Is it possible to use your institutional repository as a records management system?

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Context

• RepoMMan project, 2005-7
  • Repository Metadata and Management
  • Facilitating interaction with a repository to ease use

• REMAP project, 2007-9
  • Using a repository to support records management and digital preservation (RMDP)
View of a repository

- Institutional repositories are often
  - Centrally managed
  - Geared towards completed materials
  - Focused on the content, not the owners or the processes
- The approach can lead to challenges where content exists but the need for its management/preservation is not clearly recognised or implemented
  - Lack of submission
  - Lack of provision for materials in development
  - A perception that repositories are distant
The repository at Hull

• All digital content is important
  • There is a need for mechanisms to meet differing and flexible needs, throughout the lifecycle of the content
  • There is also a need to manage many different types of digital content, and relationships between them

• University of Hull requirements
  • Scaleable
    • Digital content is only going to grow
  • Standards-based (open standards where possible)
    • To be able to integrate with other institutional systems
    • To provide a future-proof exit strategy
Fedora digital repository

- A powerful community source repository system
  - Development overseen by Fedora Commons, a not-for-profit foundation (launched September 2007)
  - Fedora 3.0 released July 2008

- Organisation
  - Core development team within the Commons
  - Community input guides development
  - Solutions communities being developed
  - Collaboration with DSpace to work on common goals
Features of Fedora

- Powerful digital object model
- Extensible metadata management
- Expressive inter-object relationships
- Web service integration
- Version management
- Configurable security architecture
- OAI-PMH conformance
- Preservation worthy
Interface

- Fedora does not have a default user interface
  - Weakness – have to find or build one that suits
  - Strength – can build an interface to suit need, don’t have to bend a delivered interface to suit needs
- The interface is what enables a repository to be used in flexible ways
  - Could potentially use a ERMS interface over a repository
The aim of RepoMMan

- RepoMMan development was aimed at
  - Enabling users to interact with a repository in the context of their existing processes and workflows
  - Facilitating the management of digital content throughout its lifecycle
  - Assisting in the creation of metadata to effectively describe content, aiding retrieval and long-term management
Embedding interaction

- Map to existing and understood activity
  - File management and FTP paradigms

- Actions (keeping it simple)
  - Put object in repository (within identifiable structure)
  - Get object from repository (including which version)
  - Delete
  - Add metadata
  - Share
  - Publish
  - Move from personal repository to public one
The aim of REMAP

- REMAP development was aimed at
  - Identifying how an institutional digital repository can support records management and digital preservation (RMDP)
  - Noting that RM is a first stage in DP for many items
  - To extend the RepoMMan model to enable workflows that support the full lifecycle of digital objects
  - From creation to withdrawal or perpetual preservation
Using the repository

University Repository

Upload Manager

Repository

- REMAP materials
- ClinPsyD-08-pmi-babiker.pdf
- hydra-page-block.jpg
- OR08F-RMDP-v10.doc
- OR08F-RMDP-v10.pdf

Download
Create Folder
Delete
Publish
Depositing
File system paradigm
Versioning
Publishing

What Type of Object do you want to Publish?

- Software
- Sound
- Other

- Text
  - Book
  - Book Chapter
  - Conference paper or abstract
  - Examination paper
  - Handbook

[Buttons: Cancel, Next]
Metadata

Ownership

Creator: Green, Richard A
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REMAP events

• REMAP allows us to embed time-driven workflows into an object at the point of publishing

• Three categories of RMDP alert have been identified:
  • Events 1: FYI, this has just happened
    • The item you submitted for publishing is now available at http://.....
  • Events 2: This has happened, that needs to be done
    • An item has been deposited in the accession queue and needs attention
  • Dates 1: It is now xx days since you requested deposit of... or The deadline of dd/mm/yy has passed
  • Dates 2: Specified lifespan reached. Hide?
  • Status: The repository contains nn objects of filetype zzz
REMAP use cases

- Preparation of committee papers by Committee Section
- Past examination papers as learning resources
- Learning and Teaching Programme approvals
- University Register of Policies and Procedures
- University Quality Handbook
- The RepoMMan publication process
- Support for Electronic Theses and Dissertations (ETD)
- Digital Archives at the University of Hull
- RMDP for Spoken Word Services (large audio-visual archive)
Register of policies/procedures

Register of Policies and Procedures

Policy or procedure deposited into the Register – at any time of the year

Published on portal

Annual review in May

Annual review of policies and procedures is carried out

Authors of policies are contacted by email and asked to review the policies for accuracy and relevance

Document is amended

Details on Register are amended
- Date revised on document
- Possibly Date for review – depends on the time of year; document was amended e.g. if amended in March wouldn’t be in the annual review for May

Some metadata is captured into a database
- Author of policy
- Name of policy
- Date created
- Date for review

Ad hoc basis outside review process

Document is checked but remains unchanged
- Date for review is amended on Register

Document is checked and is no longer relevant
- Document is deleted

Notes:
- Previous versions of policies and procedures are not currently kept – this is a potential risk
- Response to the review is usually 70-80%, which means that all the policies and procedures are not officially checked on an annual basis
Multimedia management
Lifecycle summary

Preservation

Create → Store → Acid metadata → Publish

Delete

Manage retention

Call preservation services

Access archive → Dark archive

REMAP

Records management

RepoMMan
Proactive preservation

- Some of these lifecycle workflows may have or require preservation stages
- Preservation web services can be linked into local workflows to carry out these stages, e.g.,
  - PRONOM/DROID
  - JHOVE
  - CRiB
  - Planets
  - SHERPA DP2 / SOAPI
- A Web Services approach allows services to be interchanged according to availability and policy
Conclusions

- We have concluded that an institutional repository can be used to support records management and digital preservation
- But…
  - It is unlikely that it can do it all by itself
  - It is likely to work best in tandem with other systems, managing the content lifecycle across them
- Repositories do offer:
  - A flexible and powerful means of managing the content
  - The opportunity to use an existing system to carry out identified tasks at lower cost
Thank you

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