



The BRUCE Project
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The BRUCE Project

(Brunel Research Under a CERIF Environment)

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Brunel University & Cottage Labs

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Some thank you's:



- Andy Youell, HESA
- Daniel Hook at Symplectic Ltd
- Project Team:
 - Richard Jones
 - Patricia Donaghy
 - Bethan Adams, Lawrence Jones, Giuseppe Sollazzo

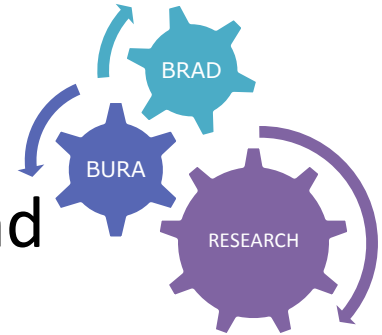
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Why BRUCE?

- Existing publications database (BRAD) and repository (BURA)
- Existing links between the Planning Office (managing the research information) and Library
- Keen to improve the management of research information but resources not available to implement a full CRIS





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- JISC Funding Call in October 2010
- JISC Infrastructure for Education and Research Programme
- “projects that use CERIF to improve the interoperability of research information at one or more higher education institutions”





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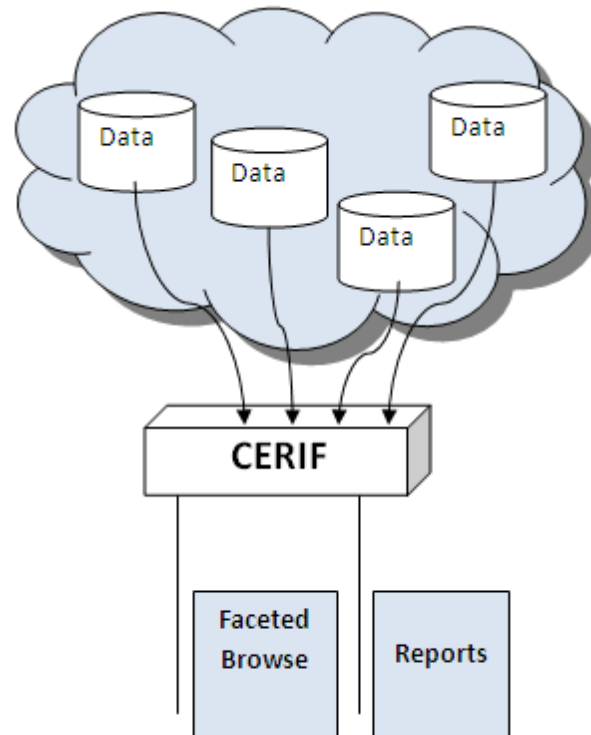
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- The BRUCE Project aimed to:
 - develop a prototype tool, based on CERIF, to facilitate the analysis and reporting of research information from existing data sources
- 6 month project, funded by JISC
- Project partners:
 - St George's University of London
 - Cottage Labs (i.e. Richard Jones!)
 - Symplectic Ltd



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Planned Project Outputs

- BRUCE and CERIF
 - Mapping the HESA data to CERIF
 - Gap analysis
- Prototype tool
 - Born to Run on Apache Solr and Project Blacklight
 - Open Source Software
- Sample Reports





BRUCE Reports

- Bring together research information from different sources:
 - Contract information
 - Academic areas
 - PhD students supervised
 - Publications
 - Funding
 - etc.

Business School		Publications Since 2008													
Subject	REF Eligible	Position	Full Name	Gender	FT/PT	Contract End Date	Funding Code	FTE	PhD Sup.	Journal Articles	Books	Chapters	Conf.	Exh./Perf./PaR	
Business & Management	Yes	Professor	AAA	F	FT			1.00	3	6	1	3	8		
			BBB	M	FT			1.00	2	4				2	
			CCC	M	PT			0.80	1	8		1			
			DDD	M	FT			1.00	1	2					
		Reader	XXX	M	FT			1.00	2	7					
			FFF	M	FT			1.00	1	10		4			
			TTT	F	FT			1.00	1	12				5	
		Senior Lect.	YYY	M	FT			1.00	1	9					
			UUU	F	FT			1.00	1	6				4	
			ZZZ	M	FT			1.00	1	5		2			4
			EEE	M	FT			1.00		7					
		Lecturer	GGG	M	PT			0.60	1	8					5
			HHH	F	FT			1.00		2					2
			III	M	FT	31/08/2012		1.00		2		1		1	
		Yes Total								13.40	15	88	1	11	25
	No	Lecturer	JJJ	M	FT	16/07/2013	EPSRC01	1.00		3				2	
			KKK	M	FT	13/07/2013	ESRC06	1.00		2				3	
Research		LLL	M	PT	31/08/2012		0.20		4		1		3		
		MMM	M	FT	31/05/2013	INDUS04	1.00		2				1		
		NNN	M	PT	31/07/2013		0.50		2				1		
No Total								3.70	0	13	0	1	10	0	
Business & Management Total								17.10	15	101	1	12	35	6	



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So, what have we actually done...





The Project Outputs

– BRUCE and CERIF

- Created a new data model for CERIF
- Created a test dataset for CERIF
- Met with euroCRIS to discuss gaps identified in the CERIF schema

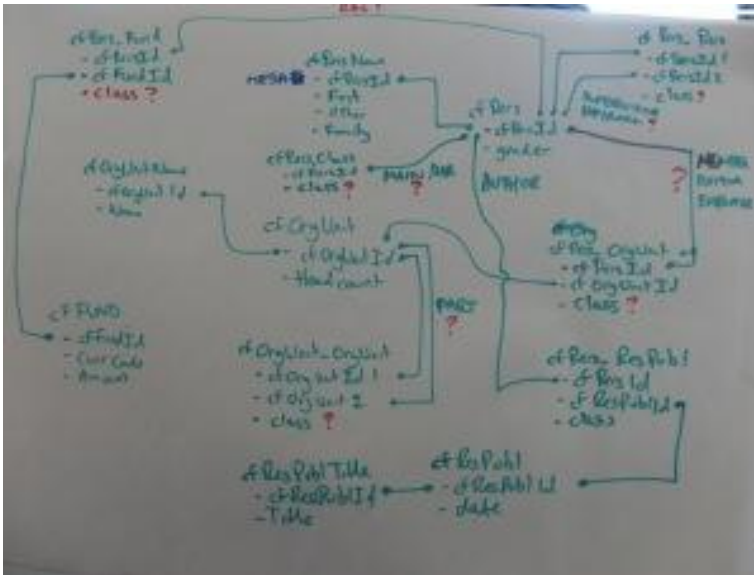
– Prototype tool

- Based on Apache Solr
- Open Source Software - SolrEyes



Data model for CERIF

- Used the sample reports to identify the tables to be mapped to CERIF
- Data modelled using a spreadsheet model of the CERIF schema and then imported into a MySQL database





Using CERIF – issues:

- CERIF is predominantly relational
 - Very flexible
 - Semantics took a while to understand
 - Some unnecessary duplication required
- Publications data proved particularly tricky
 - Different field sizes
 - Date formats needed tweaking
 - Dummy defaults required for null values



- Solr (i.e. the technical bit!)
 - Using the CERIF data model the data from existing systems is mapped into a MySQL CERIF database
 - A set of Solr configuration files and data importers were then created to relate the data to a set of flat key/value pairs
 - The data is then displayed in SolrEyes



Switching off the Blacklight:

- Original plan was to use Blacklight as the user interface
 - Installation process was unstable
 - Ubuntu was difficult, although not impossible (How-To guide patched some holes in existing online guides)
 - Results on Windows were variable
 - Installation on Mac OS X proved too error prone to complete at all
 - Ranged faceting not supported in default install



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- SolrEyes

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Report On:

Publication Year: Sort by:

Org Unit:

Gender:

Contract End:

Position:

Viewing Results: Results per page:

Department	Position	Name	Gender	FTE	Contract End	Funding Code	Total PhD Students	Publications in period	Journals in period	Books in period	Chapters in period	Conferences in period
Sport	Lecturer	GERVIS, MISIA	F		9999-12-31		0	0	0	0	0	0
Sport	Lecturer	JACKSON, ROBIN CHARLES	M		9999-12-31		1	0	0	0	0	0

Developed by the [BRUCE](#) project

Powered by [SolrEyes](#)
Developed by [Cottage Labs](#) for [Brunel University](#)



Next Steps:

- Funding for current project ends on 30/09/11
 - Processes will be documented on the project blog
 - Software and supporting documentation will be made available
 - Final project reports will be published via JISC
- Investigate sources of funding to take the project forwards



Future Work:

- Further analysis of data structures & mappings
- Automated data extraction
- Development of a more sophisticated reporting component



Any Questions?



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