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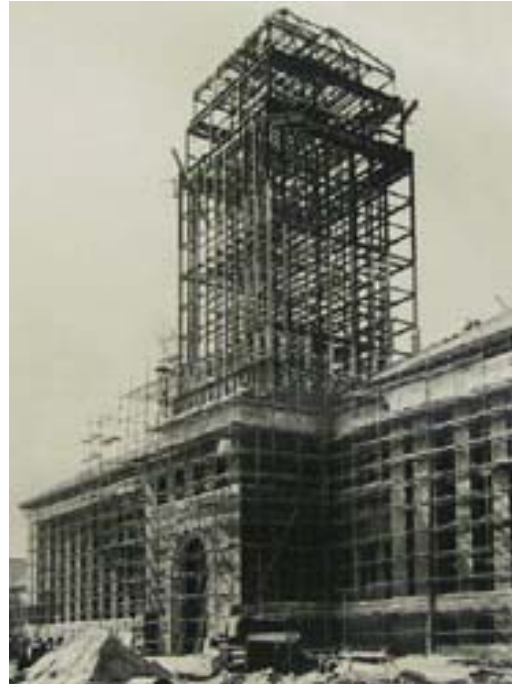


# DSpace@Cambridge project

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



# DSpace@Cambridge

## - team contacts

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