

A large version of the DSpace @ Cambridge logo, consisting of a wireframe cube with a smaller cube inside, followed by the text "DSpace @ Cambridge".

DSpace
@ Cambridge

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DSpace@Cambridge project

Objective:

to develop a digital institutional repository
for the University of Cambridge



DSpace@Cambridge



Under D-construction

(with acknowledgement to University of Cambridge *Newsletter*)



Outline

- DSpace
- DSpace Federation
- Cambridge-MIT Institute
- DSpace@Cambridge
- UK Contexts



DSpace is...

- A library-managed information service for the local research community
- An open source technology platform
- A service model for open access and/or digital archiving
- A platform to build an Institutional Repository
- A (proposed) federation of digital repositories across multiple academic research institutions



DSpace -

'a durable digital depository'

- MIT Libraries - Hewlett Packard Labs collaborative development project
- institutional repository for MIT staff's digital research and learning materials
- Open Source software (Nov 2002/May 2003)
- federated system
- preservation function



DSpace

- concepts

- captures
 - digital research material in any format
 - directly from creators (e.g. academics)
- describes
 - descriptive, technical, and rights metadata
 - persistent network identifiers
- distributes
 - via WWW, with necessary access control
- preserves
 - bitstream guaranteed



Dspace

– digital preservation

- Philosophy
 - Lots of digital material *is already lost*
 - Most digital material is *at risk*
 - Better to have it, do bit preservation than to lose it completely
 - Need to capture as much information as possible to support functional preservation
 - Cost/benefit tradeoffs



DSpace

- digital preservation

- MIT's format commitment levels
 - known/supported
 - e.g. TIFF, SGML/XML, AIFF, PDF
 - known/unsupported
 - e.g. Microsoft Word, PowerPoint (common)
 - e.g. Lotus 1-2-3, Visicalc, WordPerfect (less common)
 - unknown/unsupported
 - one-of-a-kind software program
- digital file format registry



DSpace Federation

- Federation development
 - CMI and Mellon-funded projects involving 8 universities
 - broad Open Source adoption
- goals
 - drive DSpace development
 - acquire critical mass of content
 - utilize distributed expertise



DSpace Federation

- DSpace Federation partners
 - MIT (US)
 - Cambridge University (UK)
 - Cornell University (US)
 - Columbia University (US)
 - Ohio State University (US)
 - University of Rochester (US)
 - University of Toronto (Canada)
 - University of Washington (US)



Cambridge-MIT Institute

- CMI
 - funded by UK Government (DTI)
 - £68 million over 5 years (2000-2005)
 - mission: 'to improve the competitiveness, productivity and entrepreneurship of the UK by educating leaders, discovering knowledge and developing technologies, and creating programs for change using a partnership of MIT and Cambridge'



CMI library projects

- 3 projects approved by CMI
 - preliminary study, in Cambridge and UK, of the case for digital institutional repositories (2002)
 - implementation and development of DSpace in Cambridge (2003-5)
 - UK seminar series to develop digital institutional repositories (2003-5)



DSpace@Cambridge

- joint project between Cambridge University Library and MIT Libraries in partnership with Cambridge University Computing Service
- objective: to establish and develop a digital institutional repository for Cambridge
- 3 year duration (2003-2005)
- £1.7 million grant from CMI
- Joint CUL + MIT Project Team
- Advisory Board with UK and US members



DSpace@Cambridge

- short term objectives

- DSpace 1.0 to be implemented immediately
- 'early adopters' to provide test content
- further development and customization
 - digital preservation (CUL-led)
 - learning management system interoperability (MIT-led)
- business plan to sustain DSpace@Cambridge as a service



DSpace@Cambridge

- technical tasks

- install and customize hardware and software
- develop local system interfaces
 - networks, user authentication, security, back-up
- provide ongoing systems administration
- test scalability
 - technical
 - organizational



DSpace@Cambridge

- organizational issues

- local policy decisions
 - community definitions, acceptable formats, levels of access, metadata quality, IPR, etc.
- early adopters and fast followers
- business modelling
- evaluation criteria and processes
- communication
 - advisory groups, seminars, website, discussion lists
- content, content, content



- potential benefits to users

- visibility of academic work
- 'community' (departmental) identity
- Cambridge University 'badge'
- ownership of material is retained by user/CU
- digital preservation
- UL repository offers long-term guarantees
- data security
- cost-benefits of central institutional repository



DSpace@Cambridge

- possible content

- preprints
- refereed research papers
- technical reports
- working papers
- conference papers
- e-theses
- administrative records
- legal deposit of e-publications
- published books
- overlay journals
- bibliographic datasets
- research datasets
- images
- audio files
- video files
- learning objects
- reformatted digital library collections
- learning materials
- web pages



DSpace@Cambridge

- longer term objectives

- develop records management capabilities
- interoperability with other OAI-compliant digital repositories
- develop publishing capabilities (journal hosting)
- other applications?



UK Context

- CMI

- National Competitiveness Network
 - dissemination of CMI project experience
 - DSpace@Cambridge lessons available to UK HE & beyond
- LEADIRS (LEarning About Digital Institutional Repositories Seminars)
 - two 4-seminar series in the UK (beginning September 2003)
 - institutional strategies for digital repositories
 - not DSpace-specific



UK Context

- JISC and others

- Not working in ‘splendid isolation’
- Project FAIR (Focus on Access to Institutional Resources)
 - SHERPA (Nottingham et al)
 - DAEDALUS (Glasgow)
 - ePrints UK (UKOLN)
- Digital Curation Centre
 - JISC + e-Science Core Programme
- Digital Preservation Coalition
- Scholarly Communication Campaign
 - CURL, SPARC, Budapest Open Access Initiative



Links - DSpace@Cambridge

- DSpace (www.dspace.org/)
- DSpace@Cambridge
 - Project website (www.lib.cam.ac.uk/dspace/)
 - Implementation website (<https://dspace.csi.cam.ac.uk>)
- Cambridge University Library (www.lib.cam.ac.uk/)
- MIT Libraries (libraries.mit.edu/)
- CMI (www.cambridge-mit.org/)
- LEADIRS (www.lib.cam.ac.uk/UKseminars/)



DSpace@Cambridge

- team contacts



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