MEMORANDUM

Date 26 August 2011
To Professor Daine Alcorn, DVC(R&I)
From Professor Heinz Schmidt, e-Research Director
Cc Mr Steve Somogyi, VP Resources and Chair ICT SC
Mr. Brian Clark, Executive Director, ITS
Subject E-Research Director’s Report

Dear Prof Alcorn,

This memo provides a brief report on eResearch activities over the past few months. I wish to bring to your attention in particular a significant problem RMIT researchers are facing in relation to access to the Petabyte research store acquired end last year by ITS with approximately $2M CIRB funding for research support. To date this is still not accessible to researchers. The eResearch Office and Schools continue to invest in research storage outside the central store due to lack of access—a waste of resources. More importantly, a few contract eResearch data curation projects in cooperation with SEH and DSC Schools are at risk of not delivering on time, according to contract with the Australian National Data Services (ANDS) and the Victorian eResearch Strategic Initiative (VeRSI). One of the systems being tailored under contract for two of the Applied Science school’s strongest research groups (by CAT1 funding and publications) also includes a generic curation portal ‘Publish My Research Data’ which when delivered as part of this ANDS service, will provide a generic data curation entry to RMIT researchers into the Petabyte Store and would permit Schools to begin migrating research data from School servers to the designated institutional research data repository. I suggest a meeting with Brian Clark with the aim to reprioritise accessibility of the Petabyte Research in ITS.

Publicity/Events

1. NeCTAR Workshops: In late August, RMIT eResearch will attend two NeCTAR workshops scheduled to assist the formation of consortia for bids to the National eResearch Collaboration Tools and Resources (NeCTAR) program.
2. EResearch Australasia Conference Nov/2011: Three of our papers submitted to this conference were accepted. RMIT eResearch will present and demonstrate a couple of our projects, notably on data curation implementation and agile eResearch software project management with user (researcher) participation. We will also deliver a joint paper with eResearch groups at Monash University and the University of Melbourne on the myTardis curation platform and its various customisations tailored to specific research lab practices and processes.

Research Data Curation

Our two ANDS projects, in screen media and supercomputing research data curation, which started late 2010 and/or at the beginning of 2011, are progressing well and according to plan. ANDS have been fine-tuning the processes, templates and web services for dealing with a variety of university systems and projects across the country. This has caused some minor delays but will serve the community by improved documentation, increased knowledge and skills sharing, and more streamlined curation processes from institutional repositories to national repositories maintained by ANDS. We are on track for the next major milestone. First pilot RMIT data collections are visible in the ANDS Commons on national meta data repository servers.
ANDS will be funding work on central institutional research repositories. The funding will not go directly to universities but to the providers/developers of the software for deploying these platforms on systems of interested universities. A list of ANDS funded curation platform will be discussed in the upcoming RTAG meeting. In a recent meeting with ANDS I have flagged strong interest in this support and hope to be able to dovetail current evaluation of curation platforms with this so we can get indirect ANDS funding as we roll out future discipline-specific platforms.

Improving e-Research support of RMIT researchers
The Campus Cloud has grown to a set of over 2500 teaching lab machines utilised opportunistically for research compute jobs when lab machines happen to be in standby, i.e., without users and without load. This has been operational for some months on a small scale and for voluntary test users from the research community. Only over the past couple of weeks, firewall and other RMIT network related issues were resolved to scale this cloud up to use all these machines concurrently (for example, issues with firewalls and connections automatically terminated after predefined timeouts). Now that these up-scaling obstacles are removed, we are aiming to complete user documentation before advertising this facility more widely to researchers and research students in the course of this current semester.

eResearch Collaborations

1. The VeRSI partnership was extended on 31. July, by one year, with an enlarged membership (including RMIT) and Victorian Government grant allocation of $2M.
2. The Victorian Partnership of Advanced Computing (VPAC, located in B91 on campus) was extended to the end of 2012. Under the new arrangement, a significant portion of our researchers’ demand in high-performance compute time on VPAC supercomputers will now be tracked under a fee-for-service agreement. Also any direct advice or specific projects, such as building LIEF-funded clusters or connecting RMIT HPC infrastructure into the national HPC grid will be tracked and costed under the fee-for-service agreement.
3. As part of my international participation in the European FP7 research project ASCENS, the eResearch team investigates the extension of the Campus Cloud to on-site eResearch servers across three universities, in collaboration with ASCENS researchers in the University Pisa, Munich and Zimory GmbH (a German cloud service provider and spinoff of the German Telecom). The evaluation will determine the feasibility of self-managed clouds compatible with the Amazon Elastic Cloud in a university environment and determine practical issues in cross-university research cloud management. A secondary goal of this evaluation is the preparation of a joint multi-university proposal to NeCTAR under their ‘Research Cloud’ program for funding in 2012.

Kind Regards,

Prof. Heinz Schmidt
Director, e-Research