



Universal Book
Authoring & Production Service
for
hybrid paper or online publication

February 3, 2011
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Today's Theme

- ① Production workflow of having both print and E-book
- ② How would we achieve this?
- ③ Introducing Cloud Authoring Service for Universal Book under development

Company Overview

- Established in 1984
- Offices: Tokyo HQs, Ina (Nagano Pref.), Nagoya
- US: 100% subsidiary in Delaware
- China: 100% subsidiary in Beijing
- Number of Employees: about 90 for Japan, US and China all together
- Main projects: PDF products and XML products

XML Project

- ◆ AH Formatter
 - Implements W3C world standard XSL-FO
 - Global Sales started in 2001, and 75% of annual sales sold in foreign countries.
 - Developing XML-PDF delivery service for IRS (Internal Revenue Service) with AH Formatter
- ◆ Promoting OASIS DITA (Darwin Information Typing Architecture)

Lets write and publish a book

- The publication industry plays an important role to the societal development
- Japan faces a great population decrease period for the first time in history in the 21st century
- Earnings of the publication industry will decrease sharply if the population decreases as it is
- The i18n of publication in Japanese is difficult
- The mechanism with a new book publication is needed to continue the publication of various books
- Proposal to make it with the e-book, especially with EPUB

EPUB Overview

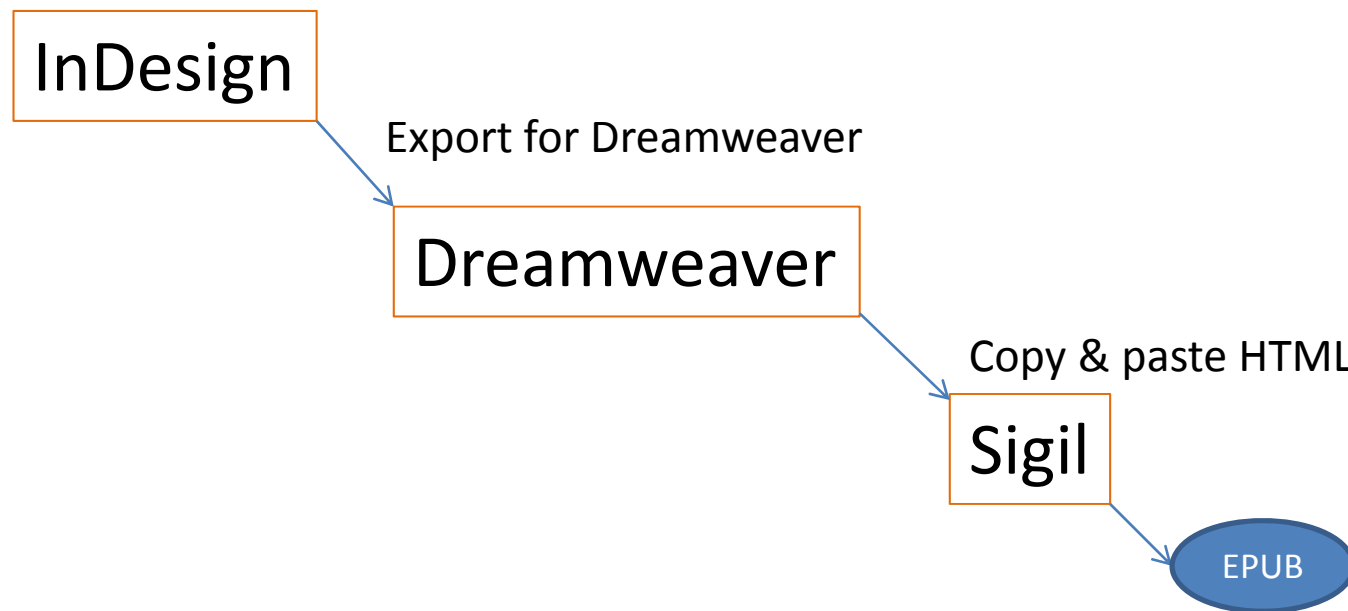
- Describe the article contents with (a part of) XHTML.
- Describe the article layout with (a part of) CSS2.
- The EPUB expression is close to the Web expression.
- EPUBReader is a browser for EPUB use only.
- XHTML is shifting to XHTML5 in EPUB3.0
- A part of CSS3 is adopted, the Japanese layout specifications like vertical writing, etc. are strengthened.

Difference between EPUB and Web

- EPUB has a table of contents (NCX method).
- EPUB book is composed of a lot of XHTML files.
- Each XHTML file cannot be so enlarged.
- EPUB is made to the package and distributed (OPF method).
- The reading order is specified with Spine.
- Available to read on the Internet non-connection environment.
 - The absolute URL (e.g.: <http://..>) is not preferable because it cannot be displayed with the Internet non-connection environment.

Making an EPUB from DTP data

- Workflow introduced in the book "How to make an e-book" written by Uji Sakai (Gijutsu-Hyohron Co., Ltd.)



Books for printing are WYSIWYG made

- The paper size is fixed for printing
- The print object is layouted on the page
- DTP uses WYSIWYG method
 - WYSIWYG means the screen must be matched to the paper in printing
- The design of the book is decided by the finished dimension
- The position to be referred is specified by the fixed page number
 - Index
 - Refer to page xx, etc.

EPUB is not page fixed

- The displayed area size is different per each terminal
 - Resolution
 - Aspect ratio
- Users can change the font size when displayed
 - The number of characters in one screen changes
 - The total number of pages changes
- Impossible to do the layout with the fixed page size
- Impossible to refer to the fixed page number

Having both print and EPUB production

- The EPUB production work flow with DTP base is improper.
 - However, impossible to make earnings with the work flow only for EPUB.
- Having both way by separating contents from the layout
 - Produce contents (without the layout specification)
 - Specify the layout separately
- Proposal for edit and production system by XML.



Idea of edit and production for Universal Book

- The book is made of a lot of articles.
- Each article is described with extended XHTML (XML)
- Assemble the articles with the map and compose a book
 - prepare the publication class for the map.
 - book1 : front matter, text and posterior matter
 - text: chapter , section
 - Book2 : front matter, text and posterior matter
 - text: part , chapter, section

Article authoring

- difficult to author XML directly
 - The beginner doesn't understand the meaning of the property and the element easily
 - The direct input of properties and elements is troublesome
 - A graphical, special editor like XMetal is expensive.
- We design the CAS notation, which is extended from the Wiki notation
 - The Wiki notation is easy, but the feature is insufficient.
 - Define natural extensions based on standard Wiki notation.
 - Easy input of XML properties and elements by the CAS notation

Creating a frame structure of the book

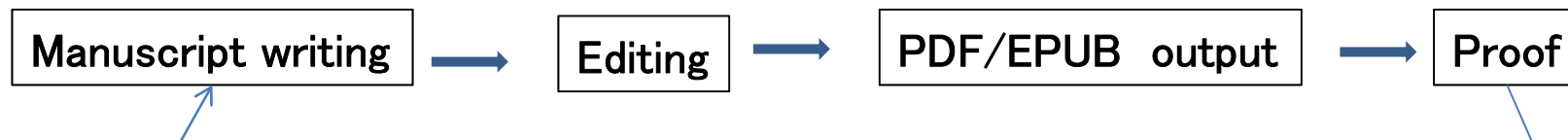
- Assemble articles along with the structure of the book
- The structural markup and the contents markup are not separated in current XML
 - e.g.) The < section > property is introduced in HTML5, the hierarchical structure of the document is available
 - However, the markup of the hierarchical structure is considerably difficult
 - When the markup is a mixture of structure and contents, the edit becomes complex
- DITA separates the topic from the map
 - DITA and EPUB are similar
 - Borrow the idea of DITA map

Output layout specification

- The content layout is applied with stylesheet afterward.
 - Adopt XSL-FO as a stylesheet for printing
 - Adopt CSS2 now and CSS3 in the future for EPUB stylesheet.
- Prepare a stylesheet as the theme.
 - Only the ready-made is enough, but
 - Customizing by customers is available if necessary

Hybrid publication with PDF and EPUB

- Create PDF for printing and EPUB from one source.
 - Generate PDF on the fly
 - Generate EPUB on the fly
- Improve the quality of the manuscript
 - Possible to speed up the production cycle



Presentation (Preview)

Any good naming ?



Under construction
Please wait

Prepare features to support document processing

- Automate creation of table of contents, table titles, figure titles
- Automate creation of indexes
- Automate creation of endnotes
- Automate creation of headers
- Automate adding of capture numbers table numbers and figure numbers
- Automate adding of page numbers, association with reference pages and referenced page numbers

Plan for collaborative editing

- Prepare the collaborative editing feature on the Web base
- Built in version control system
 - Take out previous versions
 - Control the differences
- Create a mechanism of the joint edit system participated by publishing project members

Similar systems

- Services we referred to when designing CAS-UB.
 - Blog publication
 - IdeoType (unexplored project)
 - EPUB editing by Word
 - DITA for Publishers
- CAS-UB is different
 - Easy to use for everyone
 - Achieve the hybrid publication
 - Capable of creating books that can be sold in the book store
 - Capable of creating professional EBUB books

Nominal Service media

- Service agreement with enterprises and groups
 - Publishing company
 - Educational institution
 - Organization
 - Business enterprise
- Service agreement with editorial productions etc.
- Recruit individuals who want to write or edit the book.

Future Plan

- Complete the edit and the production features.
- Add collaborative editing features
- Improve GUI for editing
- Establish an online sales site (direct sale site.)
- Connect to various platforms