Integrating Adlib Museum with an image repository and discovery platform

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Resource Discovery System project

2009

- Serials Solutions (ProQuest) launch Summon: web-scale library resource discovery
- December: Ex Libris announces partner libraries for Primo Central
 2010
- Durham University starts assessing the market for discovery systems
 2013
- January: OJEU tender issued
- Evaluated responses
- April/May: Interviews and further discussions
- Contract awarded to Ex Libris for Primo product

2014

New service, "Discover", launched ready for new academic year



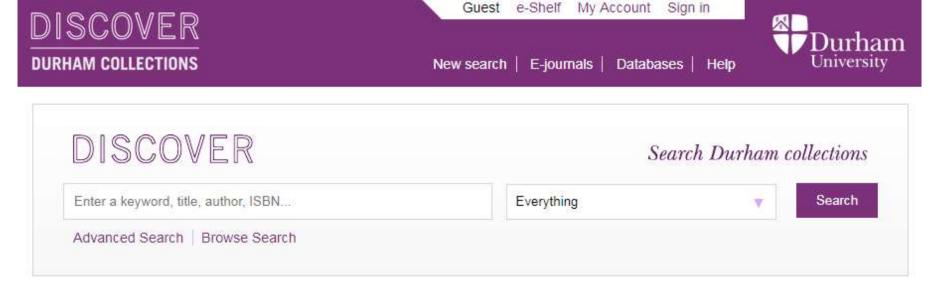
What does Discover include?

- Physical library collections (from Millennium system)
- Electronic library resources (from Primo Central index)
- Research repositories (open access publications and theses)
- Archival collections (EAD catalogues)
- Museum collections (from Adlib)
- Departmental collections



Demonstration

http://discover.durham.ac.uk/



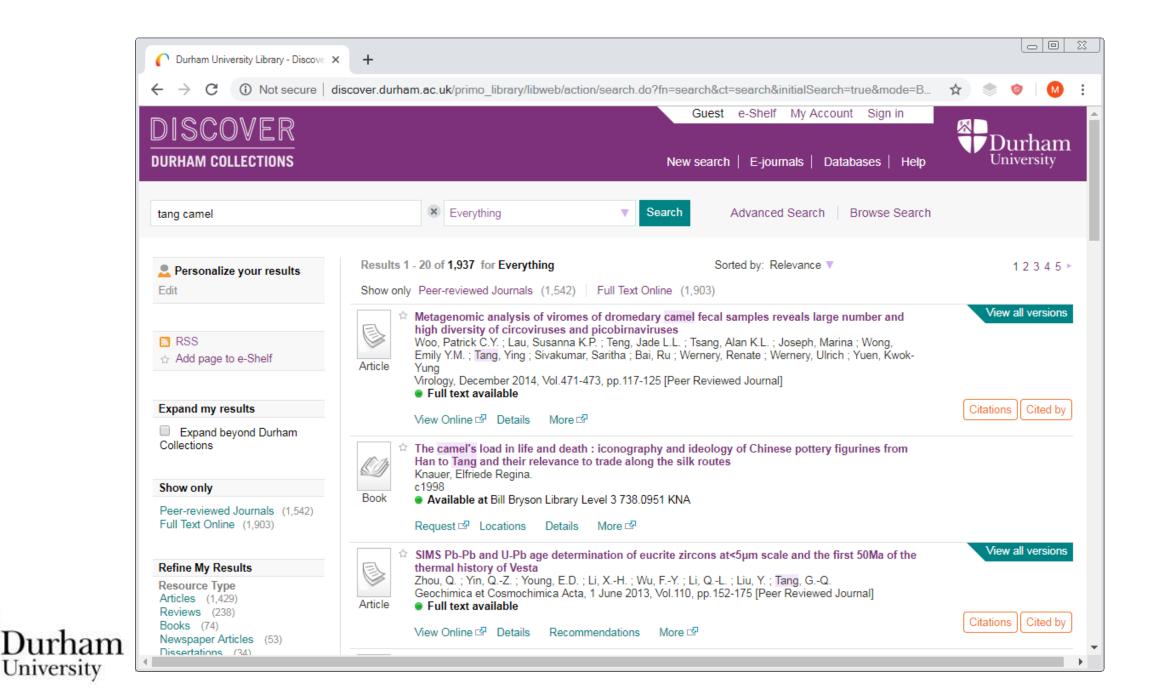


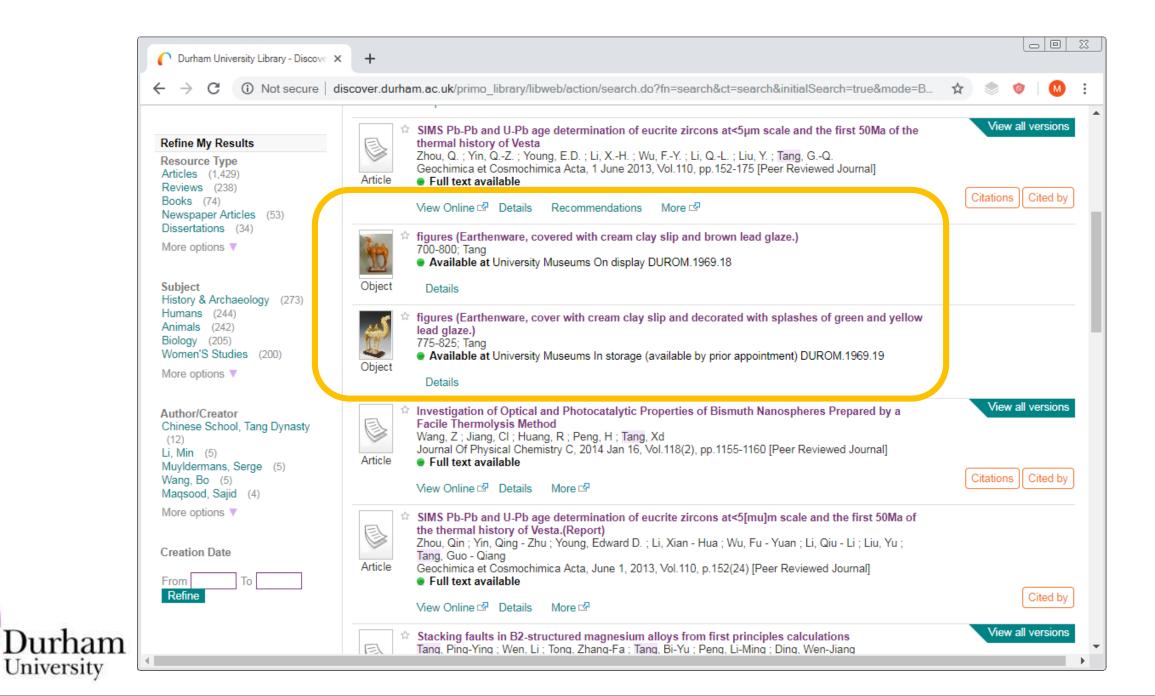


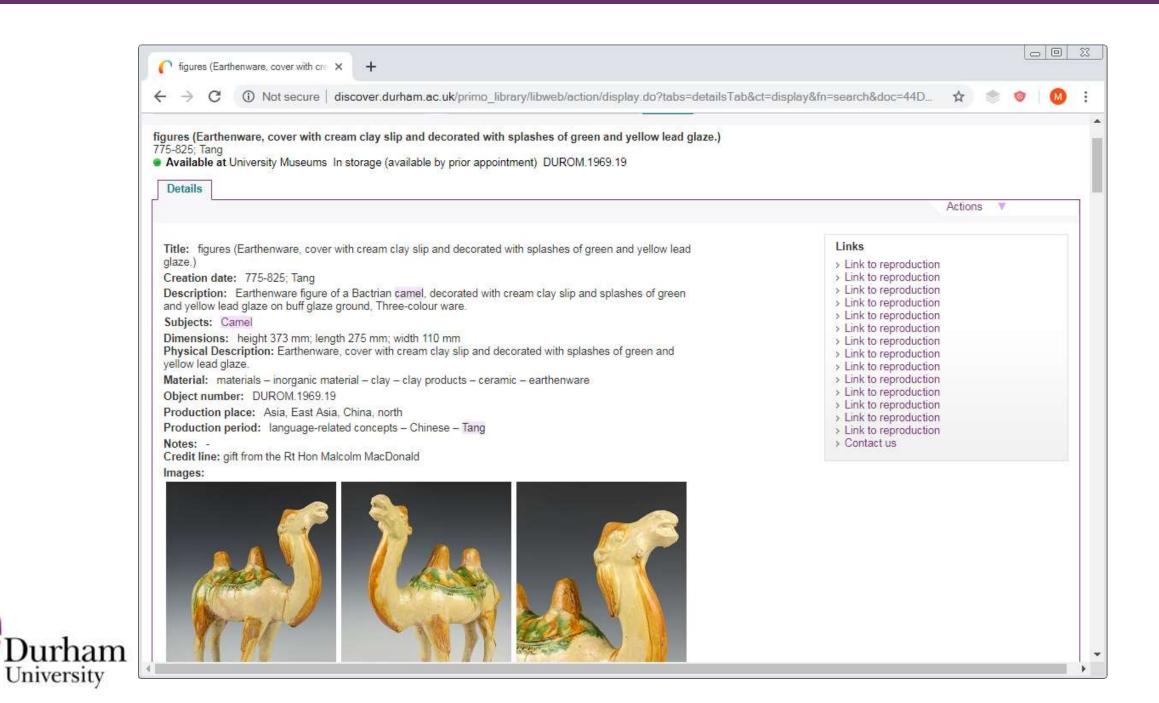


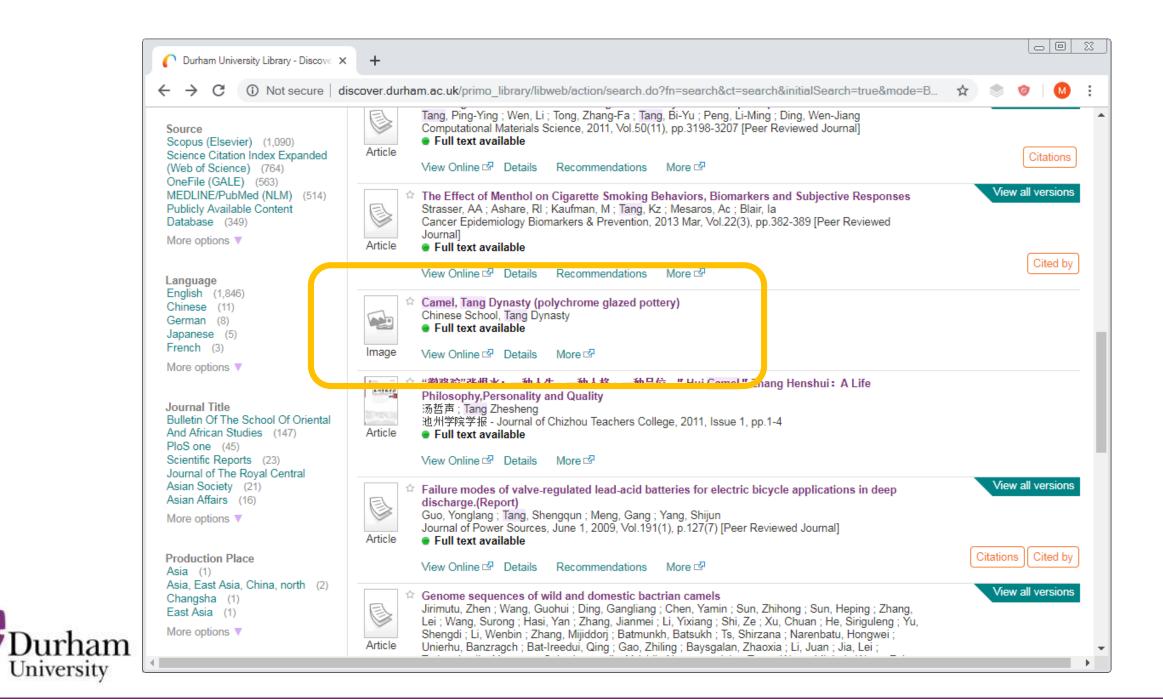


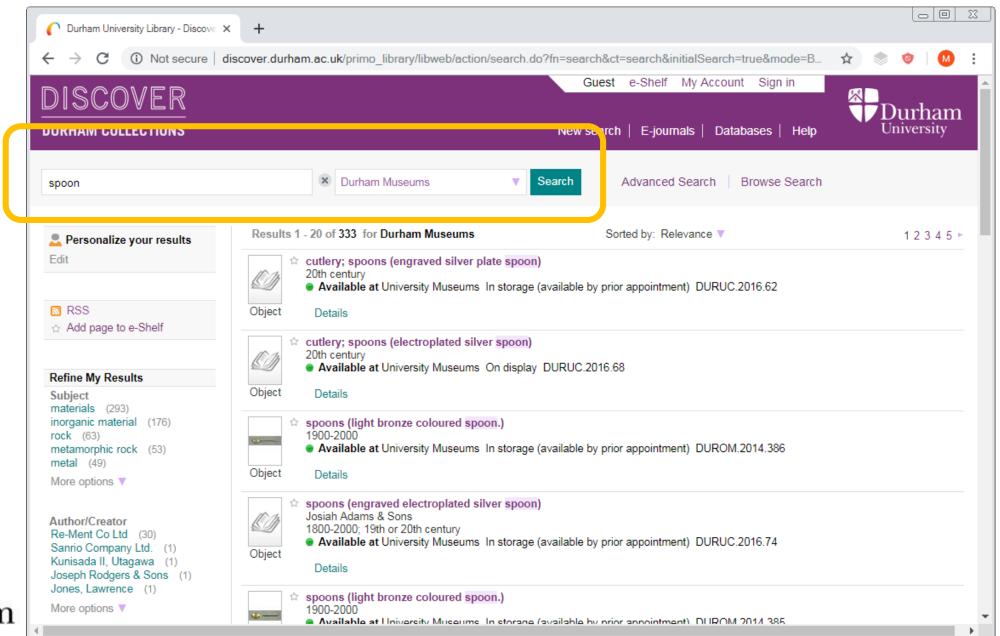




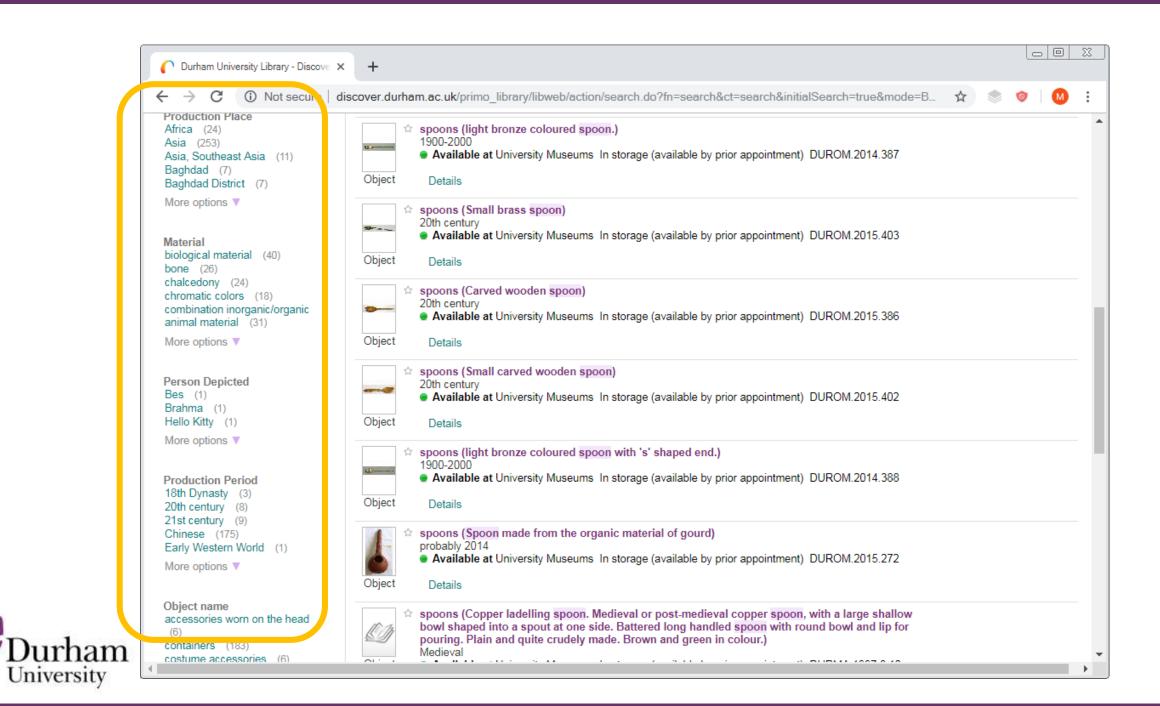


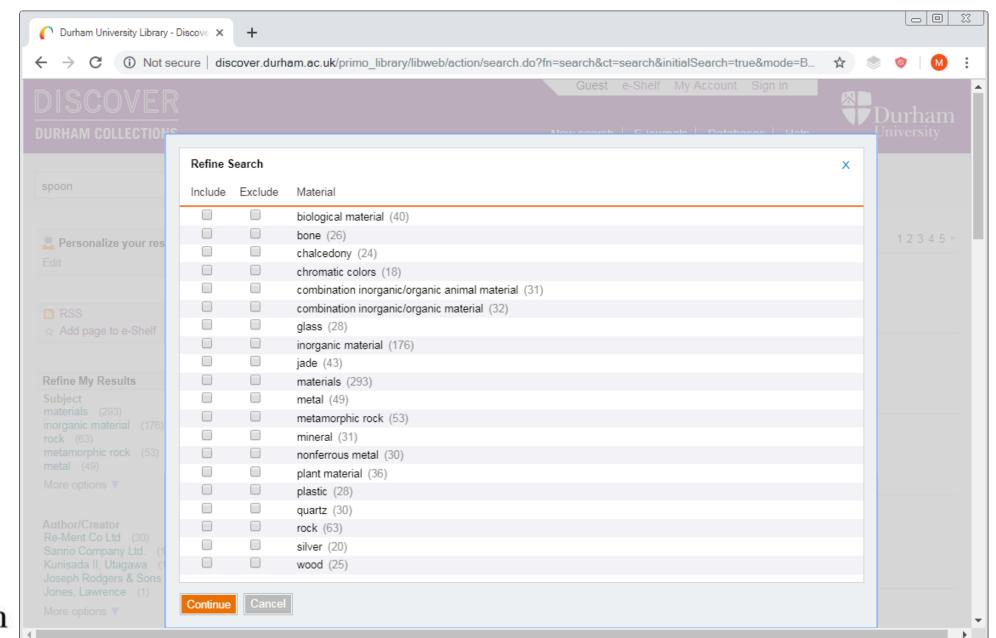














Making a library search work for museums

Pros:

- Didn't have a public museum search interface before
- Users do not have to go anywhere special to find museum objects
- System is flexible enough to handle objects pretty well

Cons:

- System still quite library focussed
- Browsing collections not well supported



Standard facets

- Resource type (e.g. book, map, video, article)
- Subject (topic)
- Author / Creator
- Creation date (as an exact year)
- Library (i.e. building location of physical item)
- Source (e.g. an electronic collection)
- Language
- Journal title
- Module name (for reading list material)



Local facets

- Material
 - ceramic, jade, wood, cardboard, imitation leather
- Production place
 - Lower Egypt, Guangdong, Samarqand
- Production period
 - Eastern Han dynasty, 18th dynasty, Post medieval
- Object name
 - teacups, incense burners, statues, posters, books
- Person depicted
 - Buddha, Ganesh, Mao Zedong, Ciel Phantomhive



Person database: indexing

Mao Zedong

Used for: Mao Runzhi; Mao Tse-tung; Ziren; 子任; 毛泽东; 毛润之

Display fields

Mao Zedong

Facets

Mao Zedong

Keyword index

All variants indexed



Thesaurus: indexing enrichment

containers – culinary containers – drinking vessels – cups – teacups

Display fields

teacups forms part of the "title"

Facets

All levels indexed

Keyword index

All levels indexed and alternative terms



Processing fields for display

- Perl script accesses API to read all objects as Adlib XML
 - Looks up Thesaurus and Persons to enrich indexing
- Many fields passed straight through to Primo
- Others need special handling:
 - Title
 - Dimensions
 - Creation date
 - Description



Creation date

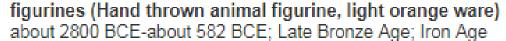
Production dating Collection	OM Period			Period	DUR:Early E	Bronze Age	
Date (early)	-2900	Precision	probably	Date (late)	-1531	Precision	
Notes	These dates ref	lect the Near an	d Middle East d	ating of the Early Bron	nze Age		

Seal (cast copper alloy seal)

probably 2900 BCE-1531 BCE; Early Bronze Age

Available at University Museums In storage (available by prior appointment) DUROM.2014.157

Production dating Collection			Period	<u>Late Bronze Age</u>		
Date (early) Notes	-2800	Precision about	Date (late)	<u>Iron Aqe</u> -582	Precision	about



Available at University Museums In storage (available by prior appointment) DUROM.1968.56.24



Dimensions

Г	- Dimensions				
	Part	Dimension	Value	Unit	Precision
		<u>length</u>	4500	<u>mm</u>	
		<u>width</u>	250	<u>mm</u>	
		<u>depth</u>	85	<u>mm</u>	
	tunic	<u>length</u>	1900	<u>mm</u>	
	trousers	<u>length</u>	2600	<u>mm</u>	



Dimensions:

length 4500 mm; width 250 mm; depth 85 mm

tunic: length 1900 mm

trousers: length 2600 mm

Physical Description: Fabric doll with hand embroidered clothes and features



The title

Primo insists on a title!

Built from:

- Title
- Translated Title
- Object Name
- Other Name
- Object Category
- Physical Description
- Material



Examples:

- spoons (painted wood)
- amulets (faience) lion and bull amulet
- dolls (wood, silk, hair)
- tea services (porcelain tea service with overglaze decoration)
- 全力支持抗美援朝志愿军部队 (Full support for the Volunteer Army to resist U.S. aggression and aid Korea)
- Sentimental Circus Bento Chopsticks with Circus Animals
- coins (metal) Didius Julianus Sestertius
- snuff bottles (amygodoidal lava)
- Welcome to the Space Show (宇宙ショーへようこそ)
- ushabti (sycamore)

Popular titles

sherds (pottery)	476
pottery (pottery)	111
photographs (paper)	99
animal bone (bone)	90
clay pipe (fired clay)	58
slide (glass)	54
pages (paper, leather)	47
unidentified (unidentified)	41
coins (metal)	38
body sherd (pottery)	35



Could consider adding

- production place or period
- field location (for archaeology)
- technique



Making data public

- Selection of records (not missing, not loaned to us)
- Accuracy, quality, consistency
- Copyright (text and images)
- Geolocation

discover.geolocation	Reference no.	Assigned
	Start date	End date
Unknown	Date	
	Authoriser	Date
		Unknown Date



Images

Current practice

- JPEGs (typically 300 pixels) stored in Adlib
- TIFFs stored on preservation-quality CDs and DVDs

User access

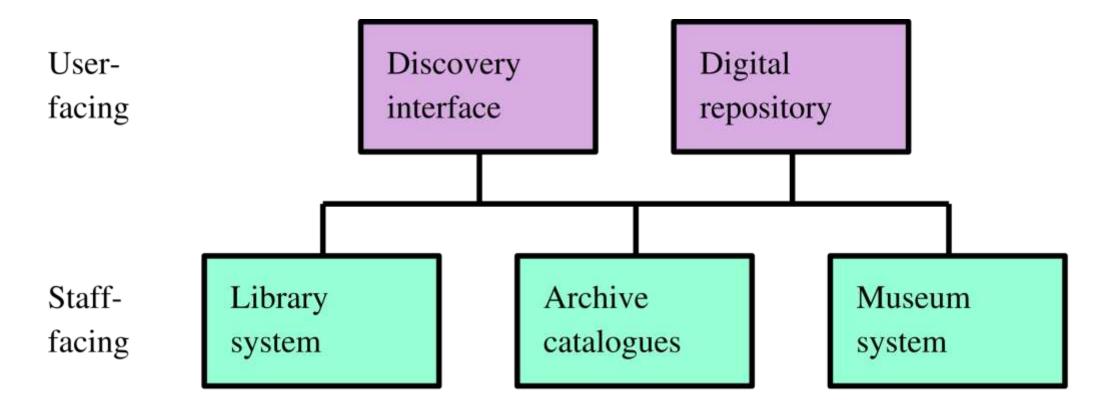
- JPEGs available through Discover
- Higher definition images only available through museum staff

Digital preservation

- Risk of degrading of optical media
- Risk of loss of discs



Library IT system strategy





Samvera repository



- Research publications, theses, research data (including audio and video)
- Manuscripts, archives and rare books
- Museum objects, art
- Born-digital special collections
- Integration with discovery and metadata systems
- IIIF image server
- Digital preservation



MF





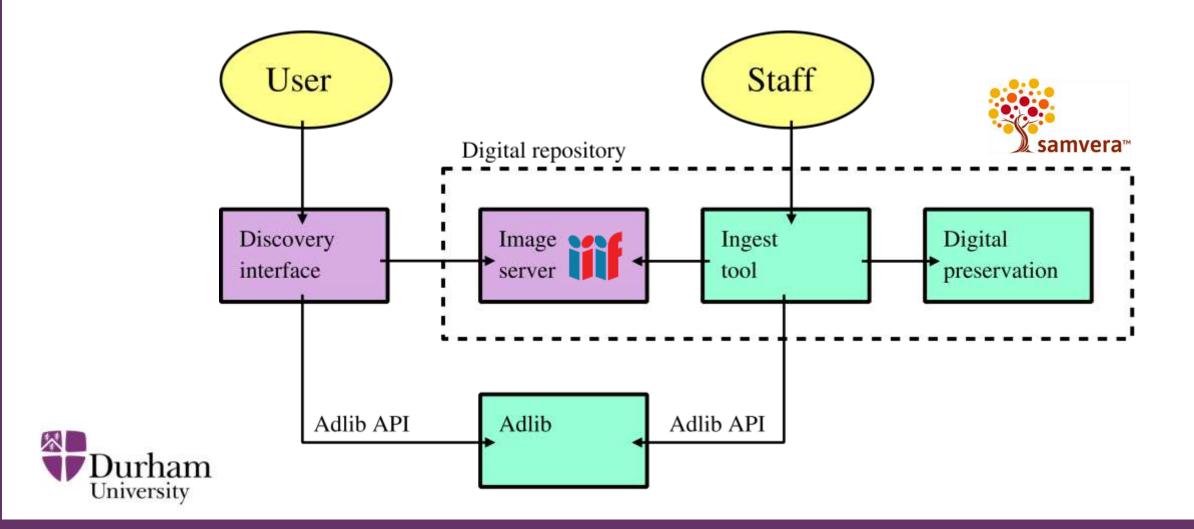
Eco-system with components working together across cultural heritage institutions

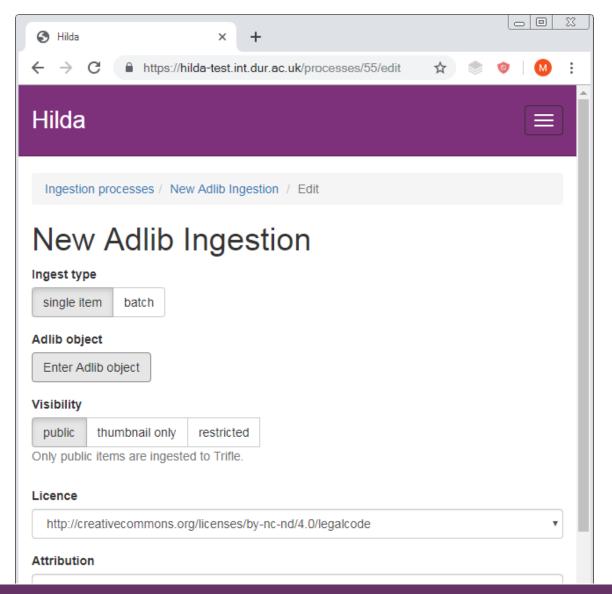
Access	Protocol to fetch images at various magnification levels
Presentation	Order of pages in a book ("manifest"), table of contents, annotations
Authentication	Controlling what people can view
Search	Searching transcriptions, OCR and annotations

Example: https://bit.ly/2JiLT8i

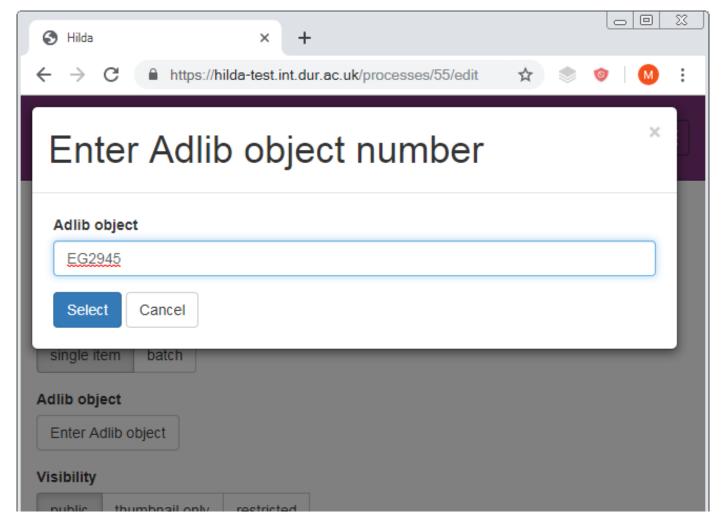


Architecture

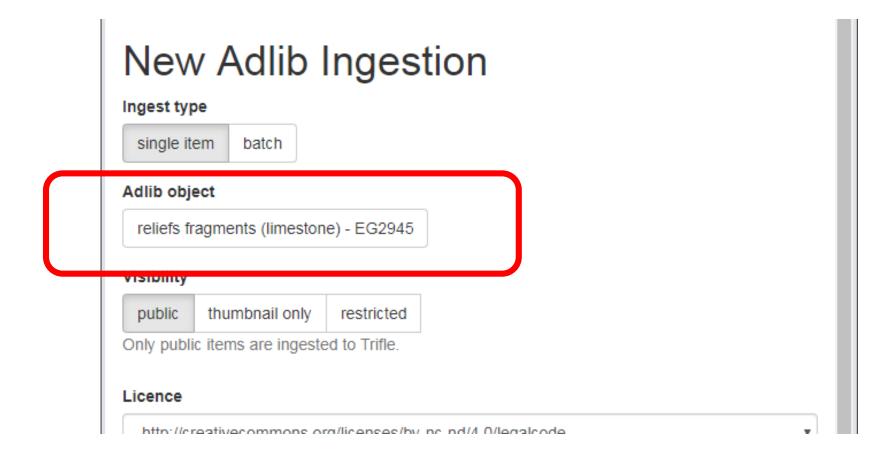




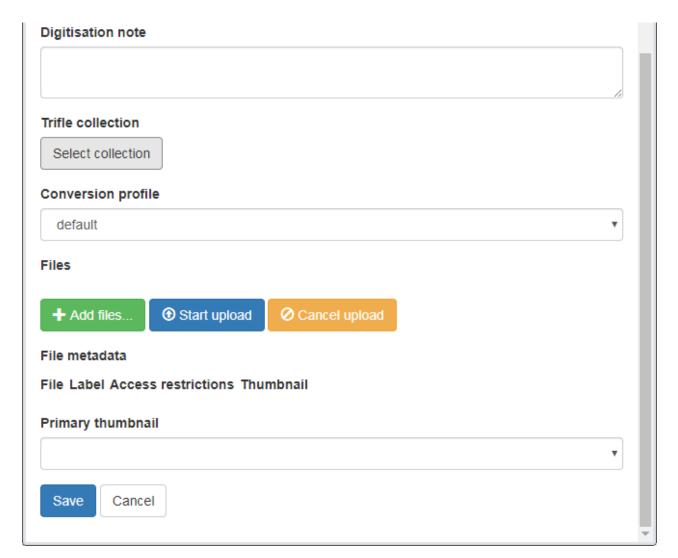




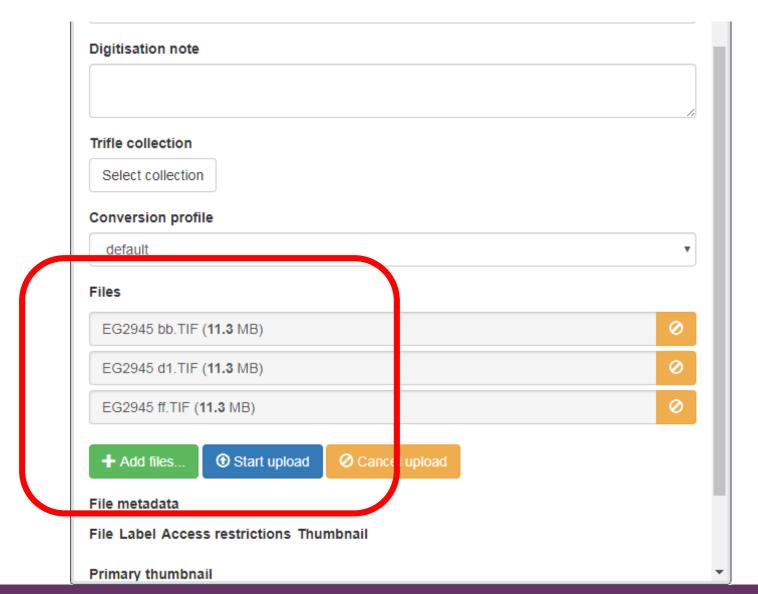




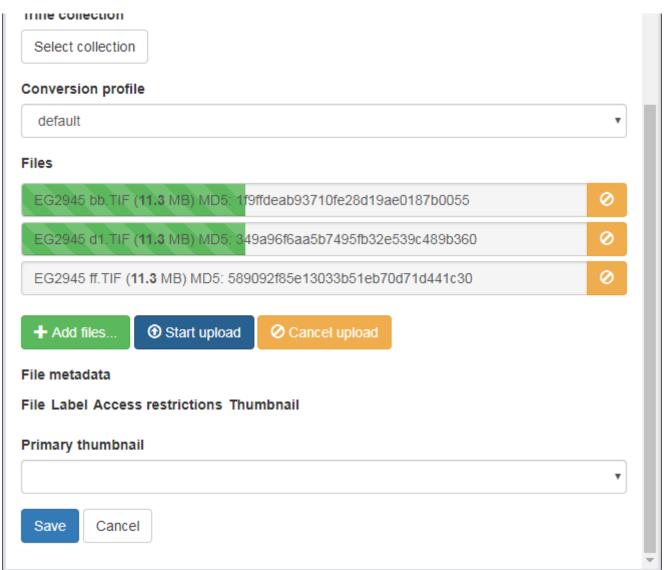




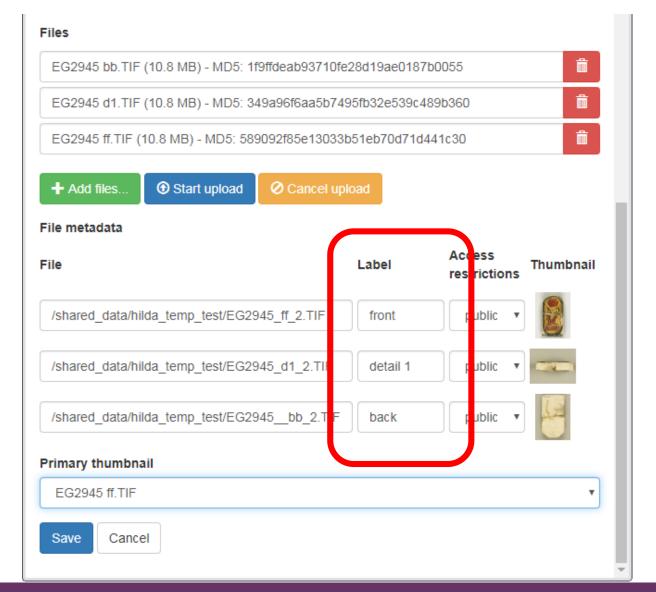




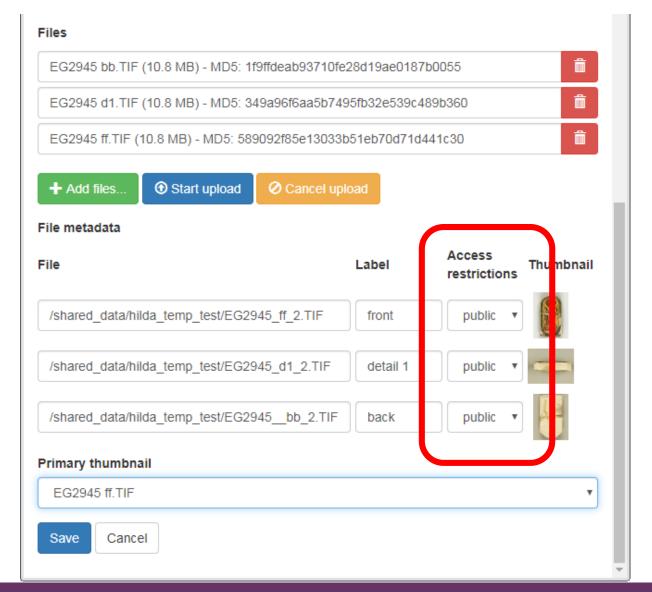








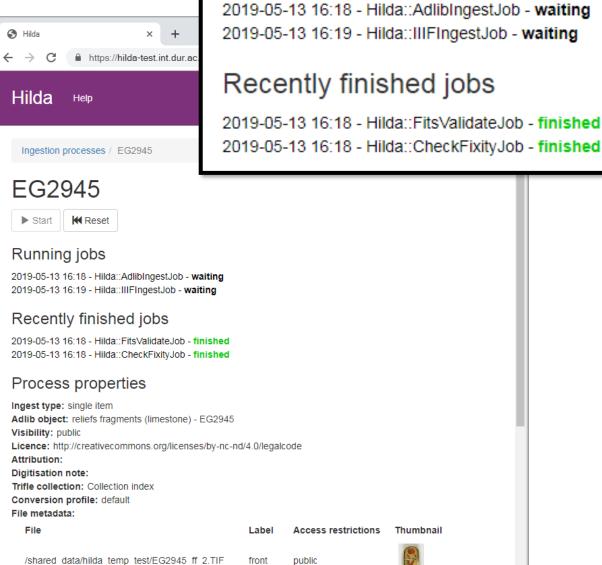






iles		
EG2945 bb.TIF (10.8 MB) - MD5: 1f9ffdeab93710fe	28d19ae0187	b0055
EG2945 d1.TIF (10.8 MB) - MD5: 349a96f6aa5b74	95fb32e539c4	89b360
EG2945 ff.TIF (10.8 MB) - MD5: 589092f85e13033	b51eb70d71d4	141c30
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/shared_data/hilda_temp_test/EG2945_d1_2.TIF	detail 1	public ▼
/shared_data/hilda_temp_test/EG2945bb_2.TIF	back	public ▼
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Save Cancel		





Running jobs



Demonstration

EG2945 (limestone cartouche)

<u>https://iiif.durham.ac.uk/jalava/</u> (experimental browsing interface)

DUROM.1960.3430 (Japanese carved ivory "devil's work" ball)



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Everything Search Advanced Search Browse Search Ball (ivory) 1868-1912; Meiji Period Available at University Museums On display DUROM.1960.3430 Details Actions V Links

Title: Ball (ivory)

Creation date: 1868-1912; Meiji Period

Description: Japanese carved ivory 'devil's work' ball with zodiac signs and various animals on wooden stand.

Dimensions:

ball: diameter 52 mm; height 54 mm stand: diameter 27 mm; height 18 mm

Material: materials - combination inorganic/organic material - combination inorganic/organic animal material - bone -

tooth components - dentin - ivory Object number: DUROM.1960.3430

Production place: Asia - East Asia - Japan (country)

Production period: Meiji Period

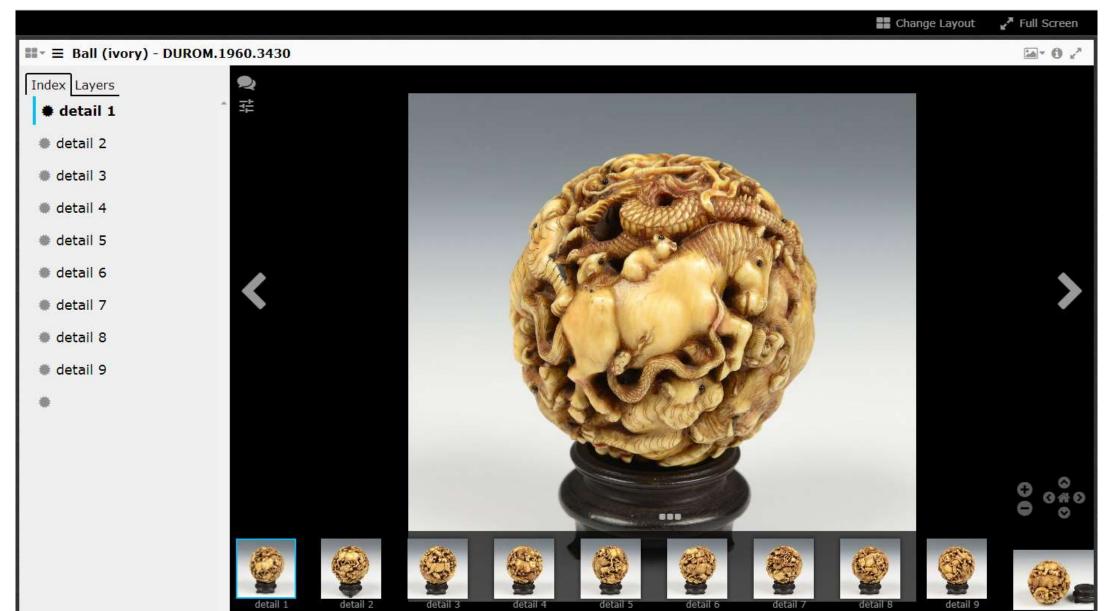
Notes: -

Credit line: gift from Sir Charles Edmund Hardinge

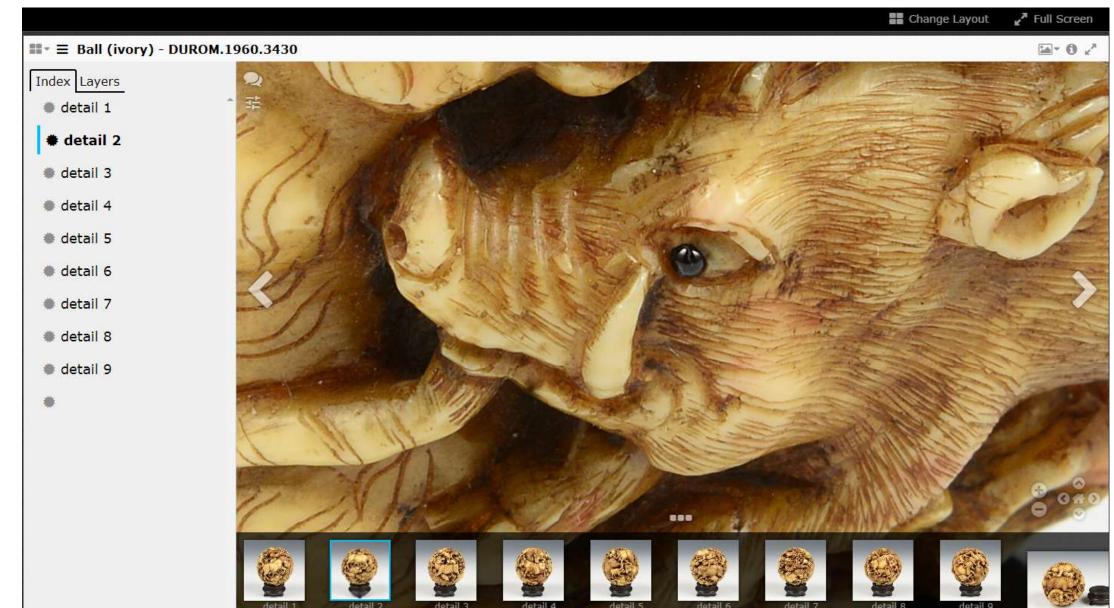
Images:



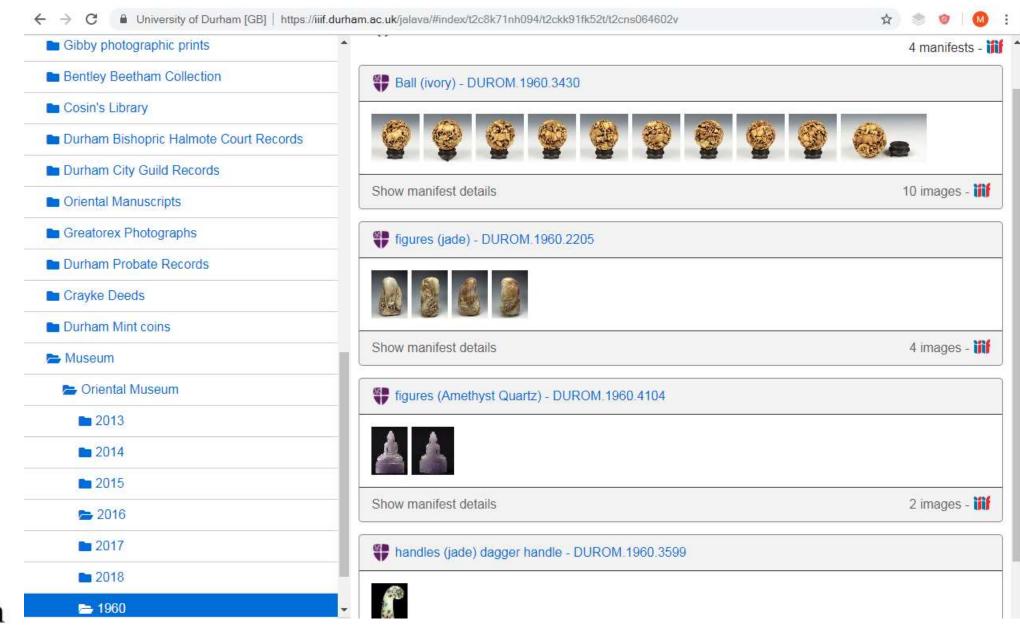








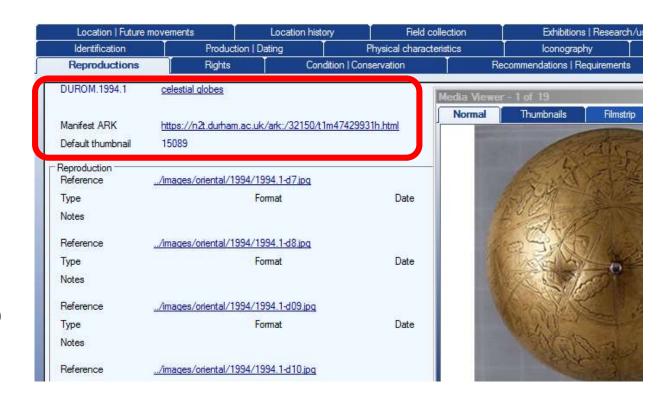






Technical integration

- Adlib API
- Write access to API
- Additional fields (image database)
 - Canvas link
 - JP2K link
 - Label (front/back etc.)
 - Preservation system ID
 - Publish (yes / no / thumbnail only)
- Link to viewer from objects





Technical challenges

Adlib API

- Authentication
- File access security issues
- Defining ordering of images

Digital preservation

Faulty TIFF files



For the future...

- Specialist search interface for heritage collections
- Visual browsing of collections
- Map-based exploration
- Teaching tools and reading list integration
- Online exhibitions
- More departmental collections
- Better metadata interoperability across library and museum
- Grouping similar objects in results



Questions?

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