

The ARROW Project: A consortial institutional repository solution, combining Open Source and proprietary software.

David Groenewegen

The ARROW Project, Monash University Library, Building 4, Monash University, Victoria
3800, AUSTRALIA
{david.groenewegen@lib.monash.edu.au}

Extended abstract

The Australian Government's Department of Education Science and Training took the view of institutional repositories as a mission-critical infrastructure component to supporting scholarship, facilitating stewardship, and advancing the global recognition of Australian universities as among the world's finest in academia. To that end, the ARROW project commenced work in February 2004 with the objective of developing best of breed solutions for open access institutional repositories and electronic publishing in Australian universities over three years.

The ARROW consortium consists of Monash University as the lead institution, Swinburne University of Technology, the University of New South Wales and the National Library of Australia. ARROW decided to have the main modules built on top of Fedora (<http://www.fedora.info/>) and written by VTLS (<http://www.vtls.com>). ARROW licensed the VTLS product VITAL and has been working with them to extend the functionality of Fedora by commissioning a series of Open-Source Web Services. This has been a true partnership, with significant transfers of intellectual property in both directions. ARROW is also trialing the Open Journal Systems software (<http://www.pkp.ubc.ca>).

While initially a research project, ARROW has now developed a workable institutional repository solution which, with the release of VITAL 2.1, meets many of the requirements for a repository capable of storing a wide range of digital objects. The 2006 work plan including XACML access control implementation and a variety of other improvements.

A complementary activity of ARROW has been the development and testing of national resource discovery services (developed by the National Library) using metadata harvested from the institutional repositories.

I propose to offer an overview of the progress of the ARROW project, which has been developed within the following three stage framework:

1. conceptualising and developing an ARROW institutional repository solution comprising software, policy frameworks and implementation strategies,
2. implementing the ARROW repository within the project's partner institutions, and
3. offering the ARROW repository solution to other Australian universities.

I will discuss the decisions the ARROW project made at the outset and provide a review of those decisions after two years of operation. I will also look forward at ARROW's plans for 2006 and ongoing development work.

Repositories using the ARROW solution are currently in place at:

Monash University: <http://arrowprod.lib.monash.edu.au:8000/access/>

National Library of Australia: <http://search.arrow.edu.au/>

Swinburne University: <http://researchbank.swinburne.edu.au/>

University of New South Wales: <http://arrow.unsw.edu.au/>

New partners include:

Central Queensland University: <http://www.cqu.edu.au/>

Queensland University of Technology: <http://www.qut.edu.au/>

University of South Australia: <http://www.unisa.edu.au/>

University of Southern Queensland: <http://www.usq.edu.au/>

University of Western Sydney: <http://www.uws.edu.au/>

In 2006 the project is focusing on:

- Working to develop more functionality for VITAL
- Access and authentication issues, including incorporating
 - XACML
 - MAMS
 - Shibboleth
- Metadata interoperability
- Development of support for the Research Quality Framework process
- Improved usability and services
- Better provision and integration of tools and functionality for both submitters and managers
- The creation of an "ARROW community"

The challenges and strategies for dealing with these issues will also be discussed.