Introduction to the International Image Interoperability Framework

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National Library of Finland Kirjastoverkkopäivät (Library Network Days), Helsinki, Finland, 2017-10-26, 14:30-16:00
Credits – There are no original IIIF slide decks!

- These slides follow most closely the presentation of the IIIF Tutorial at Open Repositories 2017 (Brisbane, Australia) given in collaboration with Mike Appleby, Jon Stroop, Sheila Rabun & Tom Cramer
- Introduction slides taken from a set last arranged by Tom Cramer
- They also include content from many others including Rob Sanderson, Tom Crane, ...
Agenda

- Introduction to IIIF
- Overview of IIIF APIs
- API Specifications Roadmap
- Short break (I think I will need it even if you don’t)
- IIIF Implementations & Demonstrations
- IIIF Community
- Do try this at home
- Discussion
Introduction to IIIF
Images are fundamental information carriers for cultural heritage.
But image delivery is...

...too hard
...too slow
...too idiosyncratic
...too disjointed
...too ugly

...and we all suffer because of it.
What if?
Deep zoom were standard (and fast)
With even the largest of images
Analyze layers

Vermeer’s Girl with the Red Hat, from the National Gallery of Art (US)
You could compare images

Computed Tomography (CT) scans of the head of a seal from the Wellcome Library
...across different sites

Yale Center for British Art: National Portrait Gallery (London) Tudor Project
and collect items that belong together

Le manuscrit 5 de la Bibliothèque municipale de Châteauroux, c. 1460
Folio in BVMM
Miniature in the BNF
despite differences in organization, geography or technology

Biblissima: MSS of France
http://demos.biblissima-condorcet.fr/chateauroux/
You could search within
Analyze

Klokan Technology’s Georeferencer
Golgi Complex
Stacked membranous structure responsible for sorting and packaging of lipids and proteins before secretion or compartmentalization.
Mirador instances on display at McMullen Museum, Boston College.
All with the application of your choice

Mirador

Universal Viewer

IA Book Reader

Qatar Digital Library

Archival papers shown in 4 different viewers.

http://labs.cogapp.com/iiif
And all of this were possible now.
What if?
IIIF Vision

Create a global framework by which image-based resources (images, books, maps, scrolls, manuscripts, musical scores, etc.)...

...from any participating institution can be delivered in a standard way

...via any compatible image server

...for display, manipulation and annotation in any application,

...to any user on the Web.
IIIF Vision, continued

• with **tens of millions** of image-based resources

• backed by a consortium of **world-leading cultural heritage and research institutions**

• supported by a rich and growing suite of **software tools**

• incorporating the **best of current image delivery technology**, and **leveraging Web standards**
So what is IIIF?
A Community that develops Shared APIs, implements them in Software, and exposes interoperable Content
A Community that develops Shared APIs, implements them in Software, and exposes interoperable Content
Global Participation
International Leaders

**Museums / Galleries**
British Museum
National Gallery of Art
The J. Paul Getty Trust
The Walters Art Museum
Yale Center for British Art
Et al.

**State / National Libraries**
Austria
Bavarian State
British Library
Denmark
Egypt
France
Israel
Moravian Library
New Zealand
Norway
Poland
Scotland
Serbia
Wales
Qatar
United States (LoC)
Vatican

**Universities and Research Institutions**
Cambridge
Cornell
Ghent
Gottingen
Harvard
Oxford
Princeton
Stanford
Edinburgh
Toronto
Wellcome Trust
Yale

**Aggregators**
ARTstor
CONTENTdm
DPLA
Europeana
Internet Archive
Wikimedia Foundation

And many more!
Institutions AND Individuals

IIIF Working Group Meeting, New York, May 2016
Community Groups

- A/V Technical Specification Group
- Discovery Technical Specification Group
- Manuscripts Community Group
- Museums Community Group
- Newspapers Community Group
- Software Developers Community Group

30+ participants on open community calls every 2 weeks

Working Group Meetings since 2011
1. Cambridge, Sept 2011
2. The Hague, April 2012
3. Edinburgh, July 2012
5. Copenhagen, February 2014
8. Ghent, November 2015
9. New York City, May 2016
10. The Hague, October 2016
11. The Vatican, June 2017
12. Toronto, September 2018
Communication

IIIF-Discuss Google Group

IIIF Slack

Total Messages

https://groups.google.com/forum/#!forum/iiif-discuss

A Community that develops **Shared APIs**, implements them in **Software**, and exposes interoperable **Content**.
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)
APIs enable reuse

Export & Embed in 3rd Party Apps
- Image Delivery
- Description

Customized App
- Image Delivery
- Search
- Description

Annotation Environments
- Image Delivery
- Transcriptions

Import & Export
3rd party tools reuse content; mark up content with annotations which may enrich the original source.

APIs
RESTful Web Services

Repository
Canonical data store for images, descriptions, and more

Data Store
- Images
- MD
- Annot.
APIs -> Framework -> Ecosystem
IIIF Application Programming Interfaces (APIs)
Use Case Driven Process

1. Gather Use Cases
2. Refine / Distill Use Cases
3. Draft Specification
4. Community Review
5. Publish
IIIF APIs

Core:

● Image API – access to bits of images and enough technical metadata to use them

● Presentation API – information about how sets images should be displayed and related, contains display metadata and *may contain* links to semantic metadata

Also:

● Search API – Search *within* an object

● Authentication API – Tie with authentication system
IIIF Image API

http://iiif.io/api/image/2.1/
IIIIF Image API
Play Along!

https://goo.gl/PrFrwj

(bandwidth permitting)
Syntax

https://example.edu/{id}/{region}/{size}/{rotation}/{quality}.{fmt}

https://example.edu/{id}/info.json
Many Size Options:

- w,
- ,h
- !w,h
- w,h
- pct:n

https://example.edu/{id}/3930,550,980,2630/,670/0/default.jpg
https://example.edu/{id}/square/200,/0/default.png

==

https://example.edu/{id}/0,998,5204,5204/200,/0/default.png
IIIF Presentation API
http://iiif.io/api/presentation/2.1/
IIIF Presentation API
“The objective of the IIIF Presentation API is to provide the information necessary to allow a rich, online viewing environment for primarily image-based objects to be presented to a human user [...]. This is the sole purpose of the API and therefore the descriptive information is given in a way that is intended for humans to read, but not semantically available to machines. [...] Explicitly does not aim to provide metadata that would drive discovery of the digitized objects.”

— http://iiif.io/api/presentation/2.1/#objectives-and-scope
Shared Canvas Data Model / Web Annotation Data Model
Shared Canvas Data Model / Web Annotation Data Model
The institution of civil government

metadata:

{ label: "Author", value: ["Benjamin Hoadly"] }
Other Properties

- Descriptive Properties
  (label, metadata, description, thumbnail)

- Rights and Licensing Properties
  (attribution, license, logo)

- Technical Properties
  (viewing direction, viewing hints, width, height, ...)

- Linking Properties
  (related, see also, start canvas, within, ...)

- Paging Properties
  (first, last, next, total)
Other Types

- Annotation
- Annotation List
- Layer
- Range
Sample Manifest

http://dams.llgc.org.uk/iiif/archive/3975658/fonds.json

https://goo.gl/df3xxxb

(bandwidth permitting)
Coming Soon: IIIF A/V & Presentation 3.0

- British Library “Save our Sounds” grant from Mellon Foundation
- Add a time dimension to the Canvas model
- Change to W3C Web Annotation Data Model (from Open Annotation)
- Late 2018?
IIIF Content Search API
http://iiif.io/api/search/1.0/
IIIF Content Search API

- [http://iiif.io/api/search/1.0](http://iiif.io/api/search/1.0)
- Specification for searching within annotations in a single IIIF resource -- implements ^F like functionality

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>q</td>
<td>A space separated list of search terms. The search terms MAY be either words (to search for within textual bodies) or URIs (to search identities of annotation body resources). The semantics of multiple, space separated terms is server implementation dependent.</td>
</tr>
<tr>
<td>motivation</td>
<td>A space separated list of motivation terms. If multiple motivations are supplied, an annotation matches the search if any of the motivations are present. Expected values are given below.</td>
</tr>
<tr>
<td>date</td>
<td>A space separated list of date ranges. An annotation matches if the date on which it was created falls within any of the supplied date ranges. The dates MUST be supplied in the ISO8601 format: YYYY-MM-DDThh:mm:ssZ/YYYY-MM-DDThh:mm:ssZ. The dates MUST be expressed in UTC and MUST be given in the Z based format.</td>
</tr>
<tr>
<td>user</td>
<td>A space separated list of URLs that are the identities of users. If multiple users are supplied, an annotation matches the search if any of the users created the annotation.</td>
</tr>
</tbody>
</table>
## Annotation motivation terms

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>painting</td>
<td>Only annotations with the <code>sc:painting</code> motivation</td>
</tr>
<tr>
<td>non-painting</td>
<td>Annotations with any motivation other than <code>sc:painting</code></td>
</tr>
<tr>
<td>commenting</td>
<td>Annotations with the <code>oa:commenting</code> motivation</td>
</tr>
<tr>
<td>describing</td>
<td>Annotations with the <code>oa:describing</code> motivation</td>
</tr>
<tr>
<td>tagging</td>
<td>Annotations with the <code>oa:tagging</code> motivation</td>
</tr>
<tr>
<td>linking</td>
<td>Annotations with the <code>oa:linking</code> motivation</td>
</tr>
<tr>
<td>Rank</td>
<td>Name</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Ty. Sub. Lt</td>
<td>Eric Hugh Allan</td>
</tr>
<tr>
<td>Lt.</td>
<td>Alfred Bakerwell</td>
</tr>
<tr>
<td>Lt.</td>
<td>Royce Gustave Andre Baudry</td>
</tr>
<tr>
<td>Tq. Flt.</td>
<td>Arthur John Binks</td>
</tr>
<tr>
<td>Tq. Engt.</td>
<td>William Black</td>
</tr>
<tr>
<td>Lt.</td>
<td>Harold Blow</td>
</tr>
<tr>
<td>Mdn.</td>
<td>Stuart Bladen N. Bolton</td>
</tr>
<tr>
<td>Lt.</td>
<td>Charles Ed. Wm. Breuer</td>
</tr>
<tr>
<td>Mdn.</td>
<td>James Benjamin Clarke</td>
</tr>
</tbody>
</table>
Who is using the Search API?

- The British Library
- University College Dublin
- National Library of Wales
- The Wellcome Trust
- North Carolina State University
- 34+ institutions investigating or developing support
The Legacy of Dr. Augustus McIver Witherspoon

A Profound Warrior For Us All
The Legacy of Dr. Augustus McIver Witherspoon

A Profound Warrior For Us All
Community Choir from St. Luke's Afrikan Methodist Episcopal Church where Witherspoon preached. The keynote speaker will be Dr. Brenda Allen, coordinator of Afrikan-American Student Services at the College of Textiles.

Dr. Witherspoon dedicated most of his life to educating future leaders of America. After obtaining a bachelor's degree from Claflin College in Orangeburg, South Carolina, Witherspoon taught high school science in Lumberton and Rocky Mount, from 1953 to 1966.

He came to NCSU as a graduate student and received a master's degree in 1968. While helping to establish an Afrikan-American Research Center, he received his doctorate in 1987. Witherspoon then became a teaching assistant to a professor, Assistant Dean to...
Live search example

- Wellcome Library
  - Origin of Species (1st ed.) -- https://wellcomelibrary.org/item/b1802922x
  - Short link https://goo.gl/BVJjs6
  - E.g. “finches” or “fitness”

Note that the IIIF Search API doesn’t specify how the search interface is presented to the user, it specifies the back-end mechanism by which the client can query annotation content on any IIIF Search API compatible server.
But what about discovery?

- Search API provides only search over annotations *within* IIIF resources
- Discovery TSG working on ways to support discovery of IIIF resources
  - [http://iiif.io/community/groups/discovery/charter/](http://iiif.io/community/groups/discovery/charter/)
- 4 areas of work
  - 1. **Crawling and Harvesting** (recently agreed split into 2 subsections)
  - 2. **Content Indexing**
  - 3. **Change Notification**
  - 4. **Import to Viewers**
IIIF Authentication API
http://iiif.io/api/auth/1.0/
IIIF Authentication API

- http://iiif.io/api/auth/1.0/
- v1.0 released January 19, 2017
- (18 months from first public draft)

Doesn’t do authentication *per se* but provides an interaction pattern allowing existing authentication infrastructure (CAS, OAuth, etc.) to be used to control access to IIIF resources
IIIF Authentication API

Specification describes how to

- From within a viewer, initiate an interaction with an access control system so that a user can acquire the credentials they need to view restricted content
- Give the client just enough knowledge of the user’s state with respect to the content provider to ensure a good user experience (including providing alternate images)
Authentication patterns

Login
○ The user will be required to log in using a separate window with a UI provided by an external authentication system.

Click through
○ The user will be required to click a button within the client using content provided in the service description.

Kiosk
○ The user will not be required to interact with an authentication system, the client is expected to use the access cookie service automatically.

External
○ The user is expected to have already acquired the appropriate cookie, and the access cookie service will not be used at all.
4. Workflow from the Browser Client Perspective

- Desc. Res.
  - 200? Y @Id expected? Y Display
    - N Display Degraded
  - N

- 401? Y External?
  - Y Kiosk?
    - N
    - Y ClickThru?
      - N
      - Y Display Description
      - N Display Options
      - N

- Login? Y Display Interaction
  - N Open Cookie Service
  - N Open Token Service

- Token? Y

**Client Authentication Workflow**
Clinical material

Online access to clinical content is restricted to healthcare professionals. Please contact Wellcome Images for further information: images@wellcome.ac.uk.

If you are a healthcare professional and already have a Wellcome Trust account, please log in.
Archival material less than 100 years old

This digitalised archival material is free to access. By accepting Wellcome Library's terms and conditions, you agree to the following:

By viewing this and any subsequent archive material under 100 years old, I agree that I will use personal data on living persons for research purposes only. I will not use personal data to support decisions about the person who is the subject of the data, or in a way that causes substantial damage or distress to them.

Read Full Terms and Conditions

Accept Terms and Open
IIIF Authentication API implementations

● British Library
  ○ In copyright material
  ○ Staff access
  ○ Single user access within the building

● The Wellcome Library

● Getty
  ○ Staff access off site to private material
  ○ On site for copyright

● Auth Playground:
  ○ [https://iiifauth.digtest.co.uk/](https://iiifauth.digtest.co.uk/)
  ○ paste manifests into e.g. [http://universalviewer.io/examples/](http://universalviewer.io/examples/)
HTTPS and mixed-content

All of the IIIF specs work over either HTTP or HTTPS (though you shouldn’t ever use authentication with HTTP)

BUT, plain HTTP and HTTPS do not play well together. Browsers block mixed-content, see e.g.

- [https://developer.mozilla.org/en-US/docs/Web/Security/Mixed_content](https://developer.mozilla.org/en-US/docs/Web/Security/Mixed_content) and

- [https://www.jack-reed.com/2017/05/23/the-case-for-serving-your-iiif-content-over-https.html](https://www.jack-reed.com/2017/05/23/the-case-for-serving-your-iiif-content-over-https.html)

**HTTPS – Just do it! Everyone should.**
API Specifications Roadmap

- Image and Presentation APIs 2.1.1 - 2016-05-12

- Authentication API 1.0 - 2017-01-19

- Image and Presentation APIs 3.0 (Open Annotation to Web Annotation, support for A/V) – feature freeze 2017-12, beta draft 2018-05, publish fall 2018 if there are sufficient implementations

Later:

- Search API 2.0 - will need updates from Open Annotation to Web Annotation to match Presentation 3.0

- Auth API 1.1 – with a view to controlling modifying events as well as read

- REST & A/V bitstream API needs fixed for authorization
Compatible Software

Universal Viewer
Mirador
Internet Archive Book Reader

OpenSeadragon
OpenLayers
IIP Moo Viewer
Leaflet JS
FSI Viewer

IIP Image
FSI Server
djatoka
LORIS

Cantaloupe
CONTENTdm®
digilib
### A Taste of the IIIF Universe

<table>
<thead>
<tr>
<th>Collection Name</th>
<th>Institution</th>
<th>Description</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Dublin : sheet 21</td>
<td>University College Dublin</td>
<td>1 Item</td>
<td>1 Item</td>
</tr>
<tr>
<td>MS Typ 41. Houghton Library, Harvard University. Chronique du monde depuis la création, et des rois de France et d'Angleterre, jusqu'à l'an 1461 : manuscript,</td>
<td>Harvard University</td>
<td>41 items</td>
<td>41 Items</td>
</tr>
<tr>
<td>唐絹草紙</td>
<td>NIJL</td>
<td>50 items</td>
<td>50 Items</td>
</tr>
<tr>
<td>Reconstructed manifest (partial): Grandes Chroniques de France (Châteauroux, BM, ms 5)</td>
<td>Biblissima</td>
<td>22 items</td>
<td>22 Items</td>
</tr>
<tr>
<td>[Evacuees in Montgomeryshire and Oswestry]</td>
<td>National Library of Wales</td>
<td>43 items</td>
<td>43 Items</td>
</tr>
<tr>
<td>National Gallery of Art Collection Highlights</td>
<td>National Gallery of Art</td>
<td>26 items</td>
<td>26 Items</td>
</tr>
<tr>
<td>Sir Joshua Reynolds RA, 1723–1792, British, Mrs. Abington as Miss Prue in &quot;Love for Love&quot; by William Congreve, 1771, Oil on canvas, Yale Center for British Art</td>
<td>Yale Center For British Art</td>
<td>7 items</td>
<td>7 Items</td>
</tr>
</tbody>
</table>
Copied letter from Francis Crick to Michael Crick

Like this:

The model looks much nicer than this.

Now the exciting thing is that when this

http://universalviewer.io/examples/
Open-source, web based, multi-window image viewing platform with the ability to zoom, display, compare and annotate images from around the world.

http://projectmirador.org/demo/
http://projectmirador.org/demo/advanced_features.html
http://projectmirador.org/
2: Select Image Size

Select output image width:
- [ ] 100px
- [ ] 150px
- [ ] 200px
- [x] 300px
- [ ] 400px
- [ ] 500px
- [ ] other

Tip: When downloading a full map sheet or very large image (width > 1000 pixels), select an output image value of 8000 or higher in the Other box. There is no need to add ‘px’ to the end of the image.

3: Select Image Options

Select output image format:
- [ ] JPEG
- [ ] PNG

Select output image rotation:
- [ ] 0
- [ ] 90
- [ ] 180
- [ ] 270

Select output image quality:
- [ ] default
- [ ] colour

4: Save or Link the image

Click on the 'Preview this image' button to open your image in a new window for download. Right click on the image to save to your computer.

- [ ] Preview the image
- [ ] Download the image

Or copy the URL below to create a persistent hyperlink to your custom image:

Violin Sonata

**title**
Violin Sonata

**subject**
Sonatas. For violin, piano

Scores featuring the violin

Scores featuring the piano

For 2 players

**date**
1915

**creator**
Janáček, Leoš
Endangered Archives Programme

Hosted by the British Library, example Armenian text Ոսկեայ Դուռն Դպրատան [Voskeay durn dpratan], 1699

- [http://eap.bl.uk/archive-file/EAP180-1-1-30](http://eap.bl.uk/archive-file/EAP180-1-1-30)
- in UV: [http://eap.bl.uk/archive-file/EAP180-1-1-30#?c=0&m=0&s=0&cv=13&xywh=-102%2C112%2C2337%2C2266](http://eap.bl.uk/archive-file/EAP180-1-1-30#?c=0&m=0&s=0&cv=13&xywh=-102%2C112%2C2337%2C2266)
- can also drag-and-drop into Mirador: [http://projectmirador.org/demo/](http://projectmirador.org/demo/)
IIIF Community
Institutional Adoption

http://iiif.io/community/

IIIF Adopters Survey (2017)
Global Community

- 100+ organizations
- 345+ million images
IIIF Community Groups

http://iiif.io/community/groups

• Manuscripts
• Newspapers
• Museums
• Software Developers
Technical Specification

Groups
As needs arise within the community, new technical specification groups are formed, currently:

• IIIF A/V
• IIIF Discovery
• IIIF Text Granularity

New use cases considered as IIIF evolves:
• https://github.com/IIIF/iiif-stories
IIIF Consortium (IIIF-C)

http://iiif.io/community/consortium

• 47 institutional members

• Sustainability and steering for IIIF

• Organizational structure:
  • Executive Committee – core founding members, high level direction
  • Coordinating Committee – active leaders for week to week activities
  • Editorial Group – writes API specifications

• Funds two staff positions:
  • Community Coordinator (Sheila Rabun)
  • Technical Coordinator (Glen Robson)

• Additional Founding Members – through 2017
Consortial Business

- Hiring a technical coordinator
- Opening up new tiers of membership in 2018
- Seeking partners
  - Software firms
  - Contractors & consultants
  - Training
  - Complementary projects & associations
- Please join the IIIF Consortium
Partnerships and Projects

• OpenJPEG improvement project

• Grant-funded projects:
  • Newspapers in Hydra (IMLS)
  • Avalon Media System (IMLS)
  • Save our Sounds (Mellon)

• DHSI Summer Institute 2018

• American Art Collaborative consulting pilot
Emerging Trends

• Increasing adoption & experimentation
• STEM imaging, publishing, DH
• Improving documentation for implementers and end users
• Lowering the barriers to adoption
IIIF to go

... and more!
Getting your hands dirty with the Digital Manuscripts Toolkit

7 April, 2017, 11:30am — 1:30pm

Venue: Centre for Digital Scholarship, Weston Library (Map)

Speaker(s): Emma Stanford, Digital Research, Bodleian Libraries

Contact: Emma Stanford emma.stanford@bodleian.ox.ac.uk

Description

In this workshop offered jointly by Bodleian Digital Library Systems and Services and the Centre for Digital Scholarship, you’ll learn how to make the most of the digitized resources at the Bodleian, the BnF, the Vatican Library and a host of other institutions, using software tools built around the International Image Interoperability Framework (IIIF). After a brief introduction to the main concepts of IIIF, you’ll learn how to use Mirador and the Digital Manuscripts Toolkit to gather images from different institutions into a single viewer, rearrange, remix and enhance image sequences and add new descriptive metadata; add transcriptions and annotations to digitized images; and embed zoomable images or whole manuscripts into your own website or blog. You’ll leave with your own virtual workspace, stocked with the images you’re using.
Europeana IIIF Task Force

Timeframe: February to June 2017

Led by: Austrian National Library

Purpose: Identify current trends and tendencies towards IIIF by the Europeana content providers. Europeana has adopted IIIF but a large portion of the Europeana Network is unaware and unsure of IIIF.

Output: Recommendations Report
Communication Channels

- http://iiif.io/community
- IIIF-Discuss email list
- Recurring calls
- Slack
- Twitter @iiif_io #IIIF
- GitHub: http://github.com/iiif
Where to Learn More

• IIIF YouTube channel
• GitHub: http://github.com/iiif
  • Awesome-IIIF List https://github.com/IIIF/awesome-iiif
• Annual in-person events: http://iiif.io/event
  • Working Meetings
  • Conferences
• Email: srabun@iiif.io
IIIF Community Newsletter, Volume 1 Issue 3

Date: 25 May 2017
Author: Sheila Rabun

Community Snapshot

- IIIF-Discuss = 692 members
- IIIF Slack = 362 members
- IIIF Consortium = The IIIF-C continues to welcome founding members. See the IIIF Consortium information page for details and how to join.
- Search process for an IIIF Technology Coordinator is currently underway.

http://iiif.io/news
Ways to Participate!

- Use IIIF
- Join IIIF-C
- Help represent & advocate for IIIF
  - Within your institution
  - Within your region
  - Within your sector
  - At conferences & events
- Share your deployments
- Share your ideas
- Join the calls, Slack, a group
- Lead a group!
- Run a local event
What’s in it for me?
IIIF is Good for You

• Rich image delivery (A/V too soon)
• Plug-and-play server and client software
• Publish once, reuse often
• Support for attribution and access control
IIIF is Good for Sharing

- Remix content from others
- Cite and share
- Annotation-friendly
- Join a global network
Why IIIF

“It’s like going from the 18th century to the 21st century in a single click.”
– Franziska Frey, Harvard

“IIIF is good for us. IIIF is good for sharing.”
– Glen Robson, National Library of Wales

“IIIF doesn’t just keep you out of silos; it keeps you out of dead ends.”
– Richard Higgins, Durham University
IIIF

- Dramatically reduces the friction of delivering image-based resources on the Web
  - Bigger, better, faster, deeper, cheaper, more modular and more flexible
- Creates radical new capabilities to do more than view resources
  - interact, remix, manipulate, annotate
- Is a pool of resources, software, individuals and institutions that work together.
Discussion