

The University of Queensland (UQ) is willing to act as either a central ANDS entity or as a “shoulder” service provider. UQ is used to working collaboratively with others in the sector and we believe that ANDS will only be achieved if a series of federated service providers gain both the trust of their constituency (such as universities or research facilities in their region) as well as that of other service providers. We believe that one of the service providers could act as “primus inter pares” and thus be the central entity. UQ would be prepared to act in this capacity or to act as a service provider if that is considered a more appropriate contribution to the sector. ANDS must integrate very closely with the Australian Access Federation (AAF) and there may be some value in bringing the two entities together.

No one institution or organisation has a monopoly on the necessary skillsets or could hope to provide, on its own, everything necessary to deliver the ANDS Services, which is why ANDS will be a co-operative effort by a number of institutions. It would be surprising if that effort did not include ANU, CSIRO, Macquarie, Melbourne, Monash as well as UQ but it is likely that there will be a number of others providing specialist skills. Each will have their own strengths; UQ believes its strengths to include:

## Federated Services

UQ has significant expertise in the development, deployment and support of FEZ, a web based digital repository based on the open source Fedora software, as a major part of the APSR project. This has already been deployed internationally in 5 countries. UQ is a leader in ORCA, a sub-project of APSR, which is the coordinating support for online research collections and is also the lead university for the AAF project. UQ brings to the AAF, very significant expertise in access services, supplemented strongly by the expertise of AusCERT. UQ/AusCERT are also leading the auEduperson Working Group, which aims to develop a common identity schema for Australian universities. The university has a representative on the management committee of the National Library Resource Discovery Service and has specific experience in both OAI harvesting and repositioning data between repositories through building interfaces between FEZ and LCMSs and Research Output repositories. In addition, the UQ ITEE eResearch Group are internationally-acknowledged leaders in the fields of metadata schema design; schema registries; interoperability; data management and curation; federated search and retrieval; preservation services - with over 20 years experience in the development of data archival tools and services for major institutions and significant involvement in both international standards and initiatives ( including Dublin Core, MPEG, W3C, OAI-ORE, NSDL, CODATA, DELOS, UK DCC, JISC, UKOLN).

## Outreach Services

UQ has a substantial capability in Outreach activities. Examples include the APSR consultancy service that is provided to other universities, the training service provided by AusCERT and the UQconnect ISP service. AusCERT has a strong reputation and provides subscription based 24x7 internet security services to universities, governments and private industry; all Australian universities are members and have a trust relationship with the group. AusCERT undertakes very significant training activities with courses being delivered to universities, private industry, governments and police. The group has operated recently in 27 countries with one of the most recent engagements being the training of the national CERTs in Mexico, Chile and Peru, on behalf of APEC. As UQconnect, the university is a full Internet Service Provider (ISP) delivering services to students, staff, alumni and the general public. With over 65,000 users, UQconnect has considerable experience in providing service to users ranging from home internet users to users of High Performance Computing Systems. As an ISP, the university already runs a help desk service with extended hours and is planning to enhance this to a 24x7 capability within the next 18 months.

## Stewardship Services

UQ has considerable experience in the delivery of curation and collection management services and the dissemination of best practice, through its work on FEZ. As a data service provider, the university already manages over a petabyte of data storage, both for its own use and for the Queensland Cyber Infrastructure Foundation (QCIF). The majority of QCIF data storage is located at UQ and UQ ITS supports it under a formal Service Level Agreement (SLA). As the lead university in developing the proposal for a federated, collaborative and highly distributed data service involving all the universities in Queensland and Northern NSW, (QADDS), UQ is experienced in brokering solutions for data services.

## Governance

UQ ITS has adopted ITIL and is formally accredited under the ISO 9001:2000 international standard with full external audits every 6 months to maintain this accreditation. There is an established project office, based in ITS, which is accredited under these arrangements has adopted a formal project management methodology. We see the governance of ANDS being collaboratively achieved through the formation of a steering committee of major providers with the central entity providing a chair and overall project manager. The overall Project Manager would be supplemented by project managers for sub-projects undertaken by other providers. UQ is capable of providing significant project management expertise to support this activity and believes that there may also be potential for a link with the governance process that UQ is developing for the AAF project.

**UQ contributes to a large number of collaborative projects within Higher Education and Research. These include:**

**Australian Access Federation (AAF), CAUDIT/Grangenet PKI (CPKI), eSecurity Framework (eSEC), Middleware Action Plan and Strategy (MAPS), auEduperson Working Group (auED), Australian Partnership for Sustainable Repositories (APSR), Australian Research Enabling environment (ARCHER), Data Acquisition accessibility and annotation eResearch Technologies (DART), Online Research Collections Australia (ORCA), Regional Universities Building Infrastructure Collaboratively (RUBRIC)**

**And contributes significantly to, or manages, the following collaborative groups, organisations or conferences:**

**Australian Computer Emergency Response Team (AusCERT), Queensland Regional Network Organisation (QRNO), International Systems Security Professional Certification Scheme (ISSPCS), Queensland Advanced Distributed Data Service (QADDS), Questnet, Queensland Cyber Infrastructure Foundation (QCIF), Queensland Facility for Advanced Bioinformatics (QFAB), eResearch Australasia Conference 2007**

Also Nick Tate is a director of both AARNet Pty Ltd and HES Pty Ltd, Graham Ingram is a member of the AUDA names panel, Professor Bernard Pailthorpe is CEO of QCIF and Professor Mark Ragan is the chair of the board of QFAB

**Bold type** indicates projects or activities where UQ is or has been the lead institution

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**UQ has a number of experienced staff who are willing and able to contribute to the provision of ANDS. These include:**

Professor Paul Bailes [ARCHER] ,Andrew Bennett {APSR, ORCA}, Ron Chernich {DART, ARCHER}, Chris Christoff {QRNO}, Professor Jane Hunter {APSR, DART, ARCHER, RUBRIC, GrangeNet}, Graham Ingram {AUDA}, Robert Mead {AAF}, Dr Rodney McDuff {CPKI, eSEC, AAF, auED}, Patricia McMillan {AAF, MAPS, auED}, Mark McPherson {AusCERT}, Professor Bernard Pailthorpe {QCIF}, Viviani Paz {CPKI, eSEC, AAF, auED}, Professor Mark Ragan {DART, ARCHER, QFAB}, Nick Tate {CPKI, eSEC, AAF, MAPS, DART, ARCHER, AusCERT, ISSPCS, QRNO, QADDS, AARNet, HES}, Keith Webster {APSR, ORCA}, Professor Xiaofang Zhou {DART}, John Zornig (eSEC, AAF)

{ } indicates participation in projects or activities