International Image Interoperability Framework
Three Case Studies - #CIDOC2017 Panel

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International Image Interoperability Framework

Global

Image-based resources: books, images, newspapers, manuscripts, scrolls, maps, music, art, et al.

Mutually usable; simpatico

APIs Software Content Community
Images are fundamental information carriers for cultural heritage
But image delivery is...

...too hard

...too slow

...idiosyncratic

...to disjointed

...too ugly

...and we all suffer because of it: users are isolated and institutions can't share easily, which is frustrating given the increasing volume of digital assets available.
A world of silos & duplication

- Every site a silo (→ no interoperability)
- Every app a one-off (→ overhead to code and keep)
- Every user forced to cope (→ many UIs, little integration)
Welcome to Silo-ville


#CIDOC2017 Slide: Tom Cramer Chief Technology Strategist Stanford University Libraries @tcramer
Researchers’ requirements

• Image quality
• Manipulate images (deep zoom, image comparison,…)
• Collaborate with colleagues across the world (share images, annotate,…)
• Produce quality research
Image comparison
Bring images from different collections together and annotate them.
Virtually reconstitute works that have been cut
Museums and funding institutions’ requirements

- Stop funding/developing technological solutions for short lived projects/proprietary silos
- Invest in community developed standards and technology that leverage museums’ digital assets and data (LIDO, CRM, IIIF)
- Develop long term technological solutions that support the whole institution, not just projects
- Develop long term technological solutions that make the museum relevant in the network environment
A Community that develops Shared APIs, implements them in Software, and exposes interoperable Content.
In other words:

An open framework

for organizations to publish their image-based resources,

to be viewed, cited, annotated, and more by any compatible image-viewing application

through a set of common application programming interfaces (API) that support interoperability between image repositories.
• **Image API 2.1**: gets the image pixels

• **Presentation API 2.1**: just enough metadata to drive a remote viewing experience

• **Search API 1.0**: search within an object, such as the full text of a book or newspaper

• **Authentication API 1.0**: to support login, and differential access to resources.

• **AV API (draft)**: deliver timebased media (audio, video)

*APIs provide a structured way for connecting systems: [http://iiif.io](http://iiif.io)*
Image + Presentation = Object

MS Richardson 7. Houghton Library, Harvard University. Heures d...

- Hours of the Cross (ff. 21-35)
  - Matins (ff. 21-23v)
  - Lauds (ff. 24v-25r)
  - Prime (ff. 25v-26r)
  - None (ff. 29-30v)
  - Vespers (ff. 31-32v)
  - Compline (ff. 33-35)
  - Passion (ff. 35v-36v)
  - Hours of the Holy Spirit (ff. 37-46v)

Presentation API
- Title Label
- Structure (TOC)
- Sequence

Image API
- Image Data

#CIDOC2017
# International Leaders

<table>
<thead>
<tr>
<th>Museums / Galleries</th>
<th>State / National Libraries</th>
<th>Universities and Research Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Museum</td>
<td>Austria</td>
<td>Cambridge</td>
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<tr>
<td>National Gallery of Art</td>
<td>Bavarian State</td>
<td>Cornell</td>
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<td>The J. Paul Getty Trust</td>
<td>British Library</td>
<td>Ghent</td>
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<td>The Walters Art Museum</td>
<td>Denmark</td>
<td>Gottingen</td>
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<td>Yale Center for British Art</td>
<td>Egypt</td>
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And many more!
The methodology that cultural institutions use to share their digital resources with the network is critical.

IIIF website: http://iiif.io
Museums using IIIF & Mirador: https://youtu.be/mKHZ9Dge0xo
IIIF and the Mirador Viewer at the Yale Center for British Art: https://youtu.be/mRIZWjRJTIE