Store and retrieve (rights) information using ebook watermarks

BooXtream ebook watermarking and personalisation enhanced for ARDITO

Huub van de Pol, CEO at Icontact BV huub@icontact.nl
London, 9 April 2018

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731760

ARDITO
www.ardito-project.eu

Existing technology: BooXtream ebook watermarking

- **Transactional**: unique, hidden codes are inserted into the ebook file during a (sales) transaction. The codes are linked to transactional (meta)data, stored in a central database
- **Redundant**: multiple code occurrences in the same ebook; tamper proof
- **Multiple algorithms**: content dependent, algorithms can be changed, updated, improved; difficult to reverse engineer

→ *Tough, persistent watermarks carry information, survive several ebook manipulations, hard to hack*

ARDITO
www.ardito-pro

Use cases for watermarking in ebook publishing

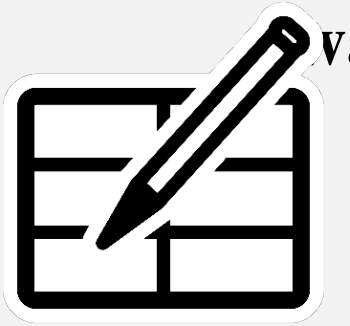
- Ebook **publishers** use BooXtream to create personalised advanced reader copies, review copies for journalists, authors - *'Manual / ARC Watermarking'*
- Ebook **distributors** use BooXtream to create unique, traceable master copies of the ebooks in their supply chain to web shops, platforms and ecosystems in order to trace 'embargo leaks' - *'Channel Watermarking'*
- Ebook **web shops** and publishers selling ebooks direct to consumers (D2C) use BooXtream to protect the ebooks. *Watermarking copy protection (aka Social DRM or Soft DRM)* instead of DRM improves accessibility and UX.

→ *Watermarking enables personal ebooks, traceable ebooks, less illegal copying, reduced piracy, improved accessibility*

ARDITO
www.arditi-oproject.eu

Encoding data in watermarks

ARDITO extension



Transaction data
(order number, date, time)

Personal information
(Name, Email address)

Rights and license information (DRS)

Ebook master file
and metadata

BooXtream
eBook watermarking and personalisation

Watermarked ebook

THE COPYRIGHT HUB

Creating HubKey, onboarding in Copyright Hub.

www.ardito-pro

Decoding ebooks

ARDITO extension

URL to watermarked ebook, or uploaded book

THE COPYRIGHT HUB

Access through Copyright Hub plug-in

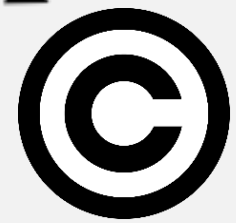
Watermarked ebook

BooXtream

eBook watermarking and personalisation

Transaction data
(order number, date, time)

Personal information
(Name, Email address)



Rights and license information

ARDITO and BooXtream (1)

EMBEDDING WATERMARKS:

- The existing BooXtream API will be enhanced to support additional ARDITO metadata, like ebook **rights and licensing (DRS) data and DOI**
- Onboarding an ebook in the BooXtream repository automatically creates a **HubKey** for use by **The Copyright Hub plug-in**
- This data is added to the other transactional data used for the **invisible** ebook watermarks
- The rights information will also be inserted into the ebooks in a human readable **(visible)** form.
- Rights and license information can be **updated** after the ebook has been sold.

www.ardito-pro

→ *An ebook can carry and deliver rights information to its*

ARDITO and BooXtream (2)

DECODING WATERMARKS:

- When an ebook is uploaded by (or found by) the Copyright Hub site, their **webbrowser plug-in**, or eg. a crawler, the ebook is decoded by BooXtream.
- The watermark is **decoded**.
- The license information will be **shown**.
- The end user is directed to the best place to **obtain** a license

→ *Content 'found in the wild' can point to the ebook owner, publisher, webshop*

www.ardito-project.eu

ARDITO and BooXtream: this summer

AUTOMATIC ONBOARDING:

- New BooXtream customers will be able to automatically onboard their ebooks in The Copyright Hub
- The Copyright Hub webbrowser plug-in can be used to 'decode' the hidden data in an ebook and show the relevant rights information

www.ardito-pro

→ *The ARDITO tools will be available for all BooXtream customers*

ARDITO and BooXtream: the next steps

DECODING FINGERPRINTS:

- When a text (fragment) is uploaded using the Copyright Hub browser plug-in, BooXtream can find the related source ebook that **contains the text**.
- The fingerprint is **decoded** and the essential rights information and license information will be **shown**.
- The end user is directed to the best place to **obtain** a license

→ *Texts can be linked to the source ebook, even without an embedded watermark*

ARDITO
www.ardito-project.eu

ARDITO / BooXtream benefits

The aim of the ARDITO project:

To help professional digital content owners, like self-publishing authors, publishers, or photographers, to optimize the legal (re)use of their assets.

ARDITO enables any end user who wants to re-use (parts of) the content to obtain the necessary and up-to-date license and / or a legal copy.

www.ardito-pro

ARDITO is relevant for

- Self publishing authors
- Educational (re)use of existing content
- Monetizing preview copies
- Monetizing web publications with excerpts of ebooks

Thank you!

Huub van de Pol

huub@icontact.nl
Skype: icontact
www.booxtream.com
Twitter.com/booxtream
Facebook.com/booxtream

BooXtream
eBook watermarking and personalisation

ARDITO
www.ardito-project.eu