2010-11-11	1.4	<p>1. Methods ListAllBooks and ListBooks now returns an array of new specialized Book objects called Book1_4 objects containing two additional properties: PriceBeforeDiscount and TransactionCost. Examples in XML: <PriceBeforeDiscount CurrencyCode="DKK">235</PriceBeforeDiscount> <TransactionCosts CurrencyCode="DKK">10</TransactionCosts></p> <p>2. Method GetBook now takes licenseKey as a Guid (and not as a string) and now returns a Book1_4 object (see 1.)</p> <p>3. Method ListModifiedBookList now returns a new specialized ModifiedBookList called ModifiedBookList1_4. The property NewAndModifiedBooks now returns an array of Book1_4 objects (see 1.)</p> <p>The value of Price (<Price>) is still the net price that the retailer will be invoiced, but it's now the price after a possible discount. The value of PriceBeforeDiscount is as it says the price before a possible discount. In this way it's possible to calculate the actual discount. The values of Price and PriceBeforeDiscount will be the same if there is no discount at the moment. The value of TransactionCost is the transaction fee (in DKK) that the retailer pays Pubhub. This transaction cost is included in Price!</p> <p>4. Method DeleteOrder has been renamed to CancelOrder because the order isn't actually deleted in Pubhub. It is only being cancelled.</p> <p>If you upgrade to version 1.4 of the web service and you worked with Book objects in the previous version then it shouldn't be necessary to update your code to use Book1_4 objects (if you don't need PriceBeforeDiscount and TransactionCost) because they are still Book objects. You have to change your code to use CancelOrder instead of DeleteOrder though.</p>
2011-05-10	1.4	<p>1. TransactionCost has been removed from Book1_4</p> <p>2. It's now required to use SSL/https in production environment</p> <p>3. Method GetPromotions has been replaced with the field Book.SampleUrl</p>
2012-02-23	1.4	Link to code samples in Appendix C changed.
2012-09-25	1.4	Method OrderBookByIsbn added
2013-04-17	1.4	Test base url changed from http://test.publizon.dk:8083 to http://service.qa.pubhub.dk

DEFINITION OF TERMS

PubHub:	Publizon Distribution Hub
DRM:	Digital Rights Management
License Key:	A GUID that identifies you as a retailer. Please contact Publizon to get a license key.
BIC:	"Book Industry Communication" (http://www.bic.org.uk). Organization providing an industry standard subject classification system primarily used in Europe.

HOW TO ACCESS THE WEB SERVICE

Pubhub exists in two separate environments, each with their own server, code and database. Please use the web service located at test.publizon.dk when developing and testing! Orders created in test environment will not be invoiced. Please request a new license key for the production environment when you're ready to go live.

Test / development environment:

http://service.qa.pubhub.dk/MediaService1_4.asmx

Production environment:

https://service.pubhub.dk/MediaService1_4.asmx

Attention: SSL/https is enabled in production.

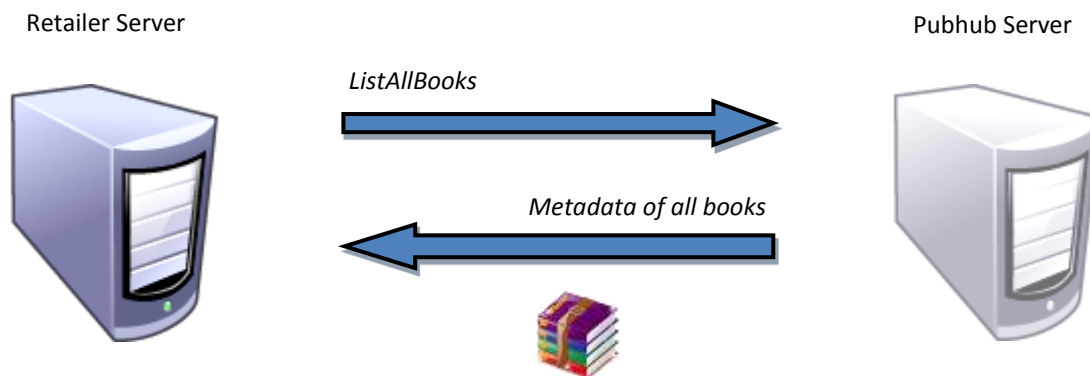
INTEGRATION OVERVIEW

Pubhub is a distribution hub for e-books and audiobooks. It contains thousands of books that you as a retailer can offer your customers. All communication goes through a web service interface. After you have signed a contract with Publizon and received your license key to the web service, the general flow is as follows:

1. You request and retrieve an initial full metadata feed containing information about all available books (like ISBN, title, author, price, links to cover images and subjects). You store these data on your own server – in a database, in xml files or any other format of your own choice.
2. You run nightly metadata updates (delta feeds) containing new, modified and removed books. You add new books, update modified books and delete/deactivate removed books on your server.
3. When a customer buys an e-book or audiobook in your webshop you place an order in Pubhub. You can supply the customer's e-mail address and Pubhub will send an order confirmation (based on your own e-mail template) containing a download link to the book or you can let your own system send an e-mail. You handle the payment between your shop and the customer yourself and you will be invoiced the price specified in the metadata feed.
4. If the customer regrets buying the e-book/audiobook you can cancel the order in Pubhub. An order can only be cancelled if the download link has not yet been clicked.
5. If the customer needs help to read the e-book or play the audiobook you can create a support case in Pubhub and a supporter will look at the problem and send an e-mail bak to the customer.

DETAILED DESCRIPTION

INITIAL FULL METADATA FEED – ALTERNATIVE 1



Call `ListAllBooks(Guid licenseKey)` to retrieve metadata of all available e-books and audiobooks.

`ListAllBooks` returns an array of `Book` objects containing relevant information about the book. Please see “Appendix A – Pubhub Metadata Format Description”, page 10, and “Appendix C – Code Samples (C#)”, page 13, for more details.

Use this method with care! It returns thousands of products. If you experience problems try to increase your web service client timeout or use “Alternative 2”.

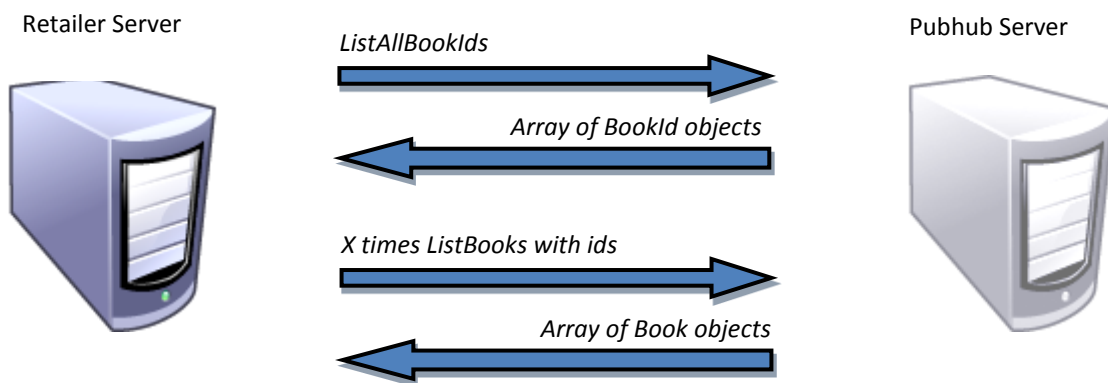
Remember to store the date and time where you retrieved the data. You need this next time you want to retrieve a delta feed (new, updated and deleted books).

ERROR MESSAGES

ListAllBooks can return the following error codes and messages (see “Appendix B – Error Format”, page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {[GUID]}
59999	An unexpected error occurred

INITIAL FULL METADATA FEED – ALTERNATIVE 2



Call `ListAllBookIds` (`Guid` licenseKey) followed by `X` calls to `ListBooks` (`Guid` licenseKey, `Guid[]` bookIds).

`ListAllBookIds` returns an array of `BookId` objects. Convert the list to an array of `Guids` and use it as an argument to the method `ListBooks`.

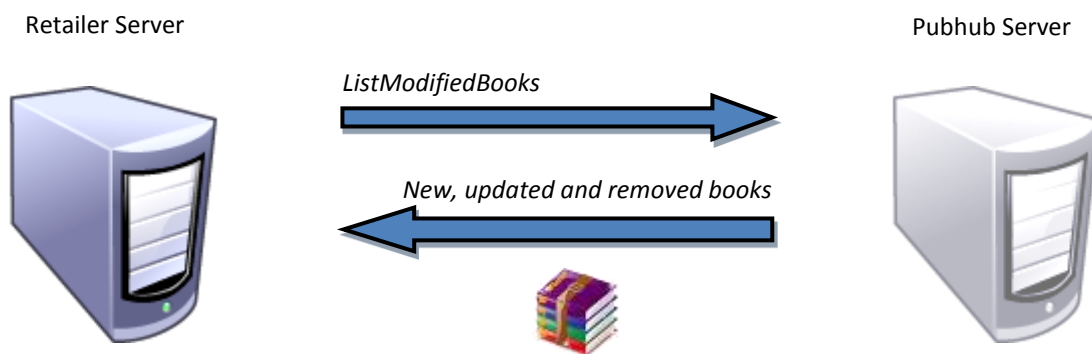
Use this procedure to split the initial feed into smaller steps. It’s slightly more difficult to implement than “Alternative 1” but it’s easier to handle errors and it enables you to proceed and retry with certain subsets.

ERROR MESSAGES

ListAllBookIds and ListBooks can return the following error codes and messages (see “Appendix B – Error Format”, page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {[GUID]}
59999	An unexpected error occurred

NIGHTLY METADATA UPDATES (DELTA FEED) – ALTERNATIVE 1



Call `ListModifiedBooks(Guid licenseKey, DateTime afterUtc)` to retrieve modified (new, updated and deleted) books since `afterUtc`. It's a good idea that you store the date and time (in UTC format) each time you call this method so that you know when to get modifications from next time you call the method.

`ListModifiedBooks` returns a `ModifiedBookList` object containing 2 properties: `NewAndModifiedBooks` and `RemovedBooks`.

`NewAndModifiedBooks` is an array of `Book` objects representing new and updated books since `afterUtc`. Please see "Appendix A – Pubhub Metadata Format Description", page 10, for more details.

`RemovedBooks` is an array of `BookId` objects representing id's of books, that cannot be ordered in Pubhub any longer. It's important that you remove these books from your store.

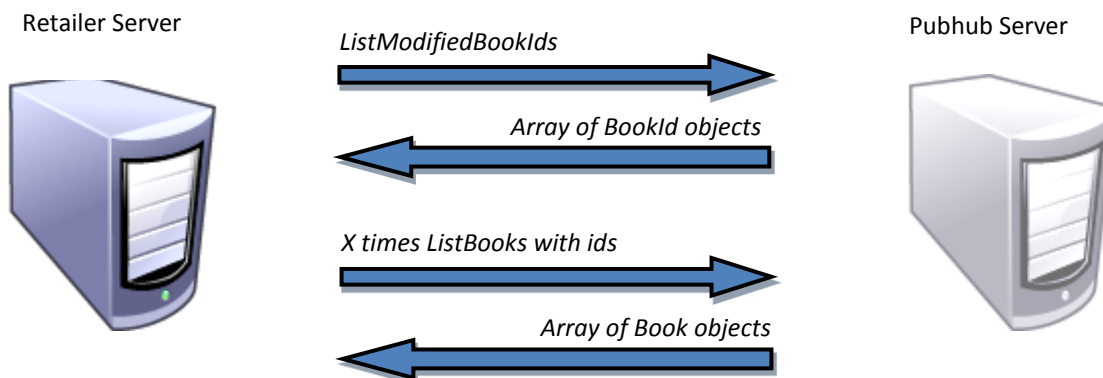
Updated metadata in Pubhub will be available by midnight danish time.

ERROR MESSAGES

`ListModifiedBooks` can return the following error codes and messages (see "Appendix B – Error Format", page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {[GUID]}
59999	An unexpected error occurred

NIGHTLY METADATA UPDATES (DELTA FEED) – ALTERNATIVE 2



Call `ListModifiedBookIds(Guid licenseKey, DateTime afterUtc)` to retrieve id's of modified (new, updated and deleted) books since `afterUtc`. It's a good idea that you store the date and time (in UTC format) each time you call this method so that you know when to get modifications from next time you call the method.

`ListModifiedBookIds` returns a `ModifiedBookIdList` object containing 2 properties: `NewAndModifiedBooks` and `RemovedBooks`.

`NewAndModifiedBooks` is an array of `BookId` objects representing the id of new and updated books since `afterUtc`. Please see "Appendix A – Pubhub Metadata Format Description", page 10, for more details. Call `ListBooks(Guid licenseKey, Guid[] bookIds)` X number of times to retrieve the new and updated books.

`RemovedBookIds` is an array of `BookId` objects representing id's of books, that cannot be ordered in Pubhub any longer. It's important that you remove these books from your store.

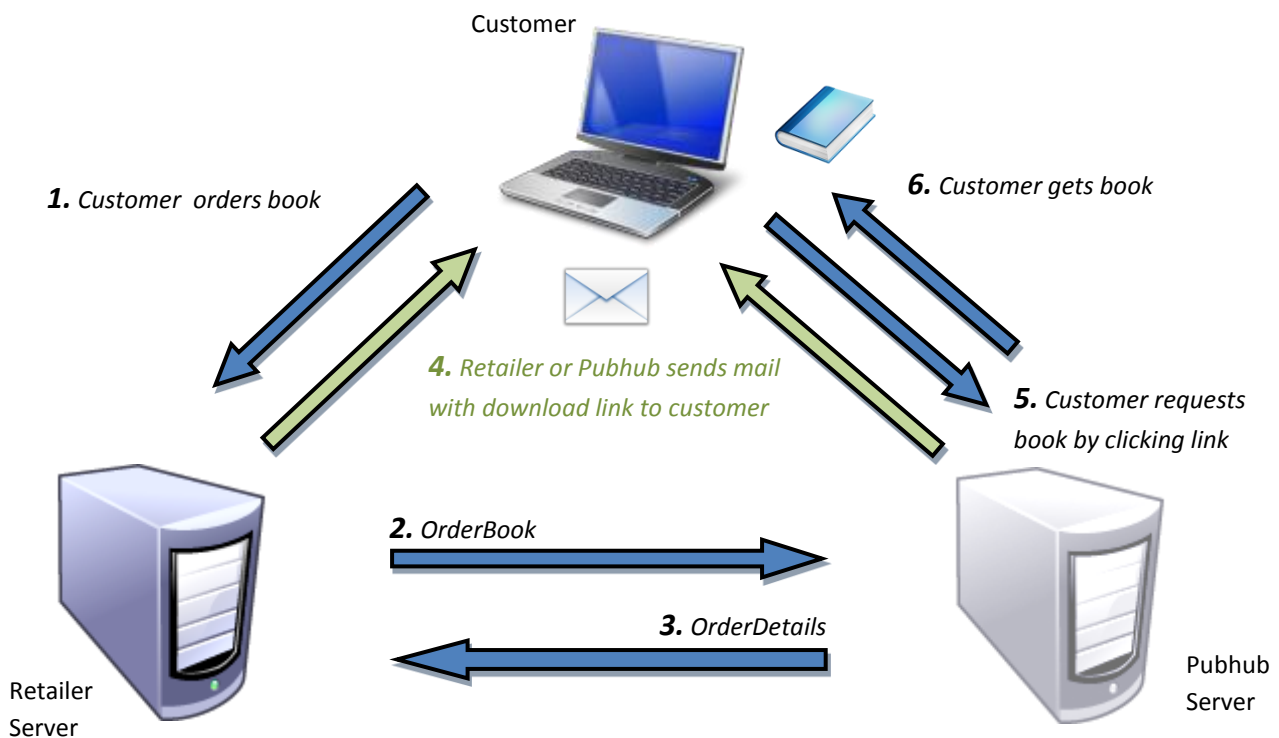
Updated metadata in Pubhub will be available by midnight danish time.

ERROR MESSAGES

`ListModifiedBookIds` and `ListBooks` can return the following error codes and messages (see "Appendix B – Error Format", page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {[GUID]}
59999	An unexpected error occurred

CREATE ORDER



Call:

- `OrderBook(Guid licenseKey, string orderNumber, Guid bookId, string enduserEmailAddress)` or
- `OrderBookByIsbn(Guid licenseKey, string orderNumber, string isbn13, string enduserEmailAddress)`

...to create an e-book/audiobook order. It's recommended to use `OrderBook` because `bookId` is the primary key that never changes. `Isbn13` numbers can change so it's very important to ensure proper updating of `isbn13` numbers as a part of the nightly metadata updates if `OrderBookByIsbn13` is used.

Important: The orderNumber must be unique!

If you supply the parameter `enduserEmailAddress` Pubhub will send an order confirmation e-mail (based on the retailers e-mail template) containing a download link to the book. If an order was successfully created an `OrderDetails` object containing the following properties is returned:

<code>IsMailSend</code>	A boolean telling if an e-mail was sent
<code>PublicationDate</code>	A date/time when the book can be downloaded (optional). If the value is null the book can be downloaded immediately. If the date is in the future the book cannot be download until the date is reached.
<code>DownloadUrl</code>	A link to the e-book or audiobook. The download url has the following format in production: http://service.pubhub.dk/Download.aspx?id=[orderId] where <code>orderId</code> is Pubhub's internal order guid. When activated the link will redirect to another url based on the type of the ordered book: <ul style="list-style-type: none">- If the book is an epub or pdf e-book either protected with a watermark or not protected the link redirects to an url that generates the file.- If the book is protected with DRM the link redirects to a url pointing to an Adobe Content Server which returns a .acsm file that retrieves the book when clicked.- If the book is an audiobook the link redirects to a server that is able to generate, watermark, compress and return the audiobook as a zip file.

ERROR MESSAGES

`OrderBook` and `OrderBookByIsbn` can return the following error codes and messages (see "Appendix B – Error Format", page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {{GUID}}
50003	Invalid OrderNumber {{orderNumber}}: There is already an order with that order number
50014	Invalid bookId {{GUID}}
50015	bookId {{GUID}} is not active
59999	An unexpected error occurred

Furthermore `OrderBookByIsbn` can return the following error code and message

ErrorCode	ErrorMessage
50019	Invalid isbn13 {{ISBN13}}
50020	Isbn13 {{ISBN13}} not found

CANCEL ORDER

Call `CancelOrder(Guid licenseKey, string orderNumber)` to delete an already created order. An order can only be deleted as long as the customer has not tried to download the book and the order is not older than 30 days.

ERROR MESSAGES

`CancelOrder` can return the following error codes and messages (see “Appendix B – Error Format”, page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {{GUID}}
50004	Invalid Order: There is no ContentVersionOrder by retailer {{retailerId}} with the OrderNumber {{orderNumber}}.
50009	ContentVersionOrder {{orderNumber}} cannot be cancelled because DownloadCount > 0
59999	An unexpected error occurred

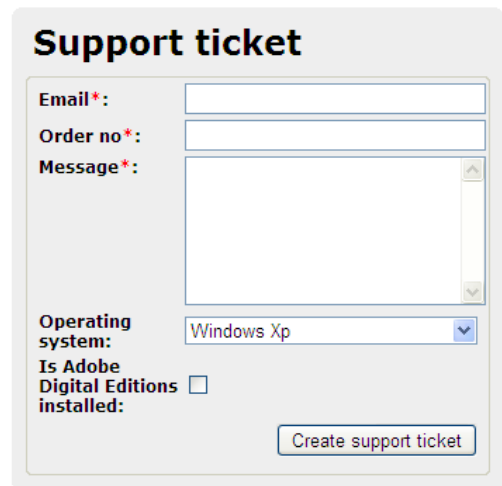
SUPPORT

Publizon has a customer service department taking care of support issues – that is questions to or problems with the e-books/audiobooks – from the end users.

Call `CreateSupportCase(Guid licenseKey, string message, string creatorEmail, string orderNumber)` to create a support case in Pubhub.

You can create a support form on your own website (see screenshot) and create the support case in Pubhub (by calling the above method) when the user submits the form.

Important: The most common cause of end user issues is that Adobe Digital Editions is not installed or that an unsupported operating system (like Linux) is used, so please ask the customer about this information in the support form (see the fields “Operating system” and “Is Adobe Digital Editions installed”). You have to include this information in the “message”-parameter in the webservice call.



ERROR MESSAGES

`CreateSupportCase` can return the following error codes and messages (see “Appendix B – Error Format”, page 13, for more details)

ErrorCode	ErrorMessage
50001	Invalid LicenseKey {{GUID}}
50008	Order id not found {{orderNumber}}: The order id was not found in the database.
59999	An unexpected error occurred

SUBJECTS

At present Pubhub supports the industry standard subject classification system BIC (version 2, revision 01).

Call `ListAllBookSubjects(Guid licenseKey, LanguageCodeTypeEnum language)` to retrieve all BIC subjects.

`ListAllBookSubjects` returns a List of `Subject` objects containing an (subject) Id, a (subject) code, a (subject) description, a `LanguageCodeTypeEnum` and maybe an id of the parent subject.

APPENDIX A – PUBHUB METADATA FORMAT DESCRIPTION

Below is an example of the “Book part” of the XML returned when making metadata request.

```
<Book>
  <BookType>Ebog</BookType>
  <FileType>pdf</FileType>
  <BookId>03ab826b-9fef-45df-8136-06b680d2a0ef</BookId>
  <Identifier>9788750041955</Identifier>
  <IdentifierType>ISBN13</IdentifierType>
  <Title>Projektledelse</Title>
  <SubTitle>mellem styring og læring</SubTitle>
  <Language>dan</Language>
  <PublicationDate>21-06-2010</PublicationDate>
  <Edition>1</Edition>
  <PublisherName>Akademisk Forlag</PublisherName>
  <NameOfBookSeries>Professionsserien</NameOfBookSeries>
  <MainDescription>Pædagoger indgår i flere og flere projekter som led i den stadige pædagogiske udvikling, og langt fra alle er enige om hvordan projekter skal gribes an. Pædagogisk udviklingsarbejde rummer på den ene side et organisatorisk sigte: Hvordan løser vi en given opgave bedst? På den anden side har det et læringssigte: Hvad skal børnene eller brugerne - og medarbejderne - have ud af det?</MainDescription>
  <ShortDescription>Bogen er målrettet pædagoger og ledere af forskellige pædagogiske institutioner. Den er desuden oplagt på pædagoguddannelsens fag 'Individ, institution og samfund' og elementerne 'praktikuddannelse', 'specialisering' og 'det tværprofessionelle element' samt på de pædagogiske diplomuddannelser.</ShortDescription>
  <DigitalProtection>AdobeDRM</DigitalProtection>
  <Price CurrencyCode="DKK">85</Price>
  <NumberOfPages>151 Sider</NumberOfPages>
  <FileSize>1902 KB</FileSize>
  <Authors>Tina Düsterdich</Authors>
  <RightList>
    <Right Type="Kopi"Count="10"/>
    <Right Type="Print"Count="500"/>
  </RightList>
  <Subjects>
    <SimpleSubject>
      <Code>JMRL</Code>
      <Description>Læring</Description>
    </SimpleSubject>
    <SimpleSubject>
      <Code>KJMP</Code>
      <Description>Projektledelse</Description>
    </SimpleSubject>
  </Subjects>
  <Images>
```

```
<Image Type="ForsideMiniature">http://images.pubhub.dk/Media/covers/thumbnails/03ab826b-9fef-45df-8136-06b680d2a0ef.jpg</Image>
<Image Type="Forside">http://images.pubhub.dk/Media/covers/originals/03ab826b-9fef-45df-8136-06b680d2a0ef.jpg</Image>
</Images>
<PriceBeforeDiscount CurrencyCode="DKK">85</PriceBeforeDiscount>
</Book>
```

DESCRIPTION OF FIELDS

* = Mandatory

Field/Element	Data type (max length)	Description
BookType*	String(10)	"Ebog" or "Lydbog" (E-book or Audiobook)
FileType*	String(4)	zip, pdf or epub
BookId*	Guid	Unique Id of the book. Use this id when ordering a book
Identifier*	String(50)	Identifier (ISBN10, ISBN13 or GTIN13)
IdentifierType*	String(25)	ISBN10, ISBN13 or GTIN13
Title*	String(150)	Title of the e-book or audiobook
SubTitle	String(150)	Sub title of the book
Language	String(3)	Language code – ISO 639-2/B
PublicationDate	String(10)	Date of publication in the format dd-MM-yyyy
Edition	String(100)	A short free-text description of a version or edition
ImprintName	String(100)	The name of an imprint or brand under which the book is issued, as it appears on the book
PublisherName	String(100)	The name of an entity associated with the publishing of a product
PartNumber	String(20)	Part designation within a larger whole (eg Part I, or Volume 3)
NameOfBookSeries	String(150)	Title of the collection/series
MainDescription*	String(10000)	Main/long description of the book
ShortDescription	String(10000)	Annotation/short description of the book
DigitalProtection*	String(50)	"Ingen" = No protection. "DRM" = Protected with Digital Rights Management. "DigitalVandmaerkning" = Protected with digital watermark. AdobeDRM = Protected specifically with Adobe Digital Rights Management
Price*	Double	Retailers net price including transaction cost and excluding VAT.
CurrencyCode*	String(3)	Currency code of the price (ISO 4217)
RecommendedPrice	Double	The recommended retail price including VAT
CurrencyCode	String(3)	Currency code of the recommended price
NumberOfPages	String(10)	Number of pages in the book, e.g. "151 Sider"
FileSize	String(20)	Size of the file in kilobyte, e.g. "1902 KB"
Athors*	String(1000)	Comma separated list of authors
TranslatedBy	String(500)	Person who translated the book
EditedBy	String(500)	Person who edited the book
RevisedBy	String(500)	Person who revised the book
RightList	-	A list of rights if the book is protected by DRM
Type	String(10)	The type of right. "Kopi" = Copy/paste or "Print" = print
Count	String(10)	The number of allowed copies/page-prints
Subjects	-	List of BIC subjects
SimpleSubject	-	
Code	String(30)	BIC code of the subject
Description	String(200)	Description of the BIC subject
Images	-	A list of images
Image	String(200)	Link/url to the image
Type	String(50)	Type of the image. "Forside" = Original cover or "ForsideMiniature" = Thumbnail of cover
PriceBeforeDiscount	Double	The price before a possible discount (including transaction cost)

IDENTIFIER TYPES

- 2 ISBN-10
- 3 GTIN-13
- 15 ISBN-13

APPENDIX B – ERROR FORMAT

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <soap:Fault>
      <faultcode>soap:Client</faultcode>
      <faultstring>System.Web.Services.Protocols.SoapException: Invalid LicenseKey {886cf071-65e6-4054-80ed-bd70b2a22cd6}
ved Publnv.WebService.MediaService1_4.OrderBook(Guid licenseKey, String orderNumber, Guid bookId, String
enduserEmailAddress)</faultstring>
      <faultactor>http://localhost:1449/MediaService1_4.asmx</faultactor>
      <detail>
        <Error xmlns="http://service.pubhub.dk/">
          <ErrorNumber>50001</ErrorNumber>
          <ErrorMessage>Invalid LicenseKey {886cf071-65e6-4054-80ed-bd70b2a22cd6}</ErrorMessage>
        </Error>
      </detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

APPENDIX C – CODE SAMPLES (C#)

You can find a C#.NET project that demonstrates the different web service methods here:

<http://service.qa.pubhub.dk/CodeSamples/csharpdotnet.rar>

Please keep in mind that this is demonstration code, not production code!

The screenshot shows a web application window titled "Pubhub Service Api Code Samples". At the top, there is a text input field labeled "Enter your license key for test environment:". Below this, there is a section for "Retrieve metadata" with four buttons: "ListAllBooks", "ListAllBookIds", "ListModifiedBooks", and "ListModifiedBookIds". The interface is divided into two main sections: "Ordering" and "Support". The "Ordering" section has an "E-mail address to send download link to:" field with an "OrderBook" button, and an "Order number:" field with a "CancelOrder" button. The "Support" section has a "Message:" field, an "Email:" field, and an "Order number:" field, with a "CreateSupportCase" button. At the bottom of the window is a large, empty text area for displaying output or logs.