

SIRCA Capability Statement for ANDS

SIRCA has been specifically structured as a multi-university cooperative to maximise opportunities for collaborative activities directed at building and enhancing e-research services for the financial, economic and broader social sciences academic community. Supported by DEST (via SII) and in collaboration with its 29 Australian and New Zealand Universities along with many government and industry partners and a growing number of international universities, SIRCA has emerged as a global leader specialising in financial e-research services. SIRCA is well positioned to leverage its substantial and proven infrastructure for the benefit of the wider e-research community.

SIRCA has proven capability in the following areas:

- SIRCA is the **trusted custodian** for major global and local protected data sets comprising fine grain (mili-second) historical time series financial, economic, environmental, and social events. Most of this event stream data is sourced from real-time market transaction and news feeds and is probably the world's largest social science related data repository in the world (capturing between 20,000 and 100,000 messages per second).
- Significant experience in **liaising with global commercial data providers** on behalf of academics including commercialization, legal and intellectual property issues. Effectively managing relationships with data providers on behalf of academics has been a key to SIRCA's success.
- Proven expertise in the **management, access and delivery of historical time series event data** including expertise in the coordinated analysis and curation of multiple data types, such as combinations of numerical, textual, geographical and time-series data.
- An "industry strength" **application development capability** comprising around 20 full-time software engineers and quality assurance professionals working in a best practice **software development, test and production environment**. This web services model also incorporate agile development activities (based around Ruby on Rails technology) and is supported by on-line and face-to-face end-user support and training. Leveraging this capability, a new innovation centre is being established to facilitate rapid technology transfer and knowledge sharing among collaborating institutions.
- **Secure and resilient commercial grade production environment**. During a recent global audit by KPMG on behalf of Reuters, SIRCA received one of the highest security and data management ratings (even compared to internal Reuters infrastructure). AC3 is the current primary site with a second **disaster recover ("mirror")** site currently under development and due for completion in October. This will include a new Network Area Storage architecture to be implemented across both sites.
- A proven **governance and professional management** capability which is geared towards self-sustainability and enabling a tight feedback loop between end-users and in-house technologists.
- SIRCA has a well established and rapidly growing **cross-disciplinary end-user network** which is now global in scope. As such it has well developed capability in dealing with institutional subscription, technology and legal requirements in many jurisdictions.

SIRCA is well positioned to provide "satellite" services to ANDS that leverage and extend the above capabilities and thereby continue its strong participation within the broader e-research infrastructure community. This could range from provision of data management consultancy services through to shared data storage and web service application development for collections without a natural home or the appropriate scale to deliver a high standard of e-research service.

SIRCA is actively investigating new collaboration on a number of fronts – particularly in the broader social science domain and where there exist common data management issues or need for **commoditised** e-research solutions.