



Creating your own Internet Libraries for $ECTACO^{\textcircled{R}} jetBook^{\textcircled{R}} COLOR$

Basics

This manual gives an example on how to create an Internet library based on the AtomPub protocol, which is widely used for organizing online libraries.

jetBook[®] COLOR Internet Library Flow Chart



Teacher enters the library URL into jetBook[®] COLOR

displayed on jetBook® COLOR

Such libraries can help you organize access to books, documents and other files stored in different locations. Creating your own library is an effective solution for distributing a set of books and educational materials among users.

Here is an example for creating a personal Internet Library based on the AtomPub protocol, which is widely used for organizing such libraries.

The contents of the library along with files describing its structure must reside on a server. The latter comprises hardware and software components. A desktop computer, laptop or web-hosting – each one is suitable to serve you as a hardware part of your server. For software part, you can use virtually any web server, such as Apache, nginx, IIS, etc. All those are capable of transmitting a list of books to the end user. It is also recommended that you install a php handler or use a combination of Apache and php (both are free). When supervising a large library (with thousands of books), it is recommended that you use a program that has the ability to work with databases – for example, MySQL (which is free). You can use the server you already have, in case it meets the requirements above.

jetBook COLOR sends a request to the server, and the latter responds with an XML file, containing information on the library structure and books. You will need to specify a name for the XML file. Let's name it categories.xml. Use the UTF-8 encoding for its content.

Here you can look at a sample file describing a single-chapter library:

```
<feed xmlns="http://www.w3.org/2005/Atom"

xmlns:dc="http://purl.org/dc/elements/1.1/" xml:lang="en-US">

<entry>

<title>CK-12</title>

<author>Ectaco</author>

<id>unt:jetbookk12:rows.3</id>

link type="application/atom+xml"

href="http://www.jetbookk12.com/jetbookk12.com/book/books.jsp?cat

=3"/>

<link rel="x-stanza-cover-image" type="image/gif"

href="images/book_icons/icon.gif"/>

</entry>

</feed>
```

Let's pay attention to the most important tags.

entry is an element corresponding to a "book shelf", i.e. a section in your library.

title specifies a name for the library section displayed in book browser. Now, the title is *CK-12*, but you can change it to something else. For example, you may want to name it *Books on Math*.

author contains information on the library section's author; this data is also displayed in book browser.

id is a unique identifier, which has three parts. In this example the id is urn:jetbookk12:rows.3.

Basics

Let's consider the id tag:

urn is an immutable element.

jetbookk12 is an element that may contain letters of the English alphabet and numbers. The values for this element are arbitrary. For example, you could opt to enter your school or your library code name, domain name, etc.

rows.3 is a unique number of library item – for example, its sequential number.

link type="application/atom+xml" href=URL is the path where to find information about the structure of a particular section. In this example, when fetching the URL http://www.jetbookk12.com/jetbookk12.com/book/books.jsp?cat=3, the server sends the device an XML file describing the library section. In the general case, it is allowed to use direct paths to pre-composed XML files. Such files can be assigned arbitrary names of your choice. For example books id cat.xml.

icon.gif is an icon corresponding to the library item. You can set an arbitrary name to this file.

To add a section to your library, you should copy a portion of code starting with the <entry> tag and ending with </entry>, then edit the portion you have copied and insert it right after the /entry> tag.

To understand how it works, let's consider a sample XML file describing a library section.

```
<feed xmlns="http://www.w3.org/2005/Atom"
xmlns:dc="http://purl.org/dc/elements/1.1/" xml:lang="en-US">
```

<entry>

```
<title>Math Analysis</title>
<id>urn:jetbookk12:4</id>
<author>
<name>Math teacher</name>
</author>
<link type="application/epub+zip"
href="http://files.lingvosoft.com/jetbookk12.com/book/CK-
12/Math_Analysis.pdf"/>
<link rel="x-stanza-cover-image" type="image/jpg"
href="http://files.lingvosoft.com/images/book_icons/book_cover_jb
c.gif"/>
</entry>
```

<entry>
<title>Biology SE</title>
<id>urn:jetbookk12:6</id>
<author>
<name>Biology teacher</name>
</author>

<link type="application/epub+zip" href="http://files.lingvosoft.com/jetbookk12.com/book/CK-12/Biology_SE.pdf"/> <link rel="x-stanza-cover-image" type="image/jpg" href="http://files.lingvosoft.com/images/book_icons/book_cover_jb c.gif"/> </entry> </feed>

Everything within <entry> and </entry> is a unit of issue in your library. Such units appear on separate lines in the jetBook COLOR book browser; they may represent either subsections or books. There is no limit to the number of nested subsections.

This example covers two books: Math Analysis.pdf and Biology SE.pdf.

A unique id of the book consists of three parts, which have been described earlier.

A path to the book may be either absolute (http:// ...) or relative.

x-stanza-cover-image points to the book cover.

http://files.lingvosoft.com/images/book_icons/book_cover_jbc.gif shows the path to the file with book cover image. A thumbnail preview of the cover will appear in jetBook COLOR.

To add a book to your library, you should copy a portion of code starting with the <entry> tag and ending with </entry>, then edit the portion you have copied and insert it right after the </entry> tag. This way you create another <entry> </entry> unit.

What is contained within the <title> and <author> tags will be displayed in your jetBook COLOR book browser.

Once XML files and book folder are copied to the server, you will need to connect jetBook COLOR to your library. To do this, in the main menu of jetBook COLOR, open *My Library* and then select *Internet Library*. Press the **MENU** key. In the menu that appears, select *Add new Internet library*. In the *URL* field, type the path to the XML file from the first example. In this manual, it is the file categories.xml. In the *Name* field, type a name that will identify your library. Press **OK**.

Turn on Wi-Fi and verify that your library is working correctly.