

A decorative graphic consisting of a thin yellow circle. A thick, dark olive-green horizontal bar is positioned across the middle of the circle. On the left side of the bar, there is a large black left square bracket. On the right side of the bar, there is a large yellow right square bracket.

Longer and stronger: building a long term repository

Belinda Weaver

- *Coordinator, UQ eSpace repository*
- *Special Projects Coordinator*

The University of Queensland Library

[What's in our repository?



- All material migrated from ePrintsUQ
 - Journal articles, conference papers, posters and proceedings, 'grey' literature, theses, preprints, patents, books, book chapters ... + new deposits of same
- Image libraries
- Research and teaching projects
- Datasets (varying formats)
- Data from 3 years of RQF trials

[Things we do



- **Open access formats** are preferred
 - If proprietary software is required to view an item, we ask depositor to tell us what it is, and where a user can get it
 - If open access tools are required, e.g. plotters, we ask depositor to tell us where they can be obtained
 - If full text cannot be deposited, are they willing to provide contact details?
- Currently no format restrictions, but we will move to
 - Supported formats, e.g. PDF, HTML, ASCII
 - Unsupported formats, e.g. Word

[What can go wrong?]



- Formats change
- Items become corrupted
- Data is lost
- Bits and bytes exist (but what *is* it?)
- Repository funding dries up
- Low take-up of service
- Migration results in data loss or impairment

[Mitigation strategies ...]



- Preservation metadata
 - – automatically generated in XML on object ingest
- Object history logging
 - – every single change to an item is logged with the event, the date and the person responsible
- Format obsolescence notification built in
 - – scans all objects in repository and notifies us when any format is at risk

Preservation metadata for digital objects supports their long-term ...

- Viability
- Renderability
- Understandability
- Authenticity
- Identity



[What metadata is collected?]

- **Object** metadata – descriptive
- **Structural** metadata – how a complex object is put together
- **Technical** metadata – all about formats
- **Preservation** metadata – what we need to know to preserve it
- **Rights** metadata – who owns the rights?

[What else are we planning or doing?



- Checksum
- Version rollback
- ✓ Backup central
- ✓ Ensuring repository survival via new research reporting role and data curation responsibilities
 - ✓ RQF
 - ✓ RAF
 - ✓ NCRIS/ANDS
 - ✓ Grants data management compliance

The seven attributes of highly effective repositories

- OAIS compliance
- Administrative responsibility
- Organisational viability
- Financial sustainability
- Technological & procedural suitability
- System security
- Procedural accountability



From the RLG's *Trusted Digital Repositories: Attributes and Responsibilities* at <http://www.rlg.org/longterm/repositories.pdf>

[More ...]

Fez

- Get the software
 - <http://sourceforge.net/projects/fez>
- Our wiki
 - <http://dev-repo.library.uq.edu.au/wiki/>
- Contact Belinda Weaver
 - *Email:* espace@library.uq.edu.au

RLG's TDR checklist

<http://www.rlg.org/longterm/>