Queensland University of Technology

Developing research data management services at QUT

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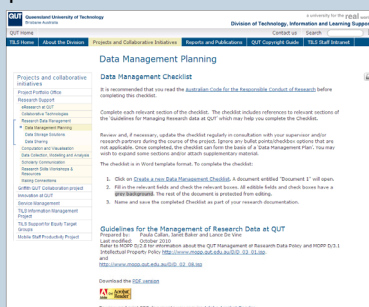
Introduction

QUT Library and the High Performance Computing and Research Support (HPC) Team have been collaborating on developing and delivering a range of research support services, including those designed to assist researchers to manage their data. QUT's Management of Research Data policy has been available since 2010 and is complemented by the Data Management Guidelines and Checklist. QUT has partnered with the Australian Research Data Service (ANDS) on a number of projects including Seeding the Commons, Metadata Hub (with Griffith University) and the Data Capture program. The HPC Team has also been developing the QUT Research Data Repository based on the Architecta Mediaflux system and have run several pilots with faculties. Library and HPC staff have been trained in the principles of research data management and are providing a range of research data management seminars and workshops for researchers and HDR students.

Framework

The Management of Research Data policy (1) was released in March 2010 to provide a framework for the University, and in response to the requirements of The Australian Code of Responsible Conduct of Research (2). The policy states that research data must be managed and should be made broadly available via open access for the purpose of sharing and re-use.

The Guidelines for the management of research data at QUT (3) expands upon the issues covered in "The Code" at "The Policy" and provides practical information on best practice around:

- Ownership of research data
- Storage and backup
- Data formats
- Documentation and metadata
- Privacy and confidentiality
- Retention and disposal of research data
- Access and re-use

The Checklist provides a practical template which researchers use to develop a research data management plan for their specific research project. The policy states researchers must develop a research data management plan.

Projects and Infrastructure

Seeding the Commons

QUT Library partnered with ANDS in 2009 and 2010 to undertake a project to conduct 195 interviews with QUT researchers about 424 research activities, the purpose of which was to gain a greater understanding of research data management practices at QUT, to inform researchers about the Policy, Guidelines and Checklist, to develop "Collection Records" describing QUT's research datasets, and ascertain the whereabouts and shareability of these datasets. Twelve records were migrated to

the ANDS Research Data Australia (RDA) service. QUT found that a broad range of ethical, contractual, privacy, cultural and project and researcher based issues restricted the availability of data.

Metadata Hub

In 2010 QUT partnered with Griffith University to implement the Metadata Hub system using the VIVO / Vitro system developed out of Cornell University. The Hub can aggregate metadata information from the research datasets with numerous data QUT sources (ResearchMaster, Research Activity Database, Staff Profiles, QUT ePrints) to create elements for Collection, Party and Activity records for the RIF-CS schema used by RDA. ANDS then harvests the RIF-CS records into RDA.

Data Capture

This project is developing software interfaces to a number of data intensive research projects (greenhouse gases, environmental health sensing data, artist performances) to deliver new workflows which will populate QUT's data repository, the Hub and ultimately RDA with data collection information. The software will be made openly available.
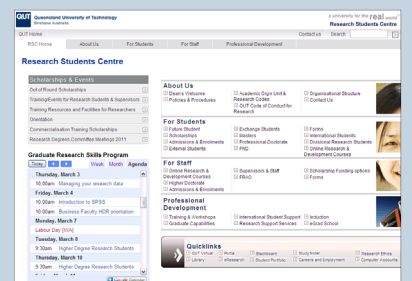

The Architecta Mediaflux system has been selected as the platform to provide a data repository for QUT research groups to manage and share data (4). Advice and support for other data services is also provided including, the ARCS Data Fabric and QUT corporate systems for collaboration and sharing such as SharePoint and Wikis. QUT's eStore system is a corporate data store that provides a safe networked storage for all faculties and institutes.

Researcher engagement

The Library and HPC provide a Research Support web site with information and registration systems for seminars and workshops. Programs are copied to the Google Calendar available from the Research Students Centre web site (5) so RHD students can find and register for all events at one location, regardless of the service provider within QUT.

During 2011, ten Research Data Management seminars will be offered to researchers, including HDR students. A range of other seminars will also be offered on topics ranging from statistics and online surveys to collaboration technologies.

References

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4. QUT, Research Data Management Solutions, 2010. Available at URL: http://researcherdata.qut.edu.au/
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