

Richard Green

Hydra UK event, London School of Economics & Political Science, 22 November 2012



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

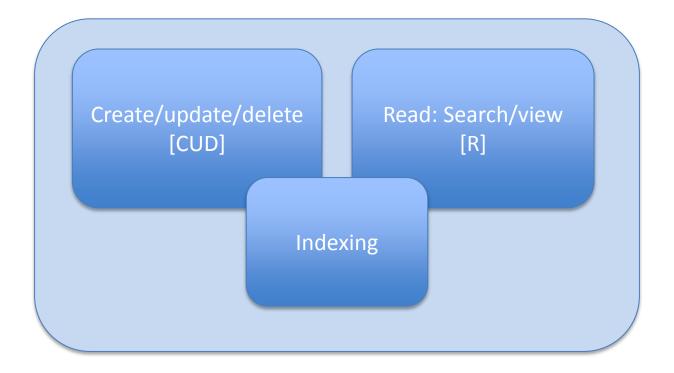


Hydra in Hull

- 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
 - Specialist pages for images, video, ...
 - etc
- Hull also has some rather specialised needs to cope with 'Hydra-compliant' content entering our Fedora instance from other systems (many are not Hydra based)



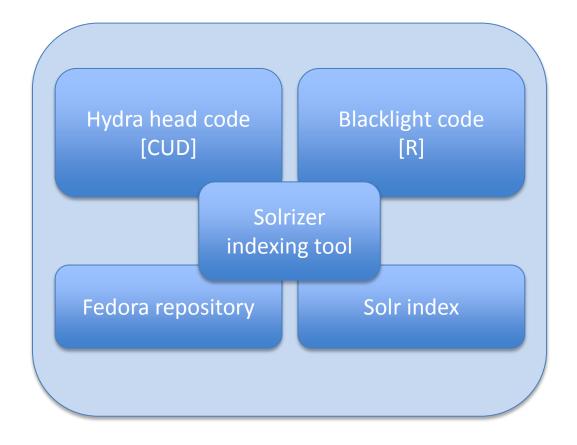
CRUD in repositories



Typical schematic for repository CRUD



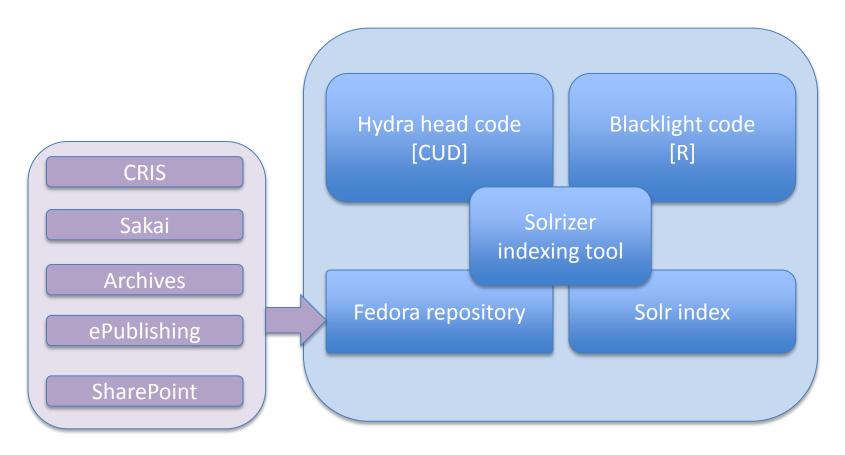
CRUD as implemented in most Hydra heads



The Hydra software stack



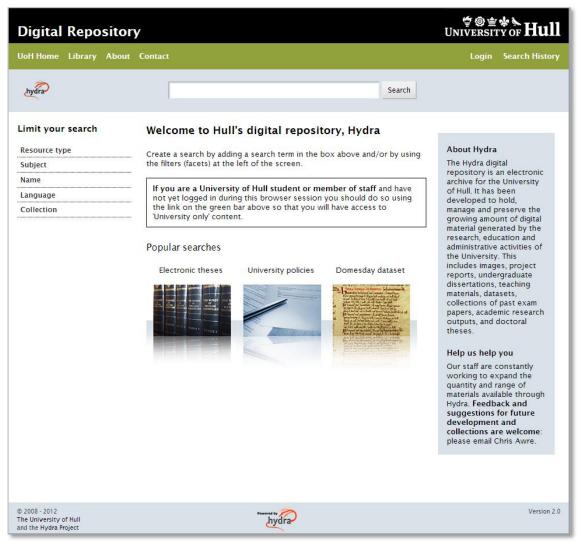
CRUD as implemented in Hull's Hydra



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



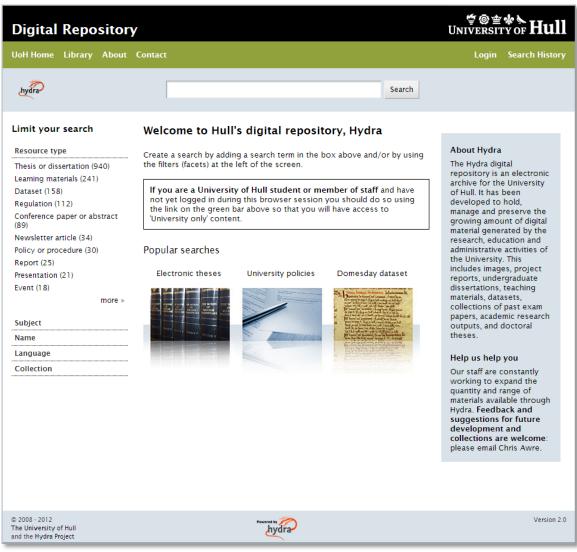
Hydra in Hull home page



- Hull's Hydra home page is a fairly standard Blacklight layout
- This is the 'public' view no explicit login required.



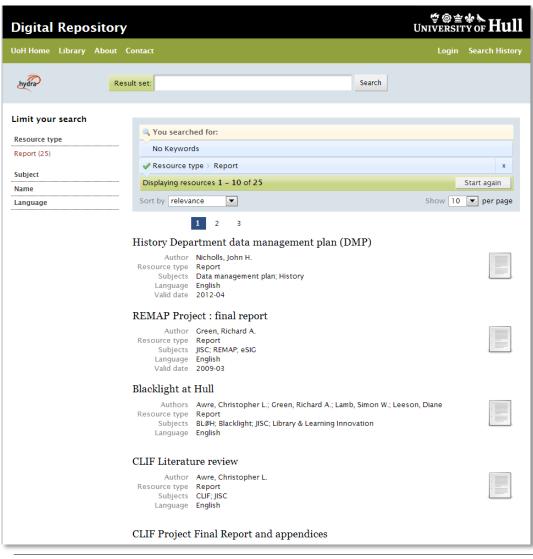
Hydra in Hull home page



- With the facets panel open we start to see the range of content
- A search can be carried out using combinations of facet selections and/or terms in the search box
- If we choose resource type 'report'...



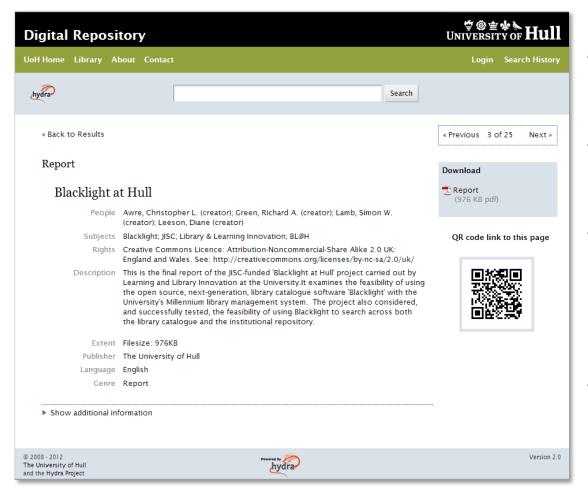
Hydra in Hull search return



- ...we generate a search return
- We could further refine our search 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 third item 'Blacklight at Hull'.



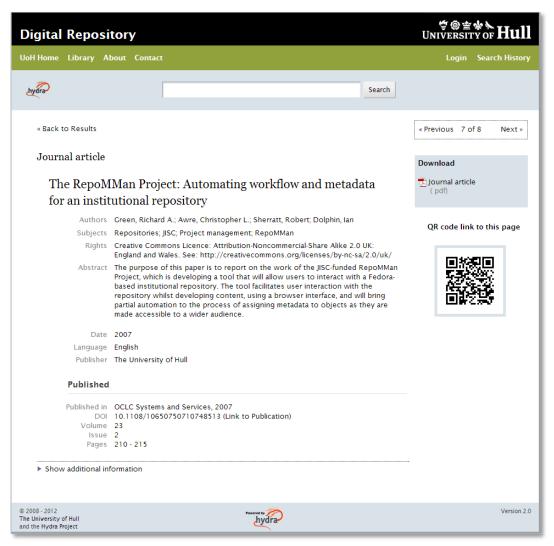
Hydra in Hull splash page



- Choosing an item gives us its 'splash page'.
- Link(s) at the right download the resource(s)
- 'Show additional resources' 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



- 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



Hydra in Hull splash page

Dataset HMAP Dataset 02: SE Australian Trawl Fishery II: Fish Database - ASCII format (zip) (various) landings and fishing effort, South East Australia, Database - Access 2000 format 1937-1943 Database - csv format Person Klaer Neil (Author) Subjects Fisheries statistics; History of marine animal populations; Trawling; Overfishing; Documentation - PDF Australian fishing industry; Southeast Australian shelf and slope format Rights Creative Commons Licence: Attribution-Noncommercial-Share Alike 2.0 UK: England and Wales. See: http://creativecommons.org/licenses/by-nc-sa/2.0/uk/ Documentation - text Citations The dataset: please cite as follows: N. Klaer ed. 'South East Australian Trawl format Records, 1937-1943' in M.G Barnard & J.H Nicholls (comp.) HMAP Data Pages (www.hull.ac.uk/hmap); Supporting documentation: please cite as follows: N. Documentation - Word Klaer. HMAP Dataset 1: SE Australian Trawl Fishery II, Supporting Documentation, (.doc) format in M.G Barnard & J.H Nicholls (comp.) HMAP Data Pages (www.hull.ac.uk/hmap) (doc) Southeast Australian shelf Description On 28 November 1991, the New South Wales Department of Agriculture and and slope - kml file Fisheries provided historical data relating to the South East Fishery (SEF) to the (141 KB vnd.google Bureau of Resource Sciences (BRS) in accordance with the Fishing Industry earth.kml+xml) Research and Development Corporation (FIRDC)-funded 'historic SET catch data' View as map project. The data were originally collected by CSIRO and handed over to NSW Fisheries when CSIRO ceased work in the 1960s on what was then known as the 'South East Trawl Fishery'. These data cover the periods 1918-1923, 1937-1943 and 1952-1957. No documentation exists for these data except for a simple QR code link to this page description of the data field names. This document describes the processing carried out, and the assumptions made, to convert the data into a format suitable for inclusion in the Australian Fishing Zone Information System (AFZIS). This format, in turn, was adapted to render the data compatible with the HMAP/OBIS schema. The map below gives an indication of the extent of the Southeast Australian shelf and slope; the 'view as map' link in the download panel at the right will show a much more detailed representation. The kml file download, when used with Google Earth, will render the extent of the Southeast Australian shelf and slope in Southeast Australian shelf and slope 1937-1943 Geo-data Map Satellite

Tasman Sea

- 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



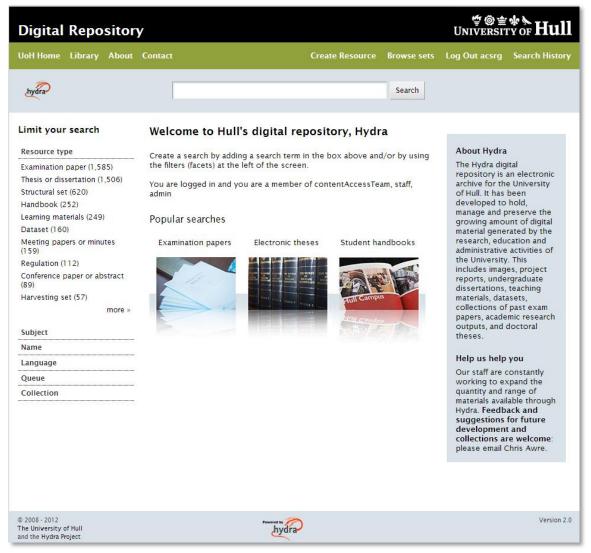
Hydra in Hull home page



- 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)...



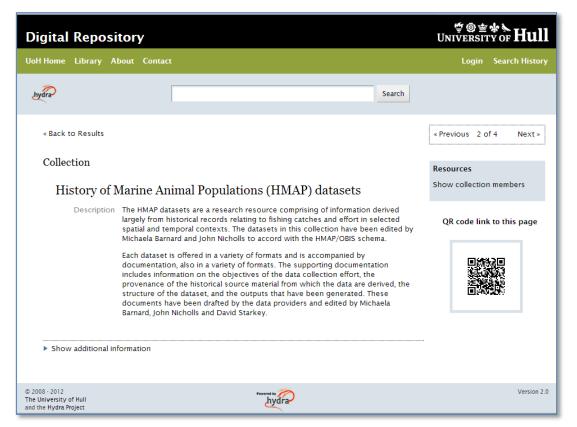
Hydra in Hull home page: logged in



- ... 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
- As one allowed to create content we also get 'create resource' and 'browse sets'.



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)

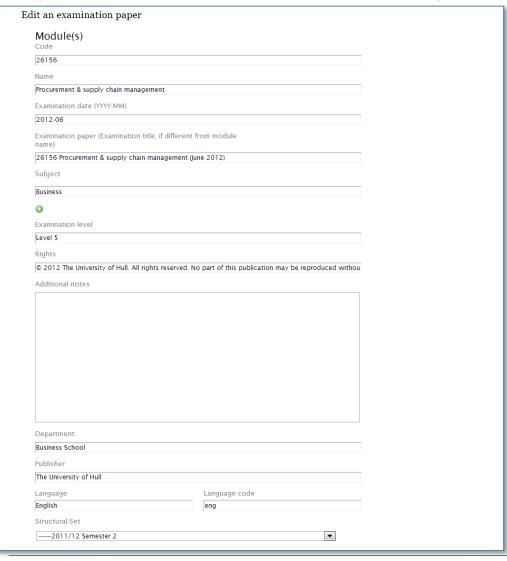


Create, update delete

- Generally, creating content through the Hydra head is a three-stage workflow:
- A contributor creates an object with appropriate metadata
 - At this stage it is private to them and can be deleted
- 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 (still) be deleted by the QA team
- 3. After QA the object is published into the repository for use
 - The object cannot now be deleted; it can be hidden (maybe during a copyright) challenge) or it can be removed (in which case the Fedora 'deleted' status is set but the object remains lurking available only to Fedora (not repository) administrators...)



Hydra in Hull 'create/edit' process

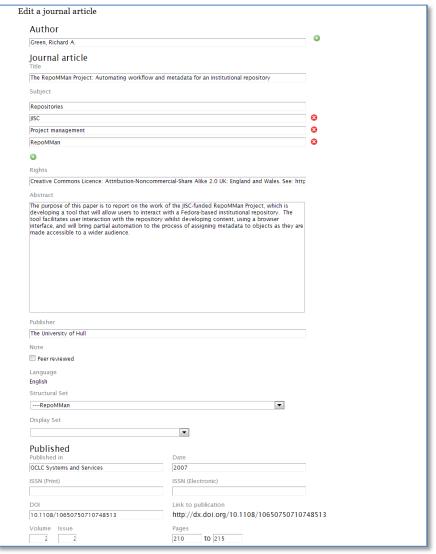


- The 'create' process offers a template customised to content type
 - (or a generic form if a customised page has not yet been created)

Once created it is passed to the QA queue for someone else to check before being moved to the repository proper



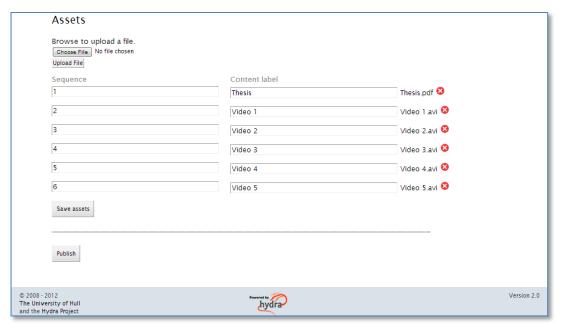
Hydra in Hull 'create/edit' [2]



 By contrast, part of the edit page for a journal article



Hydra in Hull 'create/edit' [3]

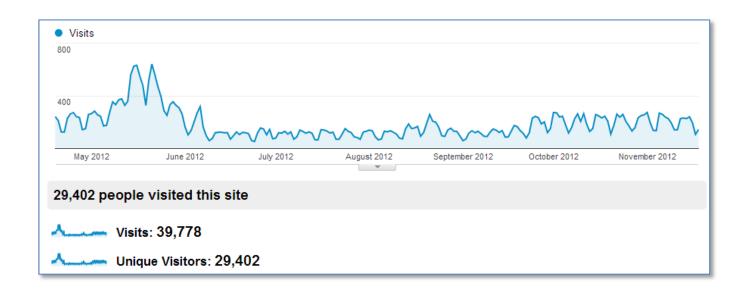


- All create/edit pages have a similar section at the bottom to deal with content.
- Items for download can be sequenced...
- ...and individually labelled



Take up: visits

- Users (both end-users and administrators) are enthusiastic. Usage is steadily rising
 - (Guess when examinations are...?)





Take up: downloads



1,638

Top downloads for October 2012

The majority of downloads are currently

– ETDs

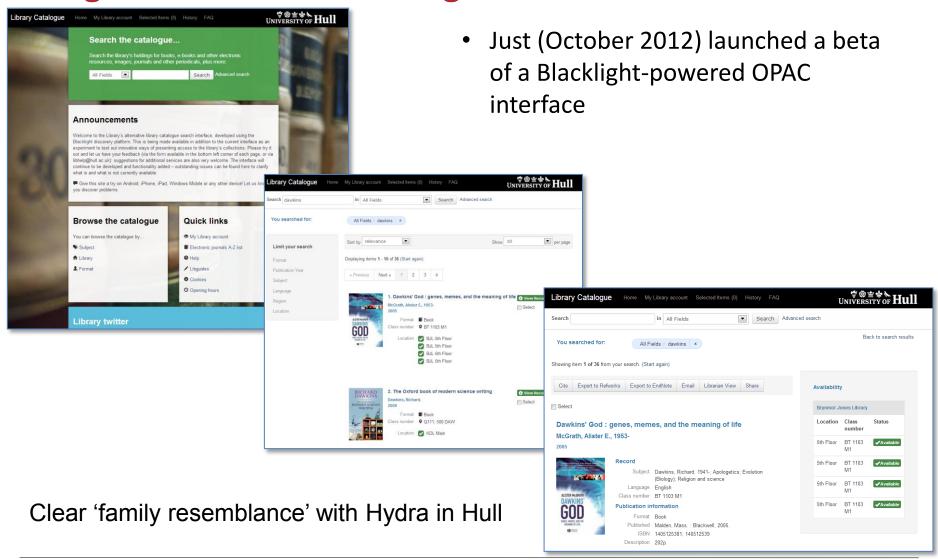
3,196

- past undergraduate examination papers (somewhat seasonal)
 - The downloads on the right with five digit module numbers are exam papers

en		Event Label	Total Events	4
-	1.	Pre-Raphaelitism and the Pre-Raphaelite Brotherhood, Volume 1		65
	2.	56354 Research methods (January 2010)		42
	3.	Intervention to alleviate shyness : social skills training and brief counselling		30
	4.	Accounting, resource allocation, planning and efficiency : case studies of the United Kingdom and Iraqi universities		24
	5.	03001 Foundation maths 1 (January 2011)		22
	6.	26207 Microeconomics (January 2011)		21
	7.	Strategic management in the public sector: An interpretive study of the application of strategic management practices in the local authorities in Malaysia		21
	8.	57025 Engineering management (January 2011)		20
	9.	23715 Introductory investment mathematics (June 2010)		19
	10.	The Psychology of Educational Technology and Instructional Media		19



Integration and embedding





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 wider Europe)
- 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)