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## The APSR June Colloquium

June 2005 has seen forty of the nation's most influential thinkers in the Digital Repository space come together with Chris Rusbridge, Director of the UK Digital Curation Centre to discuss achievements, challenges and possibilities for national and international collaboration for digital repository practitioners into the future.



*Chris Rusbridge,  
Director DCC, UK*

- The Colloquium was certainly a meeting of minds with senior representatives from the Department of Employment, Science and Technology and members from leading Australian universities, along with representatives from the National Archives and National Library.
- Topics under discussion included:
  - *policy settings for sustainability*
  - *national sustainability issues*
  - *the role of preservation networks*
  - *standards, interoperability, etc.*

Issues discussed in the open forum included:

- The need to minimize duplication of effort and to ensure good communications among practitioners and disciplinary groups
- The relationships between rights holders, beneficiaries and the repositories
- The need to recognize that not everything can or should be sustained
- Funding models, cost benefit, short-term funding (particularly 3-year funding models) and the need to align repositories with bodies that have a longer-term mission
- Investigation of partnerships with commercial bodies
- The role of the university library
- Cross-national projects – who owns the data, who pays for sustainability?
- **The agenda and background paper, together with copies of the talks and presentations can be found on the APSR Website at <http://www.apsr.edu.au/events/perspectives.html>. You will need RealPlayer to access the streamed videos.**



*Dr Evan Arthur, (Group  
Manager, Innovations  
and Research Systems  
DEST) at the June  
Colloquium*

## ■ Repositories and the role of an APSR-like organisation – a submission to the e-Research Strategic Framework Committee

*The current work in digital repositories is contributing to the goal of realising e-Research as a ubiquitous set of practices within a seamless environment, used in the normal way by all knowledge workers.*

*While an element of e-Research will involve the provision of access to expensive equipment and computational resources through virtualisation, the concern is more with developing a broad-spectrum environment and facilitating its widespread use.*

Digital object repositories, structured either as institutional repositories or discipline repositories, have an obvious place in e-Research as the organised way that research materials, research data and scholarly output (at all levels of granularity) can be shared. There is an emerging set of open standards to facilitate repository practice.

There is a role for a national organisation to locate and disseminate this expertise. In the UK, this is being identified with the Digital Curation Centre (<http://www.dcc.ac.uk/>). Australia needs to develop an organisation that is suited to its particular set of research infrastructure. APAC has emerged as a particularly Australian approach to another element of the e-Research agenda.

### Specific recommendations

1. There should be recognition of the ongoing need for centres of excellence such as APSR
2. Repositories should be encouraged to act cooperatively in order to avoid duplication of effort in overcoming the many issues which face repository developers and their clients
3. Repositories should continue to build on existing expertise, in the same way as APSR is building on expertise already developed within the National Library of Australia
4. Funding for repositories should take into account the difficulty of providing long-term research support on the basis of short-term funding provision
5. Repositories should develop and maintain relationships with comparable organisations overseas in order to stay abreast of trends, share developments and optimise training opportunities
6. Repositories should provide support for community source software and middleware tracking and development
7. Future research funding should encourage participation in research projects designed to support data sustainability and in the development of appropriate skills. It should

reward deposition of research data, publications and other output

8. There should be encouragement of discipline-wide involvement in the development of standards and tools to ensure sustainability, and the maintenance of community-based repositories where these serve as a reference model

*For further information please contact Dr Brian Molinari ([Brian.Molinari@anu.edu.au](mailto:Brian.Molinari@anu.edu.au)) or Dr Adrian Burton ([Adrian.Burton@apsr.edu.au](mailto:Adrian.Burton@apsr.edu.au)).*

## ■ APSR 2005-2006 Funding Priorities

*So that you know what we have planned for the next 12 months – here is a list of the issues we are currently dealing with:*

- Integration of preservation metadata into open source repositories
- GIS metadata capture tool
- Documentation of issues related to storage and access of compound objects
- Guidelines for user/ community-centred services
- Broader data replication in conjunction with APAC (and associated generic middleware)
- Sustainable business models for repositories
- “Fedora in a Box” (documented distribution package of the software)
- Deepened participation in DSpace and Fedora development communities
- Customisation of DSpace/Fedora reporting (e.g. DEST reporting requirements)
- Documentation of good procedures and standards for byte stream protection
- Documentation of standards for Archival Information Packages
- I-Spheres middleware & generic tools to facilitate interoperability across repositories
- Develop XSD library for common data types (schemata)
- Sustainable models for word-processed documents
- Sustainable models for data sets (non-text)
- Collaboration with Arts Council
- Guidelines for “trusted digital repository” standard in higher education
- Sustainability risk analysis project review and case studies
- Implementation of risk notification tool in open source repositories (collaboration with NLNZ, and DCC)
- Compile library of APSR publications and tools
- Document issues with persistent identifiers in repositories

## ■ News from the partners

### *DSpace-in-a-box "Update"*

**DSpace-in-a-box**, the one-stop DSpace installation package, has been released and is now available from the Digital Resource Services downloads site <http://sts.anu.edu.au/drs/downloads/index.php>.

The software has been tested successfully under RedHat Linux 9.0, Fedora Core 3 and Fedora Core 4 and installs the latest stable version of the DSpace digital repository software.

**DSpace-in-a-box** provides an organisation with an easy installation process for the open source DSpace software, giving them easy means to run up an environment ideal for testing and evaluating a digital repository software system. DSpace comes with an easy-to-download and easy-to-install version. It is designed to work on Linux platforms. DSpace-in-a-box, as this version is being named, will give an organisation a simple "in" to establish a repository. It comes with straightforward, web-based user interfaces that let you add, manage and distribute material in your repository. More information on DSpace is at <http://www.dspace.org>.

Contact: *Scott Yeadon*, [scott.yeadon@anu.edu.au](mailto:scott.yeadon@anu.edu.au)

## ■ University of Queensland

The University of Queensland is developing software for a flexible, digital repository and workflow management system, which will be released under open source licence by the end of 2005. The digital repository software is PHP and MySQL based and works as a front end and administration tool above Fedora.

The digital repository will be able to handle an infinite number of document types, such as PDFs, ASCII text, HTML, digital audio and video formats, and image files. <http://www.library.uq.edu.au/escholarship>

Contact: *Belinda Weaver*, [b.weaver@library.uq.edu.au](mailto:b.weaver@library.uq.edu.au)

## ■ University of Sydney SORRT

The University of Sydney Library has adopted DSpace as its institutional repository platform and has installed for testing the version developed by ANU. The implementation stage, including piloting with several internal communities, is taking place over the coming months. Sydney will also investigate (separate to the APSR) use of Cocoon software to facilitate the publication of selected content through the Sydney University Press print-on-demand service.

DSpace will be one part of the distributed repository environment that Sydney is addressing through the SORRT (Sustainable Object Repositories for Research and Teaching) project that is part of the APSR test-bed program. The SORRT project addresses issues around the sustainability of distributed discipline-based data repositories. One part of the SORRT project,

developed in association with the Archaeological Computing Lab at Sydney, is the provision of open source middleware – iSpheres - to serve a range of digital objects across distributed heterogeneous data repositories. The first stage of this development – iSpheresImage – is being introduced into the wider Sydney test-bed, beginning with Archaeology, Architecture, Botany and Pathology image collections.

A key part of the Sydney project is the development of a set of sustainability guidelines that will act as a checklist and resource for developing sustainable object repositories. These guidelines are being developed in conjunction with the NLA, and will provide advice about best practice standards in process, formats, storage and access as well as advice on general management.

Contact *Ross Coleman*, [r.coleman@library.usyd.edu.au](mailto:r.coleman@library.usyd.edu.au)

## ■ APAC – The National Facility

The Australian Partnership for Advanced Computing, APAC, provides APSR with expertise relating to grid technologies and advanced computing.

APAC supports EResearch for practitioners through the provision of peak computing facilities, support to community-based data collections, seamless access to the computing and information infrastructure including collaborative visualisation, computational steering, tele-presence and virtual organisation support.

The main users come from the disciplines of biology, chemistry and physics.

<http://www.apac.edu.au>

## ■ APSR Data Sustainability Survey

Kevin Bradley and Margaret Henty are currently conducting a survey at the three APSR partner institutions. The aim is to gather information about data collections which will be used to develop guidelines for preservation metadata and to help with risk assessment, both integral parts of the APSR agenda.

Interviews are being held with researchers and other collection managers in the three institutions. The collections being surveyed include individual research projects as well as the multidisciplinary collections held by archives, libraries and digital publishers. Both quantitative and qualitative information is being gathered about collections, practices and expectations.

Preliminary results of the interviews and the statistical analysis should be available later in 2005. This information will be used to help with the implementation of a relevant preservation metadata scheme, the assessment of risks associated with particular formats, the planning and implementation of format support and the development of ingest and migration strategies.

Contact: *Kevin Bradley*, [kbradley@nla.gov.au](mailto:kbradley@nla.gov.au)

## Meet Dr Adrian Burton



Adrian comes to APSR from the discipline of Asian Studies via teaching and learning technology support. A specialist in South Asian languages, Adrian did his doctoral research in the archives of Rajasthani palaces amongst the 500 year old manuscripts. Destiny preparing him for work in "long term" preservation - we're sure you'll agree.

Teaching Hindi and Sanskrit over the last ten years, Adrian developed an interest in font and document technologies. Adrian supplemented his income with work as a network/ systems admin (as specialists in arcane and obscure fields tend to have to do!). From there, a leap to teaching and learning technology support seemed logical at the time, and Adrian was to blame for academic liaison in the ANU's Division of Information.

Cross-pollination with the ANU's Digital Repository Services program drew Adrian into the even more arcane world of XML technologies. Soon that cross-pollination became grafting as Adrian took up the position of APSR project leader.

Outside of the office (when is that?) Adrian is a keen gardener, bush-stroller and traveller (specialising in tsunamis and bomb blasts so far this year).

Contact: Adrian Burton, [Adrian.Burton@apsr.edu.au](mailto:Adrian.Burton@apsr.edu.au)

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## Around the traps ... Send your suggestions to [Adrian.Burton@apsr.edu.au](mailto:Adrian.Burton@apsr.edu.au)

### Conferences and events

#### **Establishing a Digital Repository Service Workshop Series**

Canberra - 3<sup>rd</sup> August 2005

Sydney - 10<sup>th</sup> August 2005

Brisbane - 16<sup>th</sup> August 2005

Melbourne - 24<sup>th</sup> August 2005

See the APSR website for further details.

#### **Sustainable Environments for Large Data Sets - Workshop - in conjunction with APAC - Canberra**

Dr Reagan Moore, San Diego Super Computer Centre

<http://www.sdsc.edu/~moore/rmoore.html>

- 29<sup>th</sup> & 30<sup>th</sup> September 2005

29<sup>th</sup> September - Public Lecture

30<sup>th</sup> September - Workshop

#### **Forthcoming**

An **Open Repositories Forum** will be held in Sydney in February 2006. Stay tuned for further details.

#### **Next issue?**

Be the first to know ... join the APSR Announcements email service at:

[http://mailman.anu.edu.au/mailman/listinfo/apsr\\_announcements](http://mailman.anu.edu.au/mailman/listinfo/apsr_announcements)

### Publications

*APSR Sustainability Issues Discussion Paper 28*  
January 2005, by Kevin Bradley. Available at:

[http://www.apsr.edu.au/documents/APSR\\_Sustainability\\_Issues\\_Paper.pdf](http://www.apsr.edu.au/documents/APSR_Sustainability_Issues_Paper.pdf)

Discusses the specific tasks required to meet the APSR milestones. It is structured around a range of identified issues, including a summary of the topic and reference to key texts.

*The Australian National University: DSpace Testbed Program.*

[http://www.apsr.edu.au/documents/DSpace\\_testbed\\_program.pdf](http://www.apsr.edu.au/documents/DSpace_testbed_program.pdf)

This report is in five parts: Major contributions to the open source development of Dspace, Dspace-in-a-Box, Dspace Cocoon Trial, ANU Institutional Repository Policy, Project reviews and case studies and Collaboration with Music Australia.

See the APSR website for further publications and testbed reports.

"Eternal Bits: How can we preserve digital files and save our collective memory?" by MacKenzie Smith. *Spectrum Online*, July 26, 2005. See

<http://www.spectrum.ieee.org/WEBONLY/publicfeature/jul05/0705bit.html>

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## The APSR partners



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