

# MAMS Test bed Federation Mini-Grant Application

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This application fulfils the selection requirements of a **Category A**. It will provide a combination of multiple valuable SPs plus a whole of institution IdPs for the five Universities in Western Australia.

## **The institution, the person/group applying for the grant, and the person/group conducting project tasks**

Curtin University of Technology in collaboration with the Western Australian Group of University Librarians (WAGUL) i.e. Edith Cowan University, Murdoch University, Notre Dame University and University of Western Australia. All five Universities are Partners in the MAMS Project.

### **Project sponsors**

Curtin University:	Imogen Garner, University Librarian Des Thornton, Director, Information Management Services
Edith Cowan University	Jeff Murray, Director, Knowledge & Information Technology Services Centre
Murdoch University	Margaret Jones, Director Library Services
Notre Dame University	Stephen McVey, Director of Libraries
University of Western Australia	John Arfield, University Librarian

### **Project Manager**

Lib Parisotto (Research Services Librarian, LIS, Curtin)

### **Key Stakeholders**

Peter Green (Information Technology Librarian, LIS, Curtin); Ian Hill (Associate Director – ICT Infrastructure, IMS, Curtin); Maureen Murray (Associate Director, Business Solutions, IMS, Curtin); Stephen Trefry (Information Technology Manager, Library, UWA); Mario Pinelli (Computer Services and IT Security Manager, Murdoch University); Mike Hawley (Manager Administrative Services, Murdoch University); Rod Brown (Information Technology Department, University of Notre Dame Australia); Dan Archibald (Manager, Library Services, ECU) and Peter Austin (Snr Infrastructure Systems Admin, ECU).

## **Project goals, objectives and deliverables**

### **Goals:**

- To provide a federated authentication infrastructure for the students and staff of the five WA universities as a replacement for the current authentication system (i.e. based on the WALAP Project ) used by their respective libraries
- To test its feasibility and workability in relation to other large scale projects either under way or being considered.

### **Objectives:**

- Establish all five WA universities as Identity/Service providers in the Federation
- Promote the growth of the MAMS Federation test bed
- Replace the WALAP Project infrastructure (i.e. eTrust) with an open source authentication and authorisation infrastructure to reduce administrative overheads, improve security and simplify the process of authentication for clients.

- Use the opportunity offered by the project to expand the Service Provider infrastructure to cater for other projects e.g. EDURoam, LATN Offshore Information Literacy Program, WIKIs, and existing systems, e.g. espace@curtin (Curtin's e-repository currently based on ePrints). Service Providers could potentially also be set up for reciprocal access to Murdoch and Macquarie's Online Librarian service, the WAGUL LIDDAS system when VDX is Shibboleth enabled and AARLIN.

#### **Deliverables:**

- Three WA Universities join the Federation as IdPs in 2006 and the other two in 2007
- Two WA Universities join the Federation as functioning SPs
- An authentication and authorization infrastructure that enables the WA Universities students and staff to access resources and services across the WAGUL libraries and more broadly the Universities.
- On going commitment to continue to contribute to the federation as both a SPs and IdPs

#### **Selection Criteria – Category A**

This application fulfils the selection requirements of a **Category A**. It will provide a combination of multiple valuable SPs plus a 'whole of institution' IdPs for the five Western Australian universities.

#### **1. Potential of the proposal to promote the growth of the Testbed Federation for Australian Research Effectiveness**

While the initial involvement is limited to the five WA universities, being part of the Testbed opens the doors to promote further expansion in the higher education and research sectors in Australia and internationally. Initial focus is on shared teaching and learning programs and possible gains in research training effectiveness through the sector wide provision of high value resources. The MAMS project will underpin wider research applications.

#### **2. Relevance to Backing Australia's Ability & Systemic Infrastructure Initiative goals**

Upgrades systemic infrastructure to meet the needs associated with the authentication and authorization of WA universities reciprocal students and staff. This service can be expanded to cover reciprocal borrowers from all Australian universities that become part of the Testbed Federation. The project has relevance to the Backing Australia's Ability by facilitating research collaboration (e.g. State and National Research Centres where the five Universities are involved) and the probable sharing of raw data, e.g. the Square Kilometer Array project, etc.

#### **3. Technical excellence of the proposal**

This proposal provides all required application content and responds to all of the selection criteria as requested in the MAMS Testbed Federation Mini-Grant Application Package.

The proposal has been developed by Curtin University's Library and Information Service in collaboration with Curtin University's Information Management Services and WAGUL. Approval of the Mini-grant will allow Curtin to expand its Federation capabilities from an Identity Provider to a Service Provider and bring three of the other WA universities into the Testbed. (Murdoch University together with Macquarie University is currently planning to join the federation in the context of their shared Online Librarian service).

#### **4. Relevant experience of the proposed Project Team**

The project team has extensive experience due to their involvement in the WA Libraries Authentication Project which assisted in the development of an authentication infrastructure to allow WAGUL libraries to provide better access to resources and the setting up of Curtin as an IdP provider as part of the e-Grad School initiative. Currently Curtin is in the process of

completing the requirements of a Level 1 Testbed Federation, and as noted above Murdoch is also engaged in joining the Federation.

## **5. Relevant project management experience**

Local Project management guidelines are followed. The tasks, schedule and risk assessment of this project are attached. Curtin's LIS took the leadership role in project managing the WALAP Project.

## **6. Involvement with the MAMS project to date**

All the WA Universities are MAMS Project Partners and have participated in the following MAMS/Middleware workshops and events

- MAMS 1-Day Workshop, Perth 21 October 2004 (All)
- Australian Middleware Forum 2004 and Campus Architectural Middleware Planning (CAMP) Workshop 7 - 11 December 2004 Griffith University, Gold Coast, Queensland (Curtin and ECU)
- MAMS Seminar Perth, Friday, 18 March 2005 (All)

## **7. Commitment to continue to contribute to the Federation as an SP and/or IdP until at least the end of 2007**

WAGUL views the being part of the Federation Testbed as a serious and permanent undertaking. Given that the eTrust license expire early in 2007 WAGUL would want to have the Shibboleth authentication in place by the end of 2006 so it can be put through a thorough testing regime.

The Shibboleth implementation at Curtin will give organizational units within the University, eg Library and Information Service, the ability to share and work on ATN related projects, e.g. the LATN Offshore Information Literacy Program. In addition it will facilitate collaborative research with other Universities. In all, the inclusion of the five Western Australian universities to the Testbed Federation (currently populated by Eastern Seaboard universities) will lead to a truly 'federated' outcome.

Murdoch too will have an involvement not only with the other WAGUL institutions but also with Macquarie University, and the potential for further collaboration in future in the context of IRUA, of which the two universities are members.

## **8. Proposal does not duplicate work already expected from funding received**

While Curtin is part of the e-Grad School no funding has been received from QUT as a result of their successful MAMS Mini-Grant application. No other funding has been provided.

## Tasks and Schedule

Task Name	Time	Start
<b>Develop Project framework</b>	1 month	July 2006
- Meet with Team		
- Discuss timelines and outcomes		
<b>Three Universities to set up an IdP</b>	1 month	August 2006
- Configure IdP to integrate with existing directory infrastructure		
- Add to level 1 Federation for testing		
- Convert to Level 2		
<b>Curtin to Shibbolize the Reciprocal Workstation Authentication</b>	2 months	September 2006
- Convert current Authentication to SP level 2		
<b>ECU to Shibbolize the Reciprocal Borrower Check System</b>	2 months	September 2006
- Convert current Check system to SP level 2		
<b>Test Reciprocal Workstation Authentication and Reciprocal Borrower Check System</b>	1 month	November 2006
<b>Go live</b>		December 2006
<b>Development and delivery of the Federation Activity report</b>	2 months	January 2007

## Risk Management Plan

<b>Risk Event</b>	<b>Likelihood</b>	<b>Consequence</b>	<b>Rating</b>	<b>Treatment Strategy</b>
Loss of key staff (Curtin)	Possible	Moderate	High	Have more than one person trained to implement Shibboleth
Project timelines not being met (Curtin)	Possible	Major	High	Project manager to deal with issues likely to impact on timelines
Hardware constraints (Curtin)	Unlikely	Minor	Low	Ascertain that funding for hardware has been taken care of
One or more University not being able to meet deadline (WAGUL)	Likely	Moderate	High	Project manager to deal with issues likely to impact on timelines
Lack of expert staff (WAGUL)	Possible	Moderate	High	Curtin to provide assistance
Lack of co-operation between libraries and IT within a university (WAGUL)	Possible	Moderate	High	Ensure that the IT Support at each University agrees before start of project
Difficulties with implementing/integrating Shibboleth due to firewall infrastructure (WAGUL)	Possible	Moderate	High	Curtin/ MAMS to provide assistance