Digital Rights Management (DRM) Solution

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E-Book Sytems' Digital Rights Management solution allows for a secure distribution of FlipBooks to their readers.

DRM can be applied to online FlipBooks - accessed thru a webserver - as well as for FlipBooks accessed on offline media such as CDs or USB drives.

The publisher can restrict the access on a functional (features) as well as on a time level (access time).

For use of DRM the publisher does not need any additional software, as the DRM server is hosted by E-Book Systems. It is possible to also host the DRM server in-house, if need-be.

FlipBooks can be registered for DRM either thru the publishing software FlipViewer Xpress Creator 2.3, manually thru the DRM Webinterface or automatically thru scripts.

Use of the DRM Solution is easy, set-up in a few steps thru the DRM Webinterface and does not require technical skills for the most common applications.

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Customers using the DRM Solution to deliver their publications in a secure way include:

Horizont – Weekly Marketing & Media Newspaper
Link: www.horizont.net

EURO – Monthly financial magazine
Link: http://evydani.euro.cz/

Südtirol Online – Daily newspaper
Link: http://www.stol.it

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The DRM Solution consists of the following components

- **FlipViewer Xpress Creator 2.3**

  Encrypts FlipBooks, sets permissions and generates FlipBook Licenses

  FlipBook licenses are registered on DRM Server thru FlipViewer Xpress Creator 2.3, manually thru DRM Webinterface or thru scripts.

- **FlipViewer Xpress**

  Communicates with License Server to get the decryption information

  License is stored on reader's computer after first access. Optionally needs to be retrieved each time reader views FlipBook

- **License Server** (ASP access on E-Book Systems server or in-house)
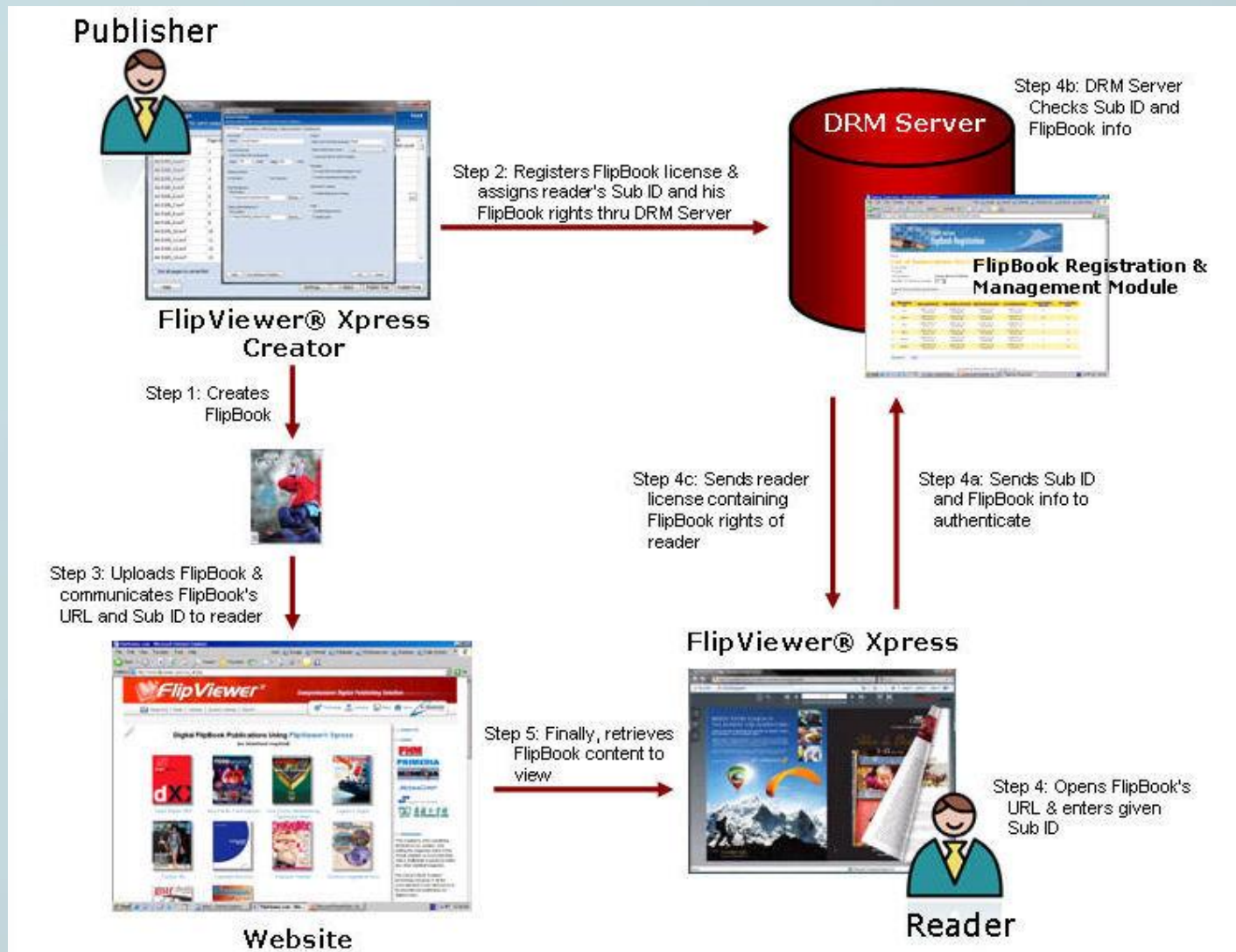
  Stores FlipBook licenses and subscriber IDs, authenticates readers, issues reader's licenses

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Key features of the DRM Solution include:
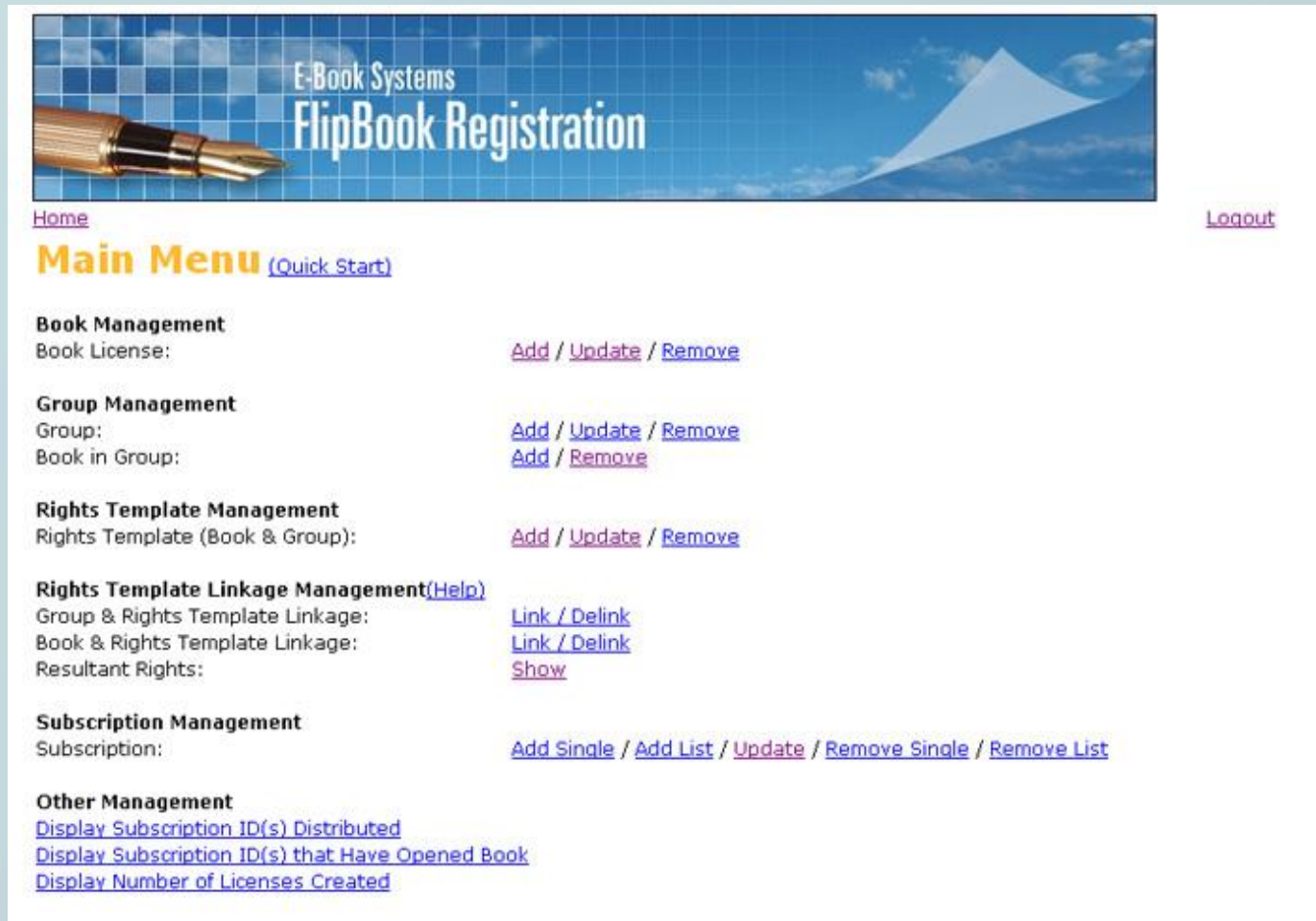
✓ General features

    ✓ Covers online and offline content
    ✓ Set different access rights for different books
    ✓ Document delivery acknowledgment with date/time stamp
    ✓ Security goes down to individual level

✓ Authentication options

    ✓ Require authentication each access
    ✓ Store license locally after initial authorization
    ✓ Prompt for Subscription ID
    ✓ Pass Subscription ID in URL
    ✓ Mask Subscription ID for inclusion in logged-in environments

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Key features of the DRM Solution include:

✓ Restrict access to FlipBook on feature level

 ✓ Print pages
 ✓ Zoom pages
 ✓ Copy text from FlipBook
 ✓ Save FlipBook locally
 ✓ View limited number of pages w/o authentication

✓ Restrict access to FlipBooks on a time level

 ✓ Forever
 ✓ Time period: From xx till xx
 ✓ Library functionality

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DRM Web Interface

Overview of DRM Webinterface

Define access rights for groups

Define book groups

Adding a New Group

Group Name: Group FVX PDF

Group Description: This group consists of FVX books converted from PDFs

Subscription Type: (Help)
- ⦿ Sale Mode
- ○ Book-based Subscription Mode
- ○ Time-based Subscription Mode

[Add Group] [Cancel]

Add subscribers for groups

Adding a New Subscription List

Group Name: Group FVX PDF

Subscription ID List (in CSV format): D:\MyData\temp\subscriptionlist.csv [Browse...]

CSV format: Subscription ID, Allow number, Subscription Start Date (YYYY-MM-DD), Subscription End Date (YYYY-MM-DD)

[Add Subscription List] [Cancel]

Adding a New Rights Template

Rights Template Name:	Rights FVX PDF

Set Time Limit: Yes

- ⦿ Start Date: 2008-01-01 (YYYY-MM-DD) Hour 00 Min 00
- End Date: 2010-01-01 (YYYY-MM-DD) Hour 23 Min 59
- ○ Number of days: 0 Hour 00 Min 00

View[1]: ⦿ All Pages ○ Pages: _____

Enter page index numbers and/or page index ranges separated by commas. For example, 0,1,3,5-12

Capture Screens:	Default
Zoom Pages:	Yes
Toggle Window Frames:	Default
Play Multimedia Files:	Default
Print Pages:	Yes
Use Right-click Menu:	Default
Save Pictures:	Default
Enable FV Hot Keys:	Default
Copy Text[1]:	Default
Silent License:	No
Request reader license each time opening book:	Yes
Check Server Time[2]:	Yes
Auto-add FlipBook to FV Library[3]:	Default
Publication Date:	Default	(YYYY-MM-DD)

[Add Rights Template] [Cancel]

DRM Access reporting details

List of Subscription ID(s) Distributed

From Date: **2008-01-01**
To Date: **2008-03-31**
Group Name: **Group FVX PDF**
Number of records per page: 20

37 items found, displaying 1 to 20.
1, 2

No.	Subscription ID	Subscription Date	Subscription Start Date	Subscription End Date	Last Updated Date	No. of Machine Allowed	No. of Machine Used
1	jasper	2008-03-13 16:12:32	2008-01-01 00:00:00	2009-01-01 23:59:59	2008-03-13 16:12:32	2	1
2	subid1	2008-03-13 17:59:43	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 17:59:43	2	0
3	subid2	2008-03-13 17:59:43	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 17:59:43	2	0
4	subid3	2008-03-13 17:59:43	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 17:59:43	2	0
5	subid4	2008-03-13 18:28:27	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 18:28:27	2	0
6	subid5	2008-03-13 18:28:27	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 18:28:27	2	0
7	subid6	2008-03-13 18:28:27	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 18:28:27	2	0
8	subid7	2008-03-13 18:28:27	1990-01-01 00:00:00	2199-12-31 23:59:59	2008-03-13 18:28:27	2	0

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How the DRM access works:

Access Rights

After a Rights Template is linked to a Group, these group-level rights apply to all Books in the Group. A Rights Template can be linked to single or multiple Groups.

Subscription

Each subscription has a Subscription ID. Each reader uses his/her own Subscription ID to open any Books in the Group that has been subscribed. If the reader has opened a Book in the Group successfully by entering his/her subscription ID, the rest of the Books can be opened without entering the Subscription ID.

Each OS (Windows/Mac) login user account is counted as a machine by FV Xpress.

In other words, if login user A and login user B share the same PC and read the same FV Xpress FlipBook, DRM Server will count that there are two machines have read the Book.

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Implementation of DRM in Online Subscription systems:

The DRM Solution allows for an easy integration with an existing online shop for subscriptions.

After a successful purchase all that needs to be done is to register the Subscriber ID on the DRM Server, which can be done via a HTML post.

See next slide for details.

Addition of Subscription IDs

Subscription IDs can be any kind of text, numbers, eMail addresses or a combination.
These can be added manually to the DRM server or via upload of a CSV list

Dynamically addition of Subscription IDs

The alternative way of adding subscription IDs into the database of the DRM Server is through the use of scripts. This feature caters for those who need to add subscription dynamically. On the DRM Server, there is a script that can receive and process requests for adding subscriptions.

The URL of the script is "http://asp16.digitalflip.com/drm26/regusr"

The steps of using this method are:

(i) Prepare parameters:
(ii) Use HTTP GET method to submit the parameters in step i to the script in DRM Server.
For example,

http://asp16.digitalflip.com/drm26/regusr?pb=drm25asp001&wd=xxxxxx&uid=testing123&gid=group 9nov05&sd=2006-01-01&ed=2006-12-12&anum=4

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Dynamically updating Subscription IDs

After a subscription has been added, you can also update the subscription dynamically. The subscription information that can be updated are Subscription Start Date, Subscription End Date and Allow Number.

On the DRM Server, there is a script that can receive and process requests for updating subscriptions. The URL of the script is

http://asp16.digitalflip.com/drm26/updusr

(i)   Prepare parameters:
(ii)   (ii) Use HTTP GET method to submit the parameters in step i to the script in DRM Server.

http://asp16.digitalflip.com/drm2/updusr?pb=drm25asp001&wd=xxxxxx&uid=testing123&gid=group 9nov05&sd=2006-01-01&ed=2007-12-12&anum=10

The DRM Server may also be set-up in-house. Please contact your E-Book Systems sales representative for purchasing options. The DRM Server consists of the following modules:

- **License Server -** *running CentOS Apache*
  License Server authenticates readers and issues reader licenses to readers.

- **DRM Database -** *running on MySQL*
  DRM Database stores FlipBook licenses, FlipBook rights and subscription information.

- **FlipBook Registration Website & SOAP Interface:**
  SOAP (Simple Object Access Protocol) Interface is the interface between the FlipBook Registration website and the DRM Database. FlipBook Registration Website is a website for publishers to register FlipBook licenses, manage rights and subscriptions.

- **Software requirements**
  Redhat Enterprise Linux ES 4 / CentOS 4.7
  Apache 2.0.52 web server
  Java SE Development Kit (JDK) 6
  JBoss 4.0.5 application server
  MySQL 4.1.22 database server / MySQL 5.0.84 database server

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