

Project Objectives and Strategies

1 To develop regional research repository infrastructure based on software and best practice outcomes of the FRODO projects.

1.1 Objectives

- To find synergies between the four FRODO projects and assess the practical implications of their roll out to regional universities.
- To work collaboratively with the FRODO projects wherever possible to avoid duplication of effort and to learn from experience already gained by existing projects.
- To establish USQ as an exemplar site demonstrating FRODO best practice.
- To document implementation issues from a regional perspective.
- To build organisational capability and provide assistance to a significant number of regional universities, resulting in embedded and sustainable repository and information infrastructures beyond the funded project.
- To develop advocacy and promotional tools for use by other regional universities.
- To act as the conduit between the FRODO projects and regional universities for ongoing infrastructure development issues.
- To monitor best practice as it continues to emerge in this developing field.

1.2 Strategies

- Develop appropriate alliances with the FRODO projects[1]and other regional universities to consider deployment issues in a broader context.
- Implement solutions emerging from FRODO in the USQ environment, initially exploring ARROW and DSpace software to assess suitability for wider deployment.
- Investigate solutions such as MAMS and their application to the USQ environment and RUBRIC partners as a case study for wider deployment in a MAMS federation.
- Incorporate documentation already available, such as checklists produced by APSR.
- Document implementation procedures and regional issues for further consideration by FRODO and RUBRIC project teams. This is likely to include aspects such as hosting services, ongoing collaboration and integration issues such as ensuring the MAMS access management solution works in an institutional repository environment.

Develop audit, advocacy and promotional tools covering deployment issues such as:

- Reasons for institutions to develop repository based research infrastructure
- Compelling cases to sell concepts locally

- Skill assessment (required vs available)
- Requirements assessment for archiving role in the organization
- Availability of other database support which could be adapted
- Ways to establish dialogue mechanisms for discussion of issues such as rights management policy
- Data quality issues relating to data capture, entry and re-use
- Integration of repositories into institutional research and scholarly information infrastructure
- Use project management techniques, enhance project management capability and engage with academics and researchers to ensure repository infrastructure is in place and gains critical mass[2] at partner institutions.

2 To develop a set of support services to sustain the collaborative development of distributed research information networks across regional universities.

2.1 Objectives

- To determine the level and nature of support services that regional universities need to implement and sustain research information networks.
- To explore support and sustainability issues in a national and international context, building on experience already gained in these areas by the FRODO projects

2.2 Strategies

- Resolve and document support issues.
- In consultation with the FRODO projects, develop technical services support strategies and systems that can be specifically utilized by regional partners.
- Provide mentoring and assistance in embedding support services into existing support infrastructure (eg existing Help Desk systems) at partner institutions.
- Build critical mass in terms of commitment to repository infrastructure by partner institutions as a key sustainability issue.
- Use the partnership with Massey University in New Zealand to determine whether regional issues are consistent in an international context as a means of contributing to the wider exploration of research repository infrastructure internationally.
- Consider the practical issues of managing and sustaining multiple repository models (ARROW, DSpace, ADT and other commercial or in-house repository platforms).

3 To use demonstrators implementing pilot repository infrastructure in research universities to explore the leadership roles that regional universities can take in larger collaborative arrangements

3.1 Objectives

- Establish and participate in formal relationships with existing FRODO projects and newly funded SII projects, so that RUBRIC can bring regional issues to the table and learn from the experience already developed in existing project teams.
- Establish a formal cross-sectoral partnership with the University of Newcastle as a conduit to the IRUA group through which RUBRIC can:
- Explore “quick start” methods of repository population
- Provide partner libraries with demonstrable systems to use for advocacy purposes and further exploration of repository issues
- Explore mentoring methodologies for distributed support infrastructure

3.2 Strategies

- Work with a select number of partners to act as a test bed and sounding board for the broader rollout of the research repository solution. Partners have been selected on the following characteristics:
- Small or regional universities
- Expressed need to manage research data effectively
- Expressed interest in collaborating on research infrastructure
- Actively participate in appropriate user and advisory groups to ensure regional universities’ needs are defined and catered for as part of a national strategy.
- Obtain and load citation data into IRUA institutional repositories to evaluate the effectiveness of batch loading as a strategy for repository population.
- Establish mechanisms for open linking between batch loaded metadata and full-text content subscribed to by member institutions (within licensing limitations).
- Build project management capability at IRUA universities to ensure that repository population occurs and that local expertise is developed to sustain ongoing activities

4 To deploy the DEST/JISC framework as a planning, dissemination and implementation support tool for infrastructure development

4.1 Objectives

Under the guidance of lead consultants Kerry Blinco and Jane Hunter, utilise the DEST / JISC e-Framework in an institutional context and contribute nationally and in collaboration with international partners to the development of the e-Framework as a sustainable planning, dissemination and implementation support tool for the orderly development and evolution of cost effective technical infrastructure.

4.2 Strategies

- Collaborate with DEST /JISC in the development of processes and guidelines for sustainable development of the e-Framework framework including community participation and dissemination of project outcomes.
- Assist the FRODO and other identified key Australian projects to understand and engage with the e-Framework development processes, and assist in identifying and documenting best practice and innovative outcomes into the e-Framework.
- Use the e-Framework as a dissemination tool to synthesize lessons learned and innovations in the RUBRIC project into best practice and wider community guidance.
- Collaborate with the Australian community and DEST international partners to develop a focused repositories reference model within the context of the e-Framework and define the repositories service interactions required to support the reference model.
- Collaborate with the Australian community and DEST international partners to develop solutions to identified gaps in the e-Framework.
- Explore the use of the e-Framework as a tool in the planning and development of institutional infrastructure that provides cross linking between e-research scholarly information and e-learning.
- Develop Australian capacity and capability to participate in and influence international standards and specifications activities relating to the national requirements expressed in the e-Framework giving priority to repository infrastructure and links between e-research, scholarly information and e-learning.
- Monitor and participate as appropriate in related international research and repository infrastructure standards and reference model activities.

5 To develop new processes and tools to exploit the natural progression between e-Research and e-Learning for regional universities where research and learning are closely aligned

5.1 Objectives

- To achieve significant sustainable outcomes for regional universities' research output so that it can be managed, made accessible and re-used through collaboration, enabling regional universities to remain competitive in the national arena.
- To explore and test compatibility issues with FRODO solutions where other repositories may exist or be under development (such as ICE and GOOD at USQ).
- To explore workflow issues between repository systems where multiple repositories can be seen as nodes in a distributed information landscape.
- To explore new paradigms for data capture, storage and recombination (including automatic aggregation) of research objects and their impacts on allied educational processes (such as the teaching environment).

5.2 Strategies

- Engage and involve academics and researchers in the life-cycle management aspects of their data including data format aspects and guidelines for data capture.
- Collaborate with IT Directors in partner institutions and projects such as MAMS to discuss strategies for managing authentication issues across a range of repository models, associated research applications and existing institutional infrastructure.
- Promote advantages of standardised processes as opposed to ad hoc processes to capture research data.
- Collaborate with regional partners so that specialist knowledge and technical expertise that is required to build infrastructure of this nature is widely available.
- Document and promote data management issues such as data capture, quality (accuracy, completeness and consistency), standards and templating.
- Explore granular data harvesting and manipulation (eg Tables of Contents) as a development of metadata harvesting and storage of blobs[3].
- Investigate and develop automatic aggregation tools that pull together research output, including research assessment data required by DEST and learning objects.

[1] Preliminary contact has been made with the existing four FRODO projects

[2] Definition: "a size, number, or amount large enough to produce a particular result" (Merriam-Webster Dictionary, <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=critical+mass>). For RUBRIC partners, the amount will vary according to university size and research output.

[3]Definition: "Binary Large Object, something that (e.g. within the context of XML) is

treated and gets stored as a whole without further structuring efforts.”
<http://www.auditmypc.com/acronym/BLOB.asp>