

The ANU test bed team has been busy over the last twelve months mentoring other Australian universities which have chosen the DSpace platform. The ANU test bed staff have led technical workshops in most Australian capitals throughout 2005, and into 2006. The ANU test bed provides ongoing informal technical advice and collaboration on DSpace development projects. This has made the ANU test bed a key resource and source of expertise for fledgling institutional repositories in several universities around Australia.

During 2006, the ANU test bed will continue to show direction to the Australian higher education sector in areas of institutional repository management. It also has a cluster of projects for 2006 that will increase the relevance of the institutional repository to the everyday concerns of academics. These revolve around automated ways of integrating a repository with the processes of authoring, DEST reporting, pre print archiving, journal publishing, etc.

### **The University of Sydney**

The test bed program at the University of Sydney USyd is based on a DSpace based institutional repository and has concentrated on the development of repository middleware called iSpheres. This allows existing digital collections around a university to interoperate. iSpheres provides a researcher or student integrated access to heterogeneous collections of images, sound, video, text, databases or GIS datasets, housed variously around the university and beyond. This project is developing tools for universities that require a decentralised repository system.

Continuing its focus on services for distributed or decentralised digital collections, the University of Sydney test bed has begun work on an interactive online tool, the Digital Sustainability Checklist. The checklist assists researchers and collection managers Australia wide to locate information, standards and best practice for digital objects, digitisation and sustainable digital collection management. The interactive checklist will continue to develop during 2006 through collaboration with the National Library of Australia and is set to be an invaluable resource for the higher education sector at large.

In 2006 the University of Sydney test bed will also conduct an exciting APSR project to help researchers capture better digital data while on fieldwork. The FieldHelper tool set is being designed by field researchers to allow them to retain a maximum amount of descriptive, technical, structural, locational, temporal and relational information about the data they collect. This contextual information about the data will not only engender more eResearch, but will greatly increase the long term sustainability of data in the repository environment.

### **The Scholars Workbench**

One of the APSR projects for 2006 is development of the Scholars Workbench, designed to make it easier for scholars to manipulate their work into different formats and to deposit to the institutional repository.

This is a web application that will bring together a range of services for scholarly authors. The author writes using a word processor and a template distributed by the institution. When the author saves a document, it becomes visible in the Digital Scholar's Workbench web site. From here, the author can preview the document in several different formats, including PDF suitable for printing; post the document to a blog; send the document as an email; deposit an automatically converted DocBook version of the document in the institutional repository; use a version control system; upload the document to a web site; or upload a linked set of documents to a learning management system, to name but some of the options which will be available

2005 2006

## **Australian Partnership for Sustainable Repositories**

*... to establish a centre of excellence for the management of digital collections*



[www.apsr.edu.au](http://www.apsr.edu.au)

### **The APSR Partners**



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## Australian Partnership for Sustainable Repositories 2005 - 2006

### Background

The Australian Partnership for Sustainable Repositories (APSR) is funded by the Australian Federal Government's Department of Education, Science, and Training. APSR was allocated 2.4m over three years from January 2004 to December 2006 to develop a centre of excellence in the management of digital collections. APSR is a coordinated set of programs and projects that address strategic issues of digital sustainability, eResearch facilitation, repository management and system development.

### Digital Sustainability

Universities are faced with the challenge of ensuring continuity of access to valuable digital assets such as journal articles, digital theses, research data, learning objects and digital objects such as images, recordings and multimedia. APSR is performing a leadership role for the higher education sector at large through its Digital Sustainability Program. The APSR Digital Sustainability Program has leveraged the expertise of the National Library of Australia one of the APSR partners. During 2005 this program delivered two internationally acclaimed reports:

- The APSR Sustainability Issues Discussion Paper
- Survey of Data Collections

These two papers lay the groundwork for the final year's work for APSR - implementing sustainable infrastructure solutions for digital collections within various popular digital repository platforms (DSpace, Fedora, EPrints and others).

The Digital Sustainability Program has an exciting year ahead with three major projects afoot that directly address practical issues of digital sustainability in actual working collections:

- Automated Obsolescence Notification System (pilot implementation for various partner collections)
- Preservation Metadata Implementation Requirements (for DSpace, Fedora, and Pandora)
- Digital Format Risk Analysis Online Tool

The APSR Digital Sustainability Program has this very practical focus because of its tight integration with the APSR test bed programs.

### National Outreach

The year 2005 saw the APSR outreach activities begin to blossom upon the mature wood of the APSR Digital Sustainability Program and the APSR Test Bed Program. The expertise developed in these APSR Programs is being shared with the sector at large through the APSR National Outreach Program. The highly popular workshop "Establishing a Digital Repository Service" has now been held in every state and territory around Australia. This broad brush overview of the generic issues of the management, technology and service in digital repositories has been a huge success with attendees from almost every higher education and cultural heritage institution in Australia.

More specialised seminars, colloquia, workshops and public lectures have been arranged by APSR with local and international experts, including Dr Chris Rusbridge of the Digital Curation Centre, Dr Reagan Moore of the San Diego Supercomputing Centre and Dr Bradley Wheeler of Indiana State University.

Open Repositories 2006 was a series of events convened by APSR in collaboration with other Strategic Information Infrastructure projects. Five highly stimulating events attracted attendees from all continents

of the planet except Antarctica. The international and local experts on repository development invited to speak are all highly regarded in their field and contributed considerable depth of understanding and experience in a diverse range of fields.

### APSR Test Bed Programs

The APSR Test Bed Programs are an innovative way of developing infrastructural elements for digital collections. The test beds develop "in-the-trenches" solutions to digital continuity and sustainability. These solutions are shared back to the sector at large in the form of tools, applications, guidelines, checklists and also through formal outreach events.

#### *The University of Queensland*

The University of Queensland UQ test bed project reached a momentous milestone during 2005: the release of the Fez digital repository management software for the Fedora platform. Fedora is a generic framework for managing digital objects. It requires the development of user interfaces for any application (such as an institutional repository). Fez builds upon the sophisticated Fedora base framework to provide an integrated management system to manage common aspects of institutional repository functions such as item deposit, workflow, collections and community management.

Fez has attracted international attention as a ground breaking free and fully open source digital repository management layer for the Fedora platform. International developers have already started contributing improvements back to the open source code.

During 2006, the Fez digital repository software will be further developed to provide a mature option which will be freely available for other universities around Australia. A number of useful modules are under development such as customised functionality for digital theses and RQF. The UQ test bed will collaborate and coordinate its activities with the ARROW VTLS development team.

#### *The Australian National University*

The Australian National University ANU has become a major contributor to the open source software project DSpace. Mr Scott Yeadon of ANU is a member of the seven person committers group that oversees all contributions to the DSpace project. In this way, the ANU test bed has had a unique insider's opportunity to promote the specific concerns of Australian universities in developing the DSpace platform. ANU's involvement in DSpace has resulted in an international DSpace User Group Meeting in Australia in January, 2006.

### Feedback from Open Repositories 2006

*"It was a very useful forum, especially in bringing key initiatives together in one place. The quality of speakers was excellent and the structure of the conference - specific user group meetings followed up by the wider view of repositories worked out well."*

*"Excellent gathering of minds and laying out the state of the repository space."*

*"Well chosen speakers, well allocated topics, addressed all the major issues around repositories, well done!"*

*"Thanks for a very well organised and integrated range of activities, with a good international perspective."*

*"The DSpace user group meeting highlighted some longer term needs and issues for archiving in an Australian Academic Context. We need to engage in a dialogue across the sector to address the sustainability of the movement towards a viable and complete eResearch framework."*