UNIVERSITY OF Hull

in Hull

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Hydra Europe Symposium, Dublin, 7-8 April 2014

Hydra in Hull

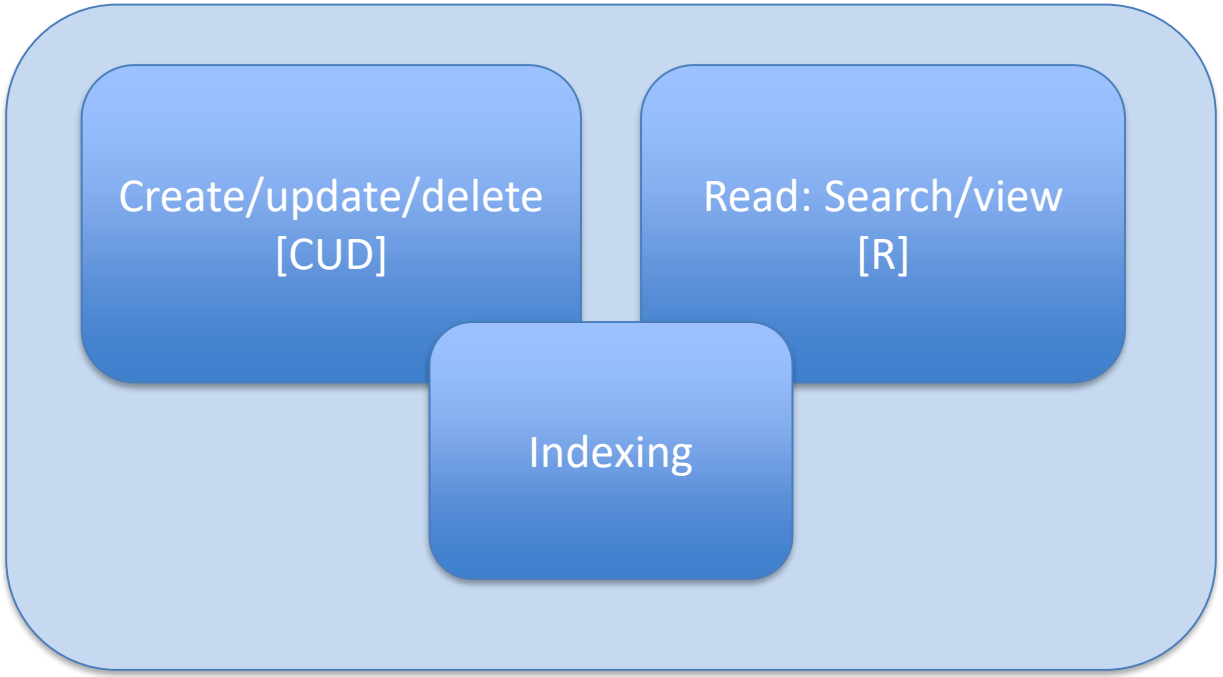
- Hull's is probably the most 'generic' Hydra head in production world-wide: very wide range of content types

- Exam papers
- e-Theses & dissertations (ETDs)
- Journal articles
- Meeting papers or minutes
- Policies or procedures
- Dissertations (undergraduate)
- Photographs
- Presentations
- Books
- Book chapters
- Regulations
- Reports
- Conference papers or abstracts
- Leaning materials
- Handbooks
- Internet publications
- Newsletter articles
- Datasets
- Sound
- Moving images
- Guidance documents
- Licences
- Posters
- Events
- Letters
- Artwork
- Diagrams
- Maps
- Software
- etc (!!!)

Hydra in Hull

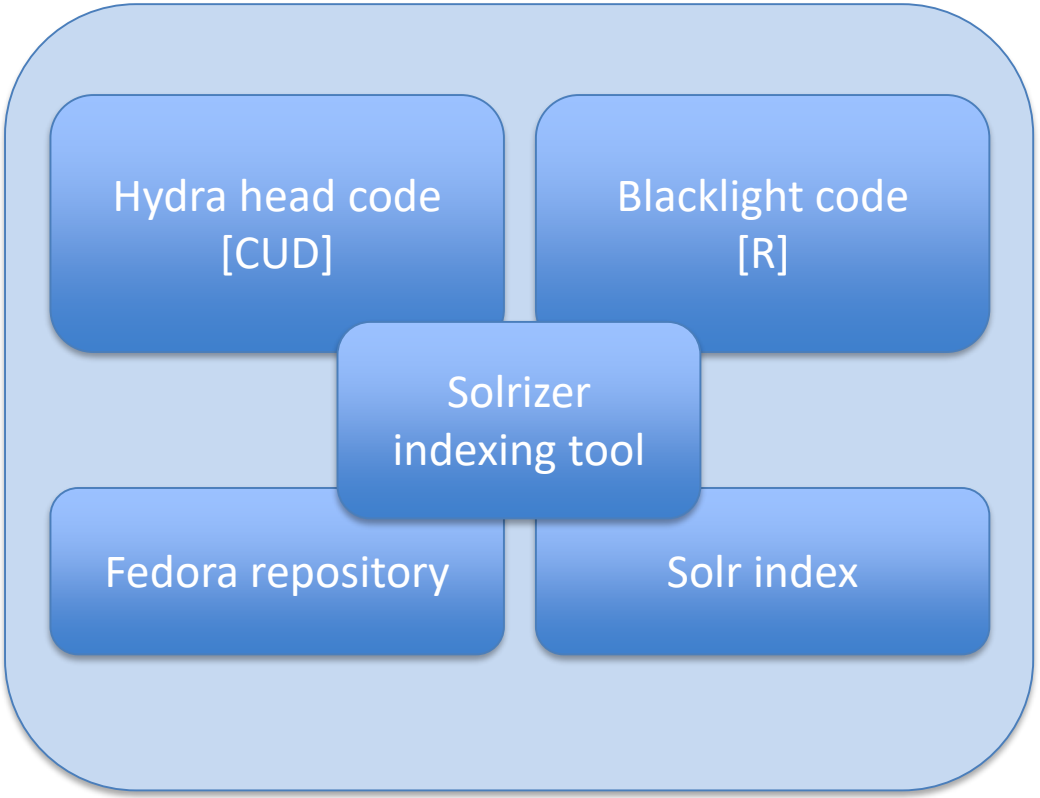
- Hull's vision of a digital repository is one that covers all the University's digital content. Whilst many Hydra heads deal with 'specialist' content, Hydra's flexibility allows us in Hull to create specialist handling as necessary within a single repository rather than a 'one size fits all' approach.
- We've started with a generalised approach but are steadily building out specific provision for content that needs it
  - Representing geo-data on splash pages
  - Specialised display for images, page-turning books, …
  - etc
- Hull also has some rather specialised needs to cope with 'Hydra-compliant' content entering our Fedora instance from other systems (some are not Hydra based)

CRUD in repositories



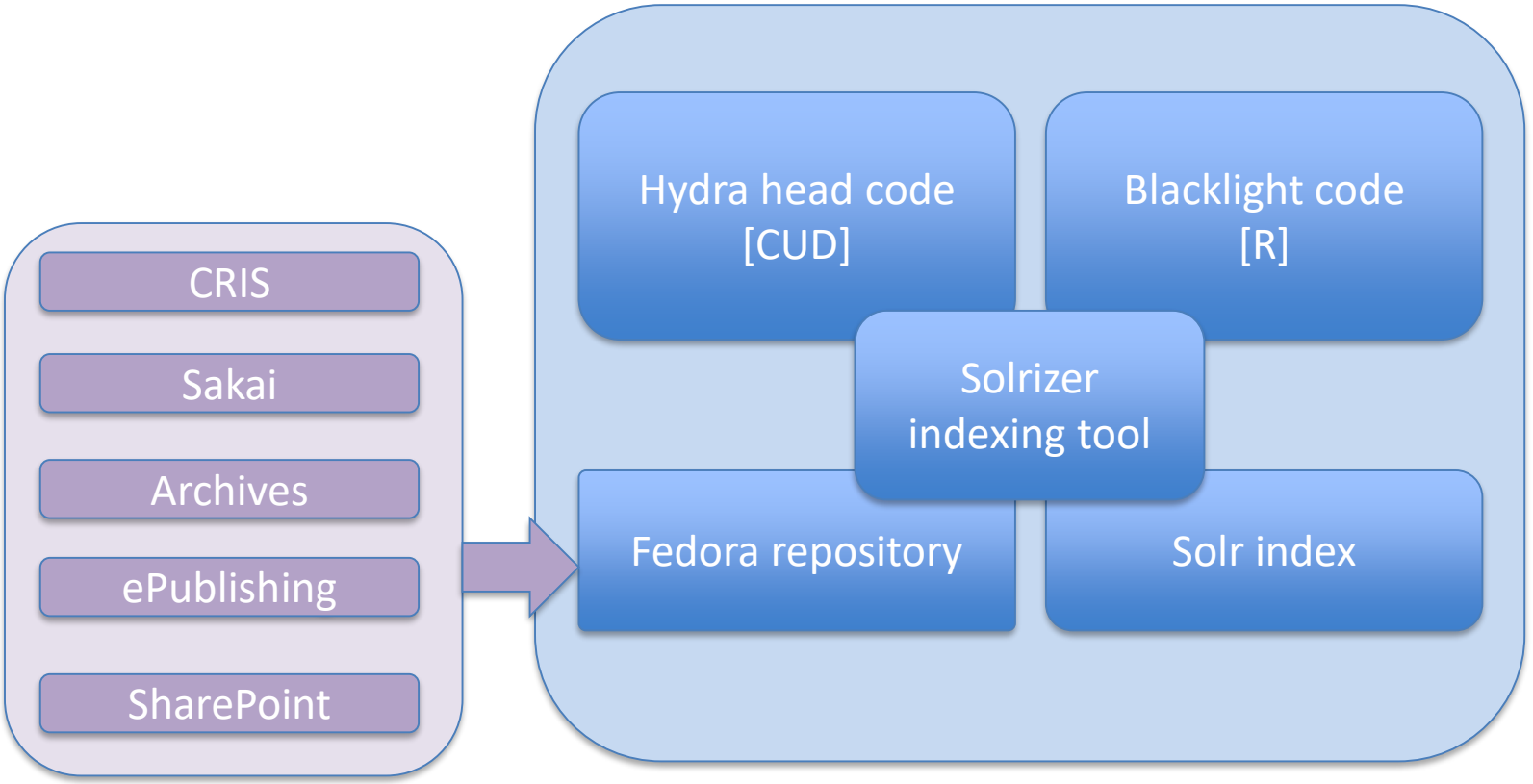
Typical schematic for repository CRUD

CRUD as implemented in most Hydra heads



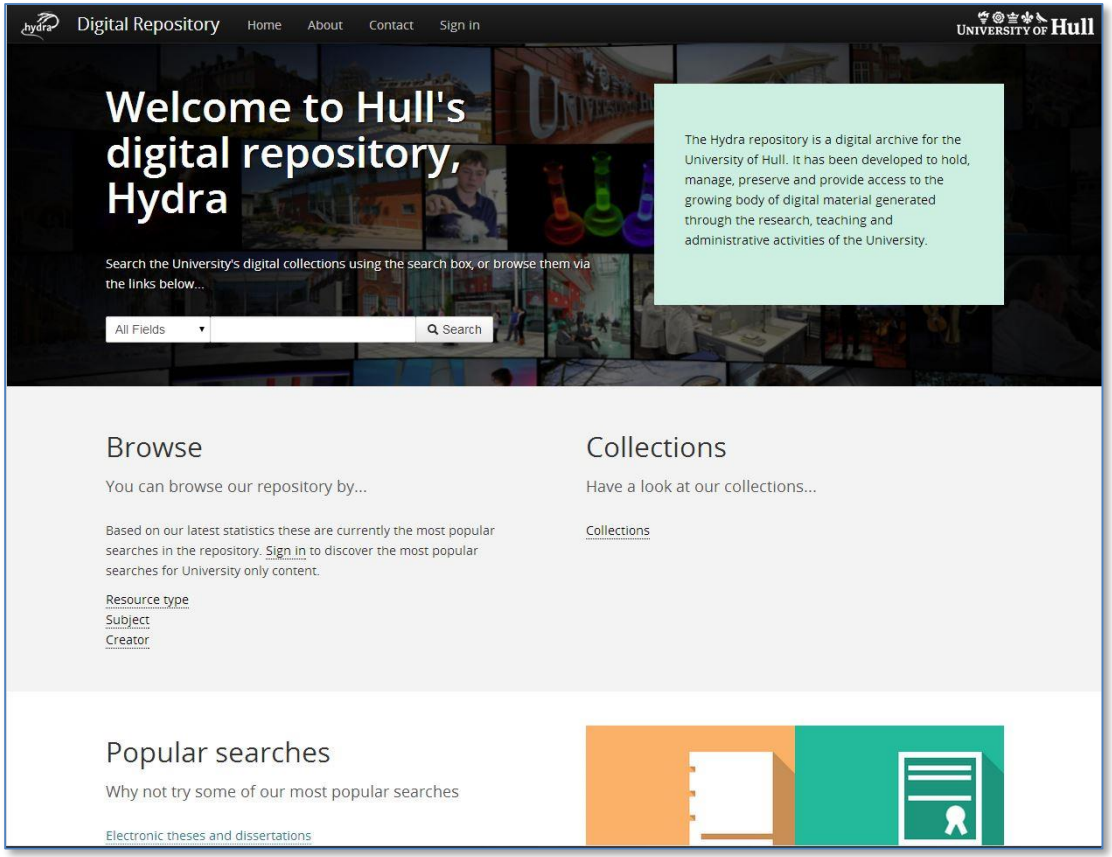
The Hydra software stack

CRUD as implemented in Hull's Hydra



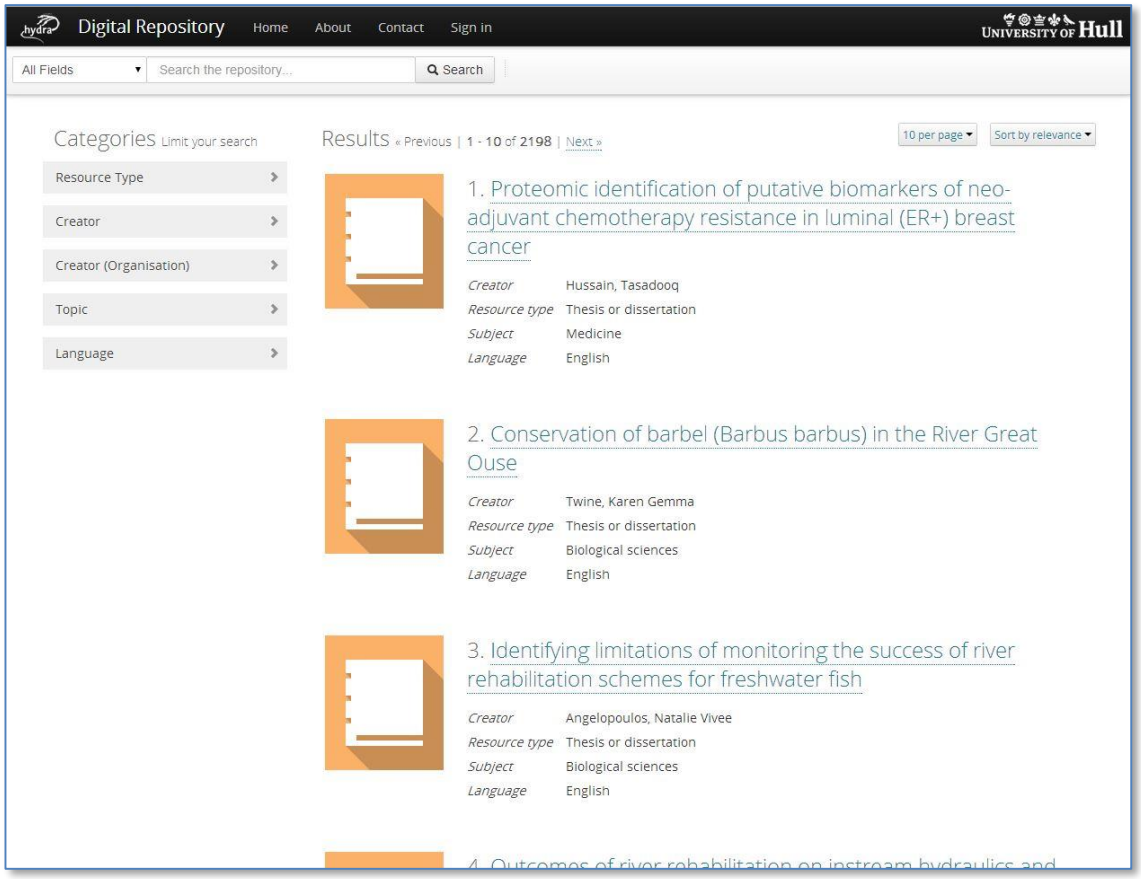
Hull brings together the Hydra software stack and external systems which feed Fedora directly

Hydra in Hull home page



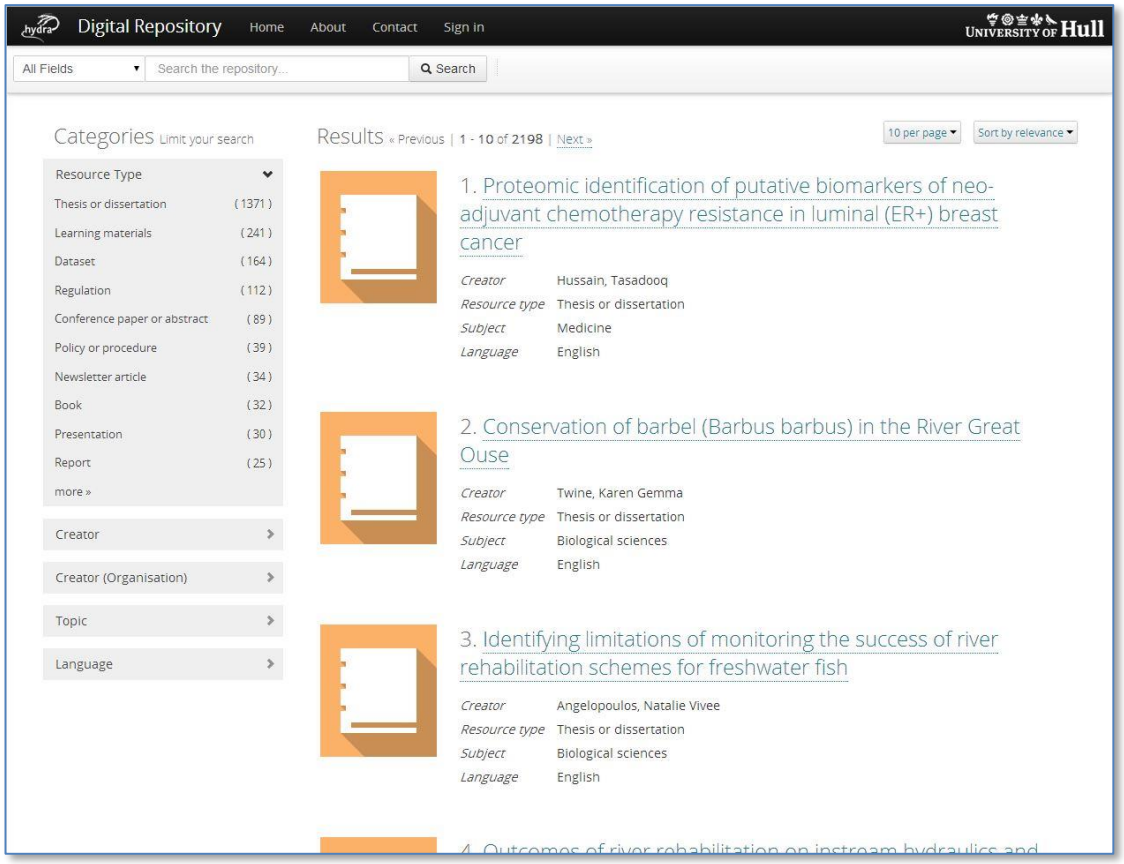
- This is the 'public' view of the repository – no explicit login required
- Responsive design (tiled approach)

Typical search return



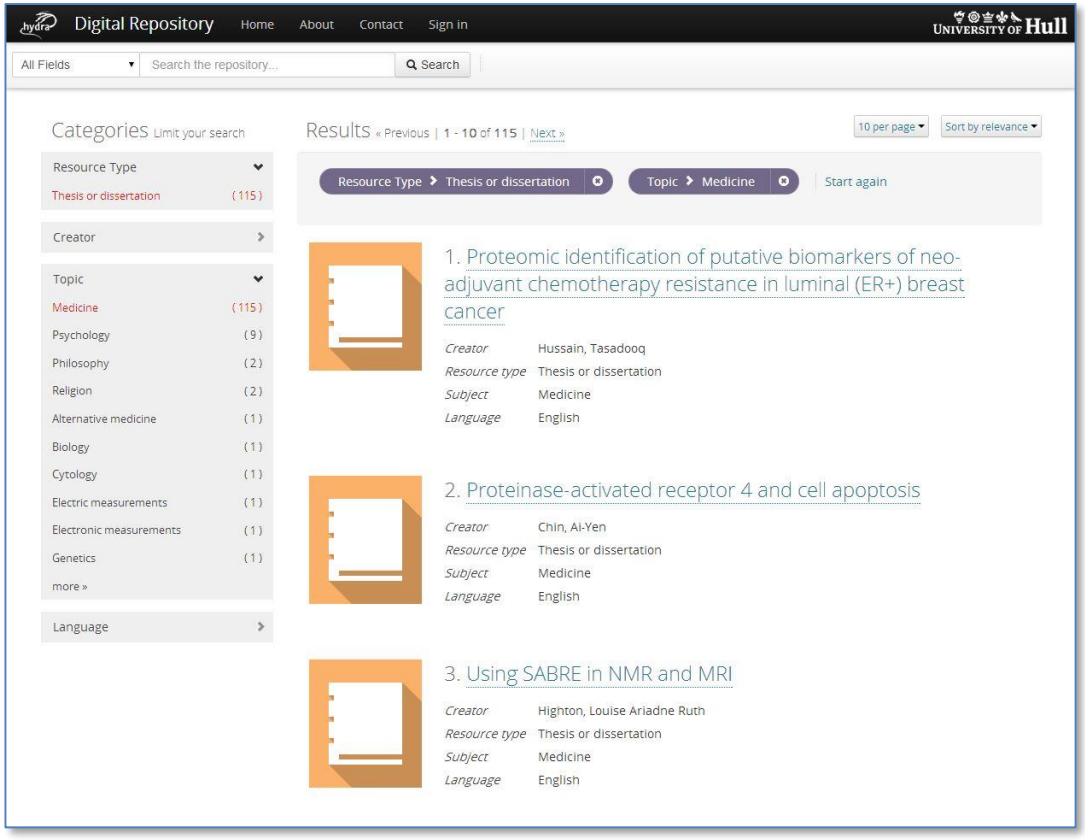
- If I search hit the “search” button but without a search term, I get a typical search return

Facets for refining a search



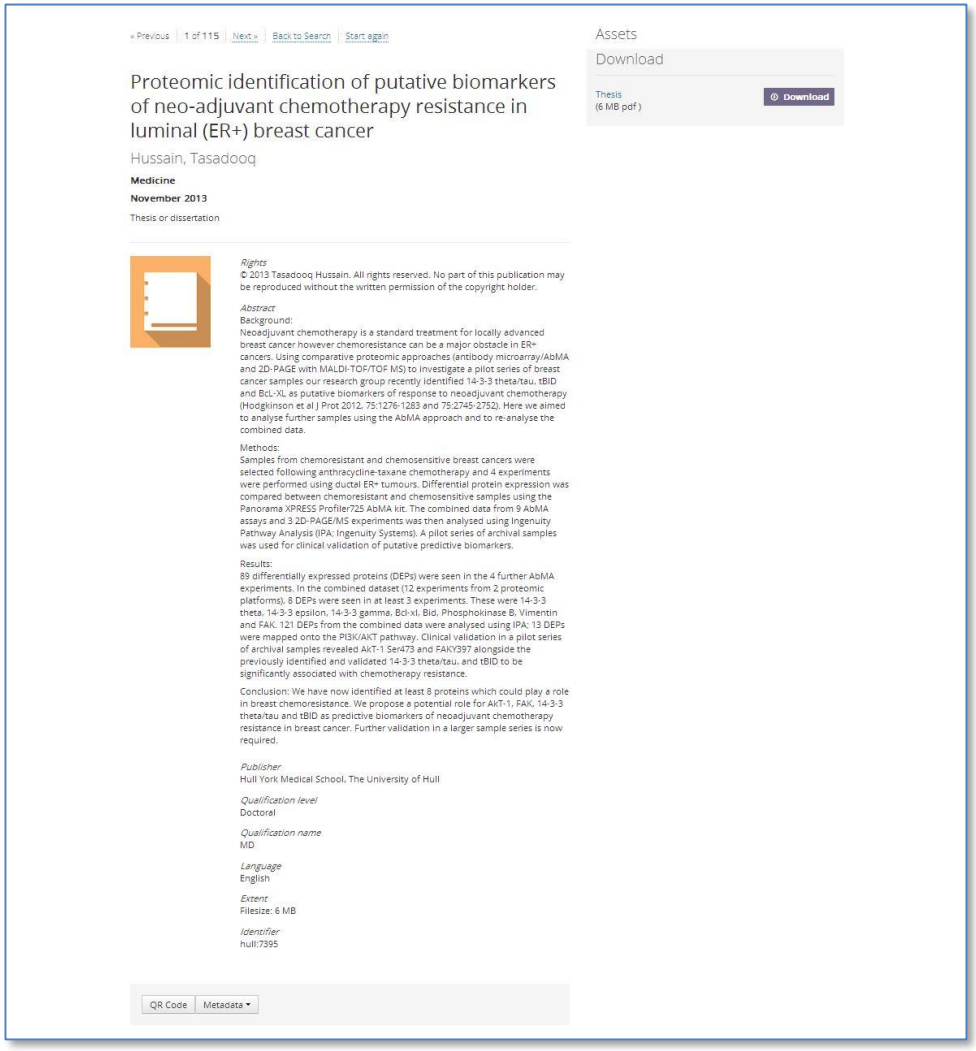
- With the facets panel open we start to see the range of content
- A search can be refined using combinations of facet selections and/or terms in the search box
- If we choose resource type ‘Thesis or dissertation’…

Hydra in Hull search return



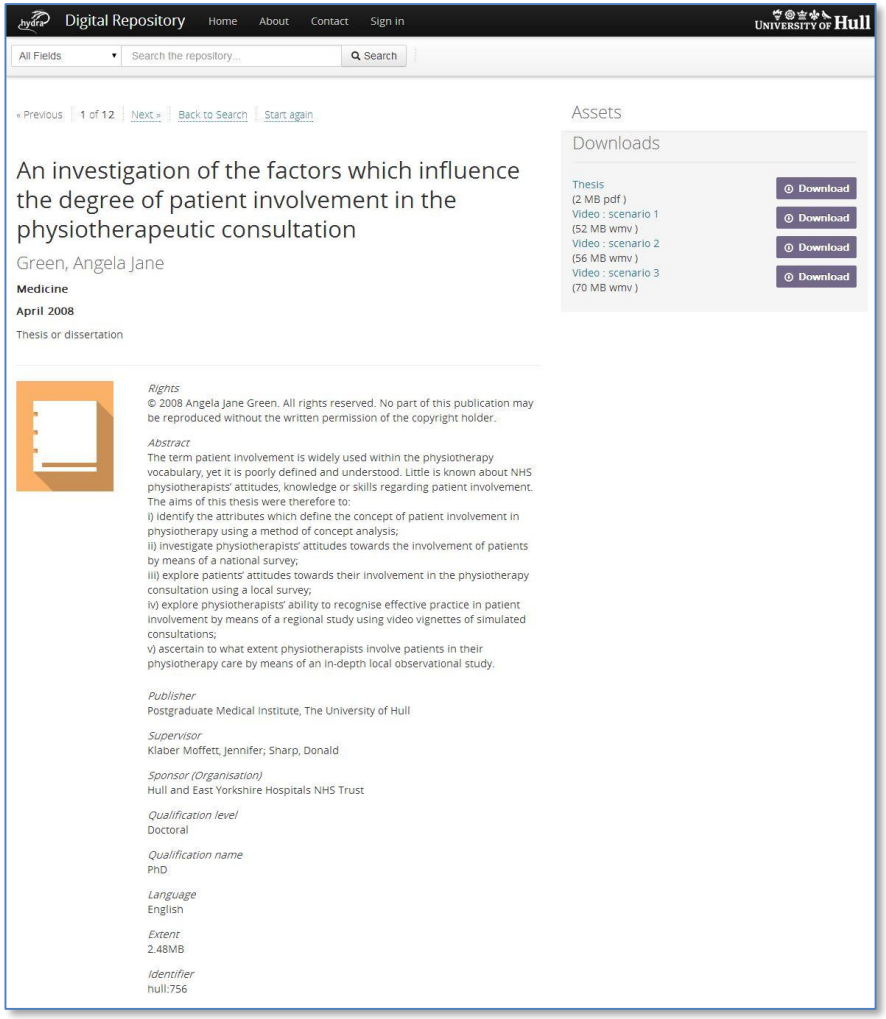
- …we refine the search return further
- We could refine our search yet more by choosing more facets and/or using the search bar
- Normally the search bar starts a new search – but on a search return page it searches within the result set
- Let's select the first item

Hydra in Hull splash page



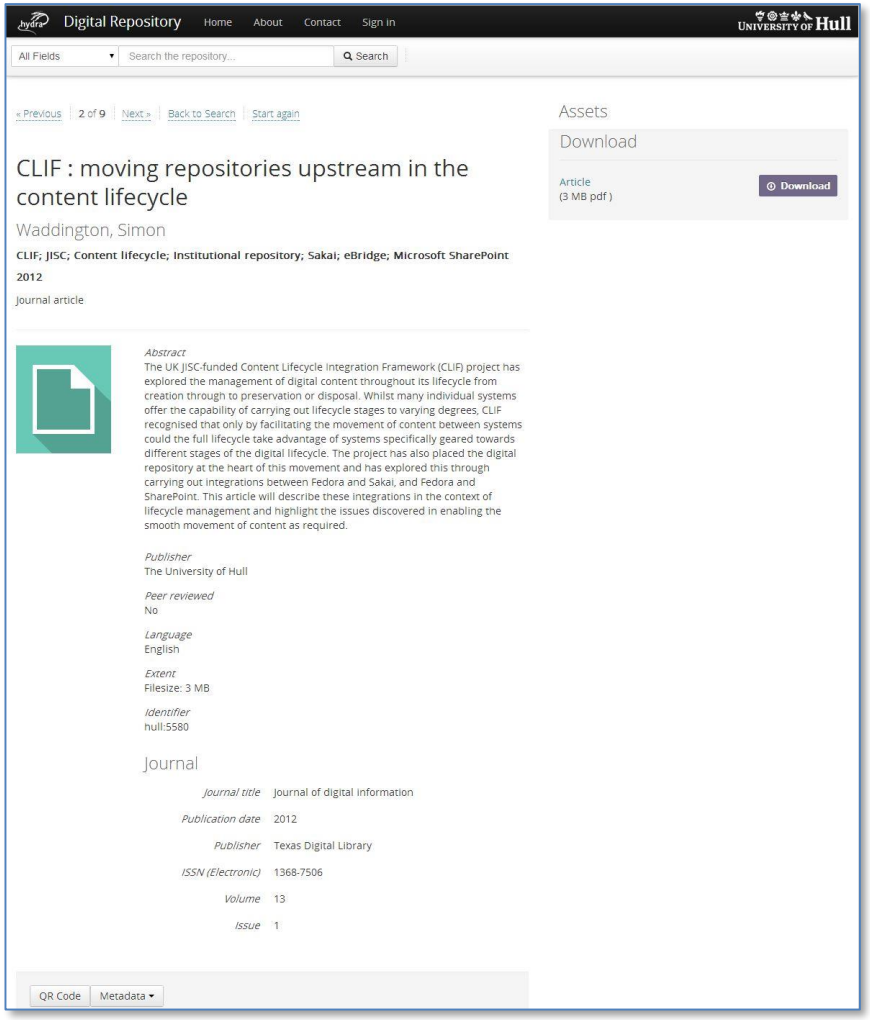
- Choosing an item gives us its ‘splash page’.
- Link(s) at the right download the resource(s) – here a single pdf file
- The ‘Metadata’ button at the bottom lets you view metadata in different formats.
- Internally all descriptive metadata is MODS but other formats can be generated on the fly (DC, UKETD_DC etc)

Hydra in Hull splash page



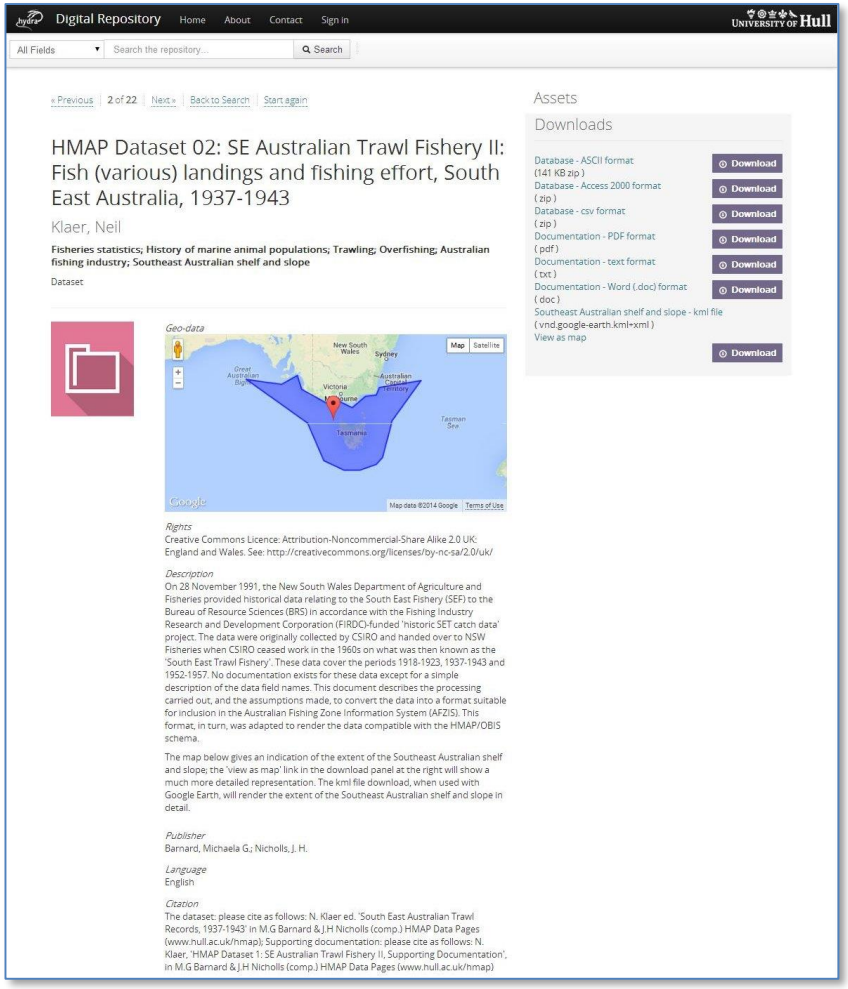
- By way of contrast, here a thesis with a pdf and three associated video files

Hydra in Hull splash page



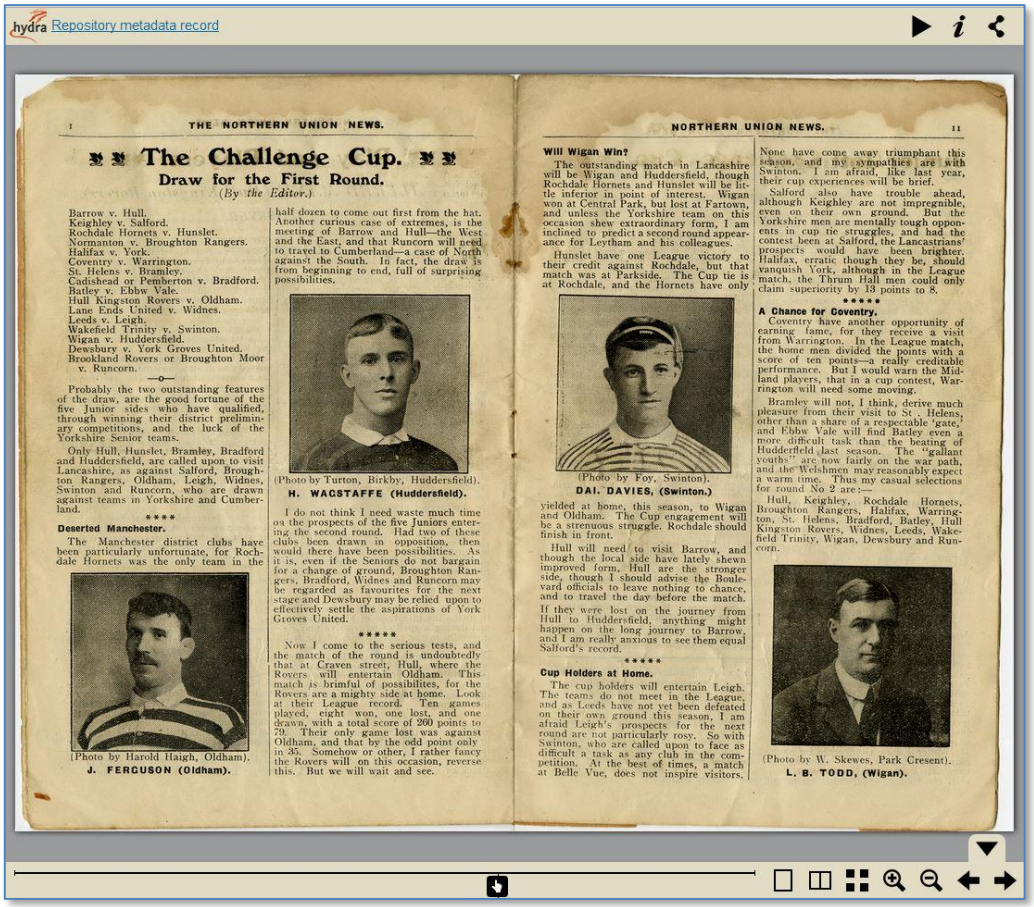
- Splash pages are not ‘one size fits all’…
- …here a splash page for a journal article (note the publication information at the bottom)
- The QR code resolves to the splash page URL

Splash page with ‘value added’!



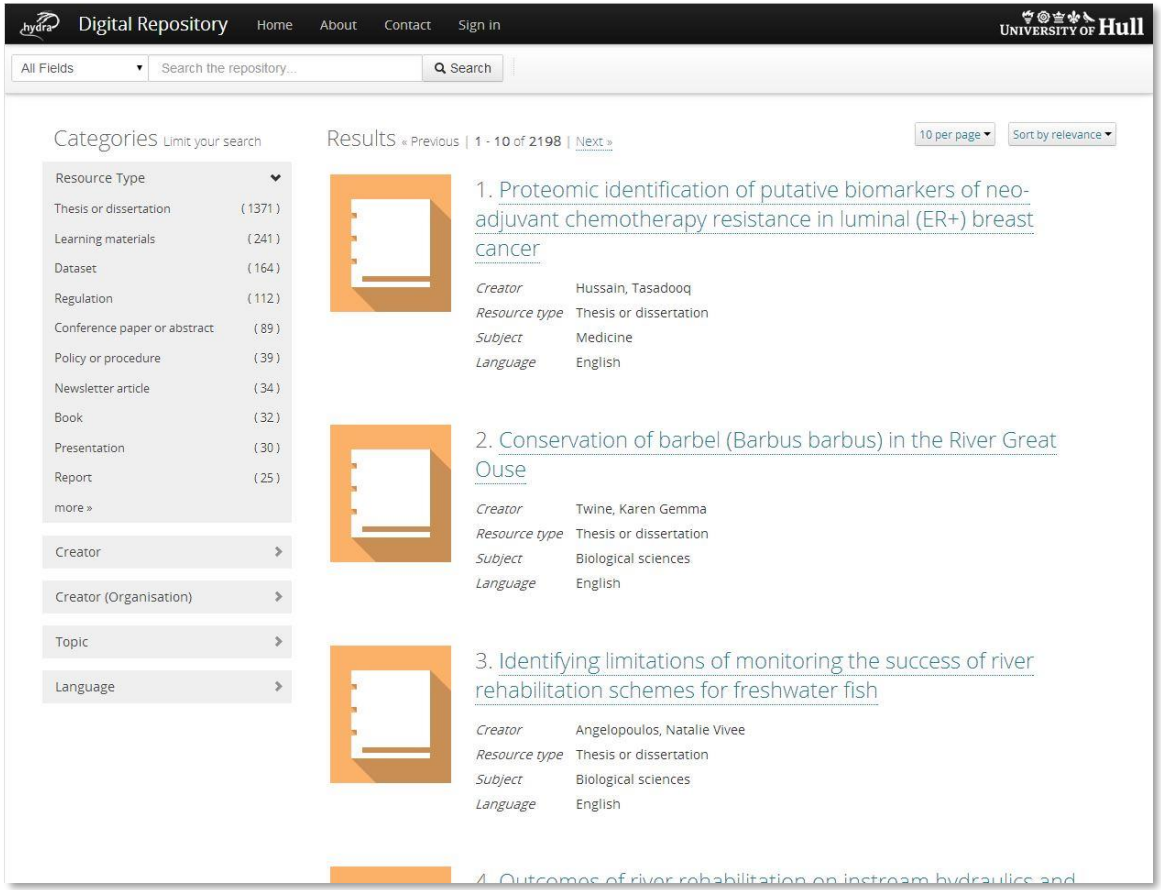
- Here part of a splash page for a dataset containing geographical information
- The geographic coverage is approximately represented in a functional Google map. More accurate mapping is provided by a link and a kml file
- For images (say) the splash page will be different again. More specialist pages being developed as resources allow

Value added services



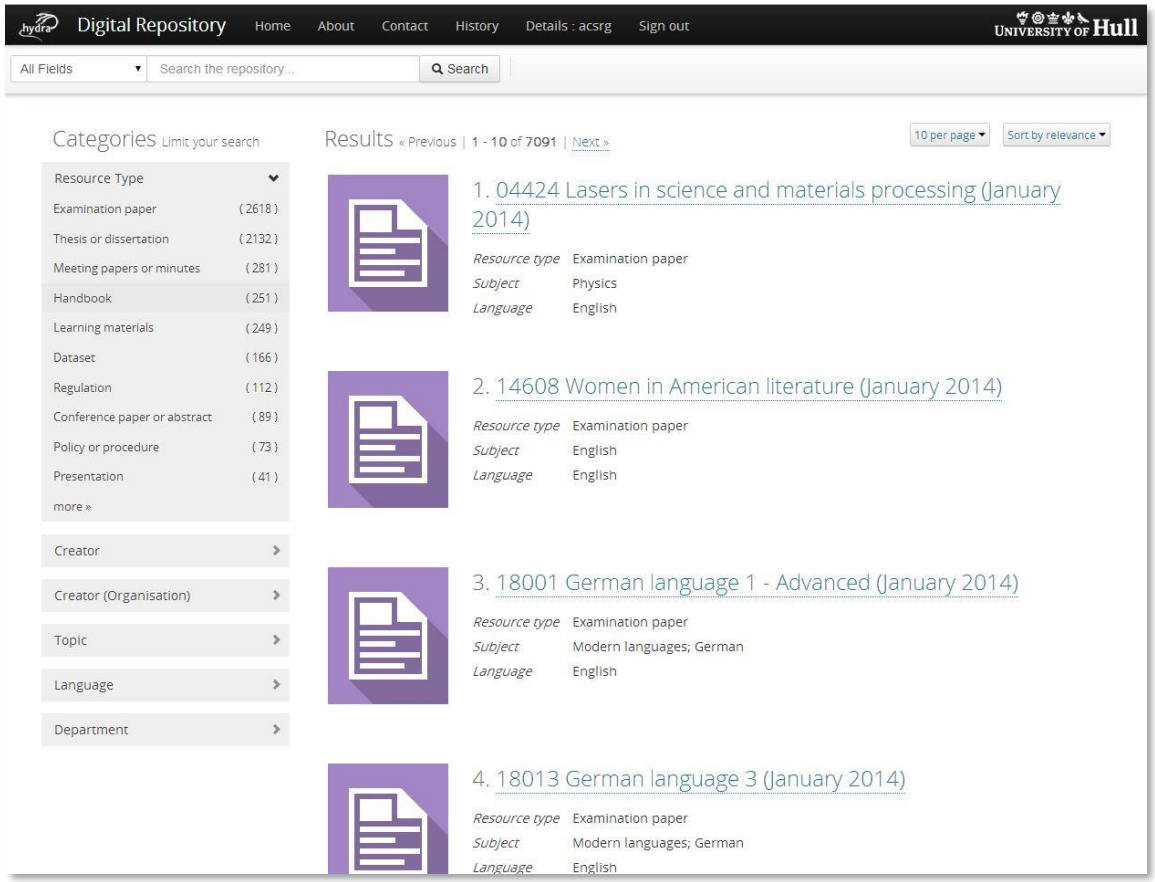
- We can also pipe content out to other display services – here a book page turner

Hydra in Hull home page



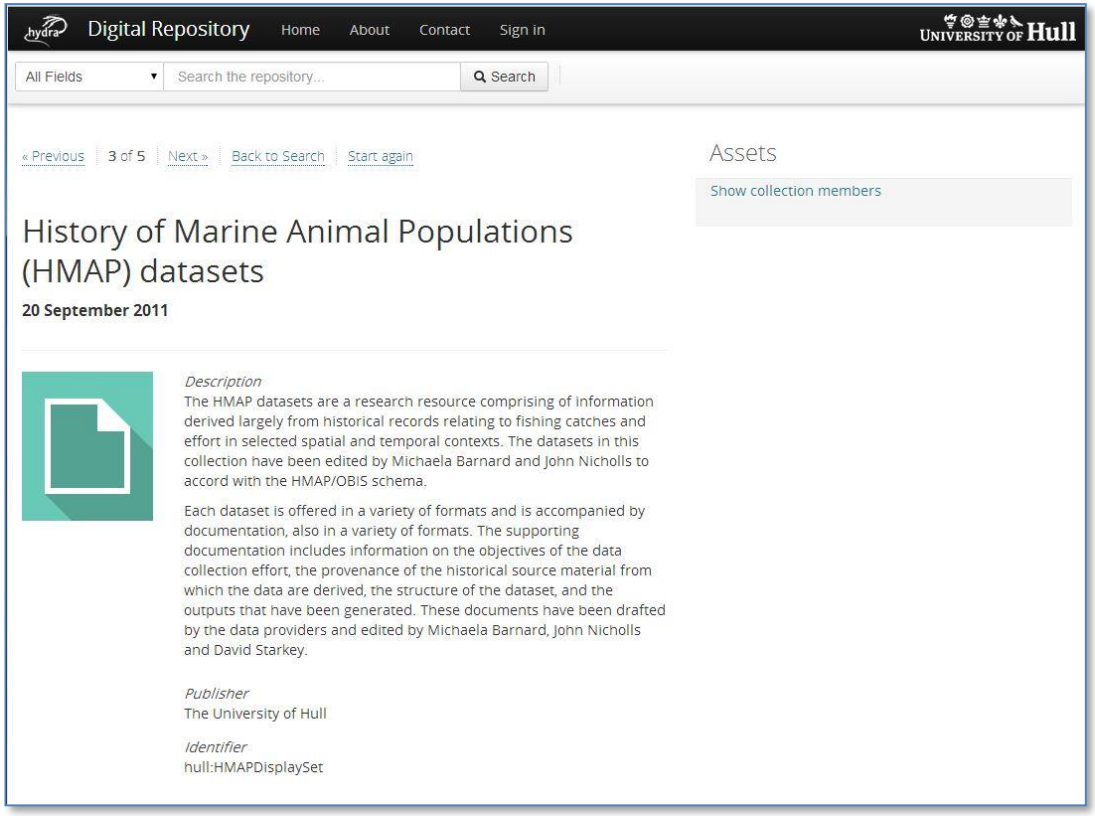
- Look again at the ‘resource type’ facet as seen by a member of the public.
- If we log in (using the University’s single login system, CAS)...

Hydra in Hull home page: logged in



- … we now see additional content appropriate to our login status (exam papers, minutes etc)
- Facets and search returns use gated discovery. Users are not be shown anything they could not ultimately access. Security can potentially be very granular

Hydra in Hull: collections



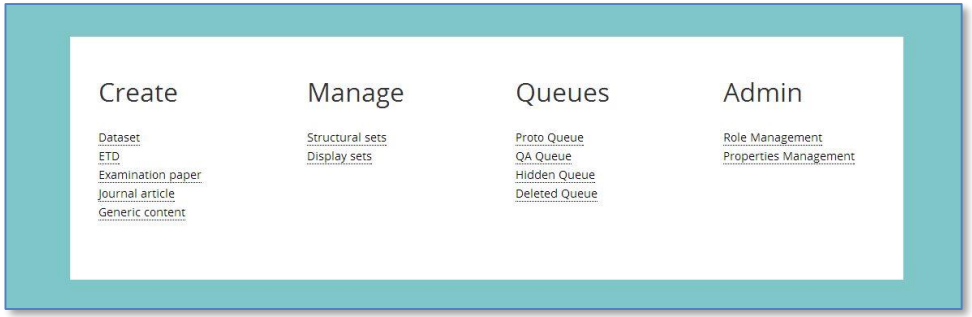
- Hull's Hydra head supports 'collections': objects with a common theme grouped together under a page explaining a context.
- Collections ('display sets') can be
  - temporary or permanent
  - flat or tiered (collections within collections)

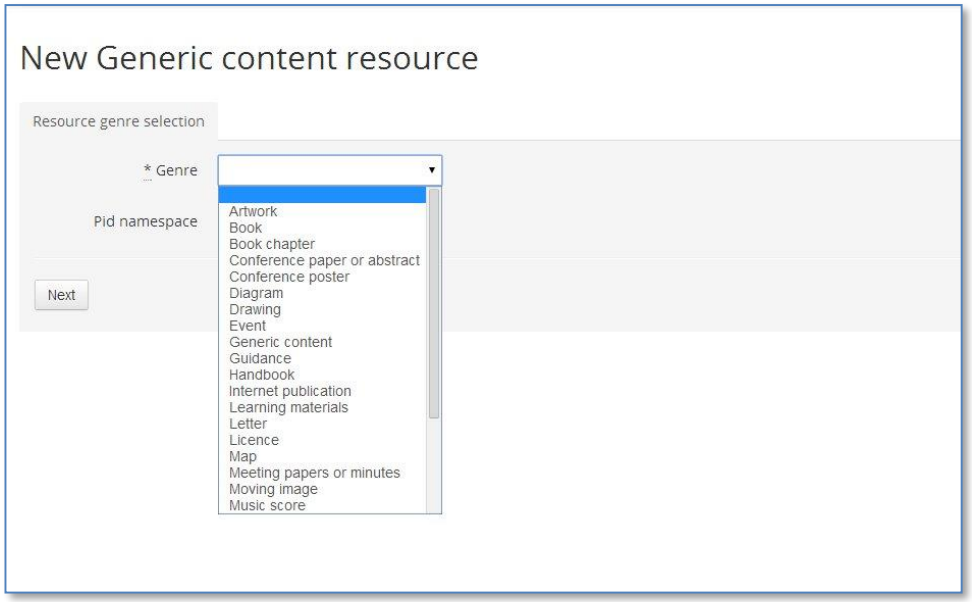
Create, update delete

- Generally, creating content through the Hydra head is a three-stage workflow:

1. A contributor creates an object with appropriate metadata in their own 'proto-queue'
   - At this stage it is private to them and can be properly deleted
2. They then pass it to the QA queue from where it is checked and allocated appropriate permissions by placing it in a 'structural set'
   - Once it is in QA the contributor loses all rights to the object. It can be deleted by the QA team (although it isn't actually purged from Fedora) or, more often, temporarily hidden (copyright challenge, etc)
3. After QA the object is published into the repository for use

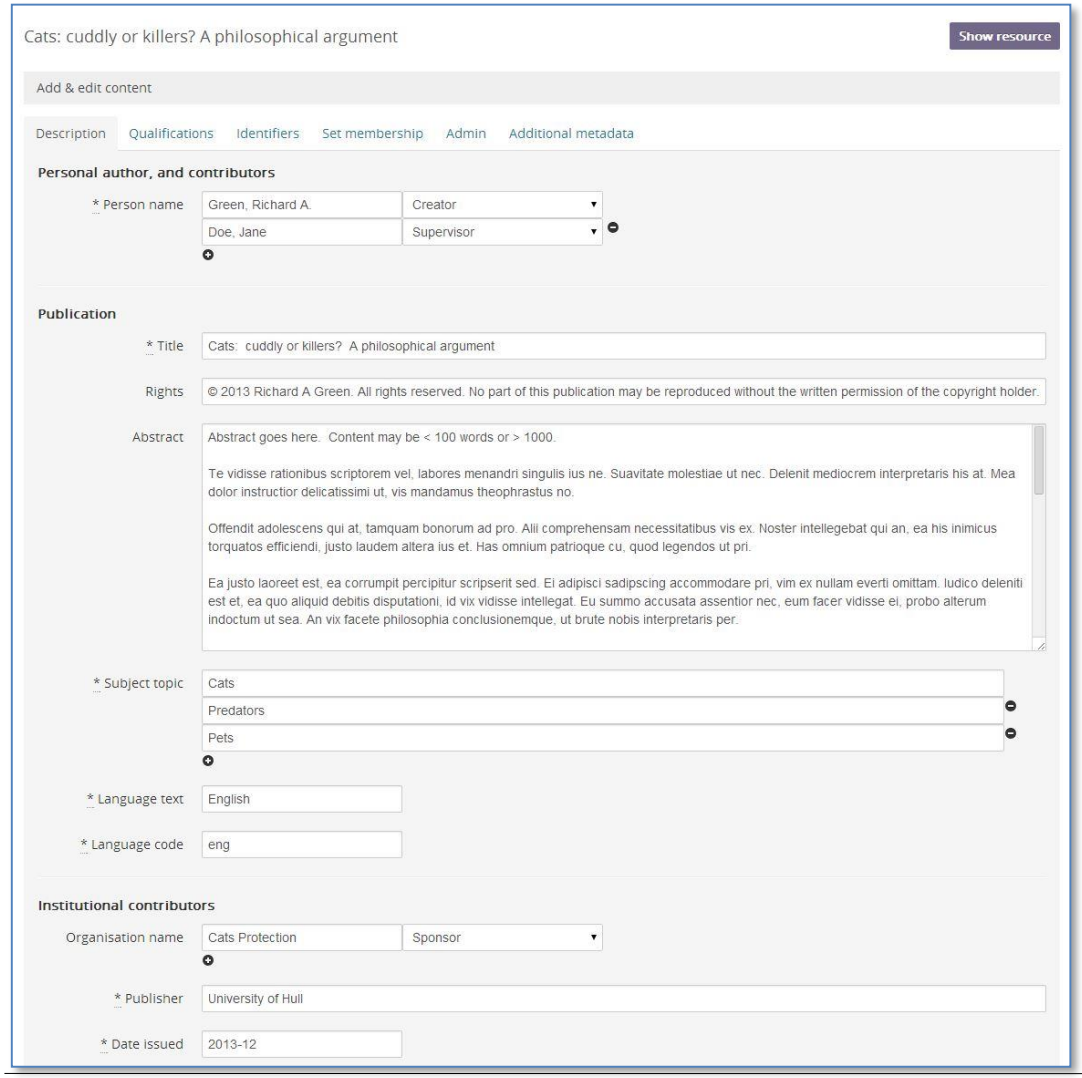
Hydra in Hull ‘create/edit’ process





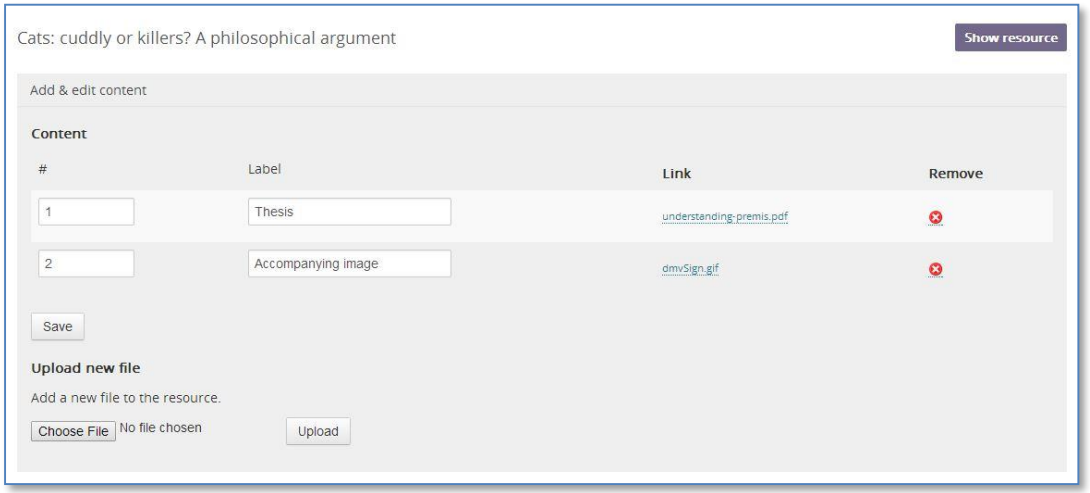
- The ‘create’ process offers a template customised to content type (or a generic form if a customised page has not yet been created)
- Once created it is passed to the QA queue for someone else to check before being moved to the repository proper

Hydra in Hull ‘create/edit’ [2]



- This is part of an edit form
- Broken up into tabs to reduce scrolling

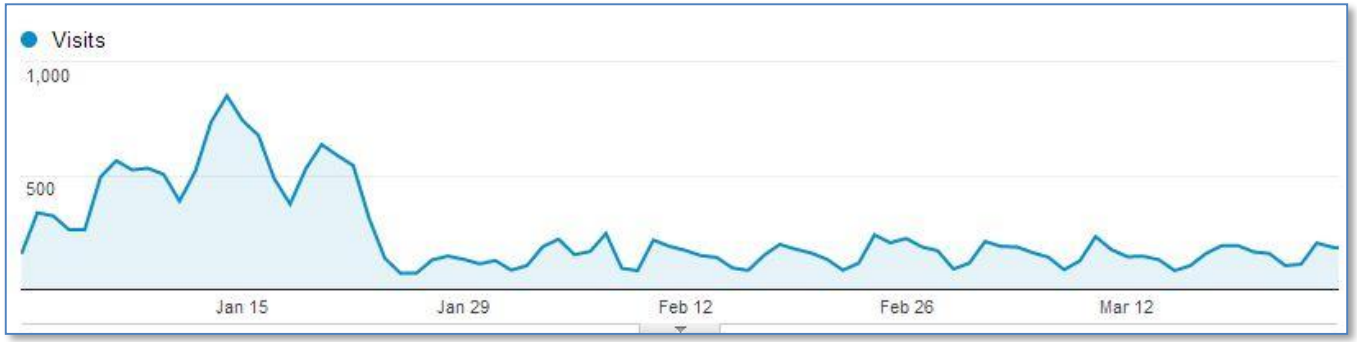
Hydra in Hull ‘create/edit’ [3]



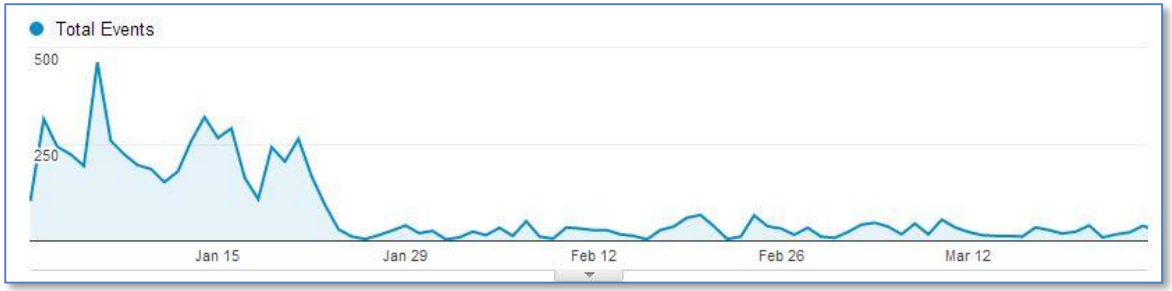
- Once created, all create/edit pages have a similar section to deal with content.
- Items for download can be sequenced…
- …and individually labelled

Take up: visits

- Users (both end-users and administrators) are enthusiastic. Usage is steady with surges during examination seasons
  - (Guess when examinations are…?)



Take up: downloads



The majority of downloads are currently

- past undergraduate examination papers (somewhat seasonal)
- ETDs

Jan – Mar 2014

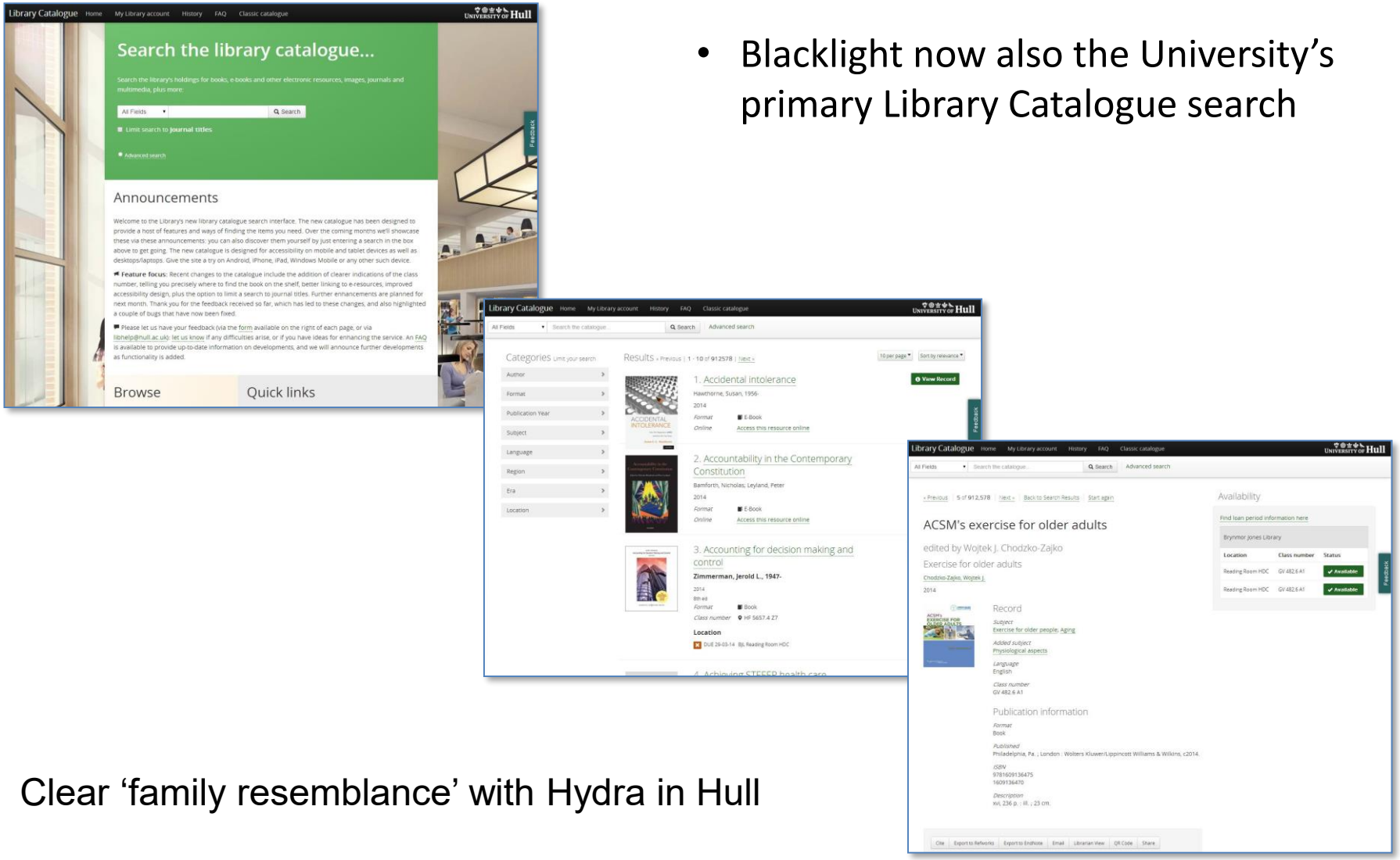
1.	57025 Engineering management (January 2013)	113	(1.68%)
2.	57025 Engineering management (January 2012)	92	(1.37%)
3.	26355 Financial management (January 2013)	87	(1.30%)
4.	26163 Empirical economics (January 2013)	64	(0.95%)
5.	26326 Financial reporting (January 2013)	64	(0.95%)
6.	26302 Managing people (January 2013)	57	(0.85%)
7.	57028 Fundamentals of engineering (January 2013)	53	(0.79%)
8.	57015 Control and stress (January 2013)	52	(0.77%)
9.	26346 European business in a global context (January 2013)	50	(0.74%)

The downloads with five digit module numbers are exam papers

Feb – Mar 2014

1.	HMAP Dataset 16: Peru, South-east Pacific	20	(1.40%)
2.	Closure of the Hull and/or Scarborough campuses due to adverse weather conditions	18	(1.26%)
3.	03520 Engineering mathematics II (May 2013)	13	(0.91%)
4.	26303 Marketing (May 2013)	12	(0.84%)
5.	26324 Strategic management accounting (May 2013)	12	(0.84%)
6.	Regulation of blood platelet function by nitric oxide	11	(0.77%)
7.	The influence of oxidised low density lipoproteins on platelet activation	11	(0.77%)
8.	03520 Engineering mathematics II (June 2011)	10	(0.70%)
9.	26335 Taxation (May 2013)	10	(0.70%)
10.	An inductive investigation into relationships between geographically co-located actors : the contribution of relationship marketing to regional competitiveness	10	(0.70%)

Integration and embedding



- Blacklight now also the University's primary Library Catalogue search

Clear 'family resemblance' with Hydra in Hull

As a Hydra partner?

- Many improvements and additions fed back to the core Hydra code for community use
  - message driven, full-text indexing
  - support for structural, display and OAI-PMH harvesting sets
  - support for simple, compound and complex objects in the same IR
  - etc
- We hope to serve as a reference site and to provide support for other possible adopters (especially UK and Europe more widely)
- Advocacy of open source (especially community source) work
  - Currently Ruby on Rails is not widely adopted in UK HEIs as a development platform: it deserves more attention

Contacts and links

Project Director: Chris Awre (c.awre@hull.ac.uk)

Project Manager: Richard Green (r.green@hull.ac.uk)

Developer lead: Simon Lamb (s.lamb@hull.ac.uk)

Repository site: hydra.hull.ac.uk

Hydra website: projecthydra.org
(includes screencasts from Hull and many others)

(Library catalogue site: blacklight.hull.ac.uk)