International Image Interoperability Framework @ KU Leuven
Current applications and future projects

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Digital systems and services for GLAM and digitally supported research

Part of the University Library of KU Leuven

Division of Leuven Research & Development (LRD)

Internal and external partnerships
Digital research and the need for high quality access to digital resources
Lot’s of data is unique and can only be captured once.
Integrated Database for Early Music

Alamire Foundation
• International Centre for the Study of Music in the Low Countries
• Research on medieval music manuscripts

Hercules call 2013
• Flemish investment fund for research infrastructures
• Proposal accepted, budget heavily reduced
• Project kick-off May 2014

Manuscript illumination. Probably created by the workshop of Petrus Alamire for the Illustrious Brotherhood of Our Lady in ’s-Hertogenbosch (around 1530’s).
Source: idemdatabase.org
IDEM research infrastructure
In search of a new data visualisation solution

LIBIS services and tools
International Image Interoperability Framework™

Enabling Richer Access to the World’s Images

Learn how to get started

IIIF Community Newsletter, Volume 1 Issue 3, Now Online

Community Focused
The IIIF is driven by a community of research, national and state libraries, museums, companies and image repositories committed to providing access to high quality image resources.

Defined APIs
The IIIF is anchored by well defined Application Programming Interfaces developed and vetted by an open and rigorous community process.

Plug 'n' Play Software
The IIIF community encourages and supports the development of compatible image servng and viewing software that is easy to install and provides a dazzling user experience.

DI4R Brussels
What does IIIF Provide?

IIIF APIs – [iiif.io/technical-details]

• Image API 2.1
  • Transfer of image pixels
  • Facilitates systematic re-use of images
  • HTTP(S) Requests – URI specifies region, size, rotation, quality, and format of image for image manipulation

Credit: Sheila Rabun - [Open Online Newspaper Initiative (Open ONI) and IIIF presentation]
What does IIIF Provide?

IIIF APIs – iiif.io/technical-details

- Presentation API 2.1
  - Provides descriptive info, annotation layer, structure/navigation for complex objects
  - Utilizes JSON.LD and Shared Canvas model
  - Easily share and re-use, mix and match content
- Search API 1.0
  - Allows for searching within annotations
- Authentication API 0.9
  - Provide interoperability for access-restricted content
- A/V API – coming soon…

Credit: Sheila Rabun - [Open Online Newspaper Initiative (Open ONI) and IIIF presentation](#)
Mirador viewer
projectmirador.org

Open-source, web based, multi-window image viewing platform with the ability to zoom, display, compare and annotate images from around the world.
IDEEM research infrastructure
Integration of IIIF and Mirador in Rosetta

LIBIS services and tools
**IDEM – Live in august 2015**

Public access to metadata and direct link to images in Mirador via Omeka

<table>
<thead>
<tr>
<th><strong>IDEM INTEGRATED DATABASE FOR EARLY MUSIC</strong></th>
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<tbody>
<tr>
<td><strong>Manuscript label</strong></td>
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<tr>
<td><strong>Holding institution</strong></td>
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<tr>
<td><strong>Shelfmark</strong></td>
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<tr>
<td><strong>Format (general)</strong></td>
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<tr>
<td><strong>Format (specific)</strong></td>
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<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td><strong>Content</strong></td>
</tr>
</tbody>
</table>
| **Authors / composers** | Josquin des Prez  
La Rue, Pierre de  
Agricola, Alexander  
Orto, Marbrianus de  
Barbireau, Jacobus |
| **Language** | Latin; French (notes / titles); Dutch (notes / titles) |
| **Origin (country / region)** | Southern Low Countries; Habsburg-Burgundian Netherlands |
| **Origin (city / location)** | workshop of Petrus Alamire [documented 1496-1534] |
| **Date range** | between 1504 and 1506 |


*Resolvable ULRs refer to image representations (JPEG2000) in Mirador viewer*
IDEM – Anno 2017

35 polyphonic music manuscripts online

IIIF and Mirador in the picture

Growing interest from research groups and heritage professionals

Source: http://lectio.ghum.kuleuven.be/
Magister Dixit
Lectio research group, KU Leuven University Libraries, UCL, KBR, LIBIS

Website: http://lectio.ghum.kuleuven.be/
Resolver URL: http://resolver.libis.be/IE5126528/representation
Magister Dixit
540 lecture notes in Mirador

Website: http://lectio.ghum.kuleuven.be/
Resolver URL: http://resolver.libis.be/IE5126528/representation
Codex Eyckenis
Eighth-century Gospel Book from the treasury of Saint Catherine’s church in Maaseik

Website: http://www.codexeyckensis.be/
Codex Eyckenis
Extensive metadata, including manifest URL

Website: [http://www.codexeyckensis.be/](http://www.codexeyckensis.be/)
Loading manifests from different repositories in a single viewer
Interoperability of digital repositories

Local Mirador instance
Interoperability of digital repositories

Demo version of the Mirador viewer, Biblissima project (demos.biblissima-condorcet.fr)

Biblissima

Codex Eyckensis

SOLESMES, Bibliothèque de l'abbaye Saint-Pi...
Reuse of digital resources
Codex Eyckensis manuscript puzzle

Source: Ben Albritton, Stanford University
New collection release 12/12
Lovaniensia, a project from the KU Leuven Libraries and UCL Libraries
Thank you! Questions?

Source: [http://lectio.ghum.kuleuven.be/](http://lectio.ghum.kuleuven.be/)

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