Intersect:

A model for eResearch Services and Support in NSW

Dr Ian Gibson, CEO
ian.gibson@intersect.org.au
What is eResearch?

“The term ‘e-Research’ encapsulates research activities that use a spectrum of advanced ICT capabilities and embraces new research methodologies emerging from increasing access to:
- Broadband communications networks, research instruments and facilities, sensor networks and data repositories;
- Software and infrastructure services that enable secure connectivity and interoperability;
- Application tools that encompass discipline-specific tools and interaction tools”

Jim Richardson

e-Research Coordinating Committee
Chair: Mike Sargent

eResearch is the application of advanced information & communication technologies to the practice of research.

Jim Richardson
What is special about NSW?

- We are the last state to organise ourselves to cooperate on eResearch
  - We can learn lessons from those that have come before us
- There are 10 universities that call NSW home
  - We need a model that scales
Intersect: One page summary

- A company established *by* its founding members to provide eResearch services *to* its members
- Founding members are:
  - UNSW, USyd, UTS, MQ, Newcastle, Southern Cross and SIRCA
  - Discussing with other organisations about joining
- Formally established July 2008
  - Practically started with my appointment in Nov 2008
  - Current staff: 23
- Intersect is the NSW member of ARCS
  - Several of our programs are funded through ARCS
- Received $2.8M is start-up funding from the NSW government
- Premises will be in Sydney CBD
Intersect: Mission Statement

Work with NSW Universities and others to increase the quality, efficiency and visibility of NSW based research through the provision of advanced and specialised ICT services and solutions, enabling:
- improved management of research data
- new methods for collaboration
- new research methodologies
But what do we actually do?

- $\text{Intersect} = \text{projects} + \text{services}$
Intersect Projects

- We have just started IT projects to deploy eResearch solutions for members
  - Once a project has been deployed to production, its ongoing support and maintenance *may* be a part of the Intersect service
- Projects are prioritised by all the usual factors:
  - Research impact and priorities, project value and impact, Intersect’s capacity, member benefit, …
- Strategy is to build on existing work
  - Build on open source and contribute back to the open source community
  - Buy production quality components where it makes sense
- We will take on other projects contributing to the company’s mission on a cost recovery basis
- First two major projects have just commenced:
  - DataMINX: manages experimental data from the Australian Synchrotron, Opal reactor and various microscopy centers around Australia
  - ASRB: developing a web interface to the Australian Schizophrenia Research Bank
- Over time, development becomes quicker and more efficient
  - Capability improves, technology reuse improves
Intersect Services

- Data Management:
  - Repository development, hosting, tools etc
  - Assistance with research data management plans
- Computation:
  - High performance computing, ...
- Collaboration:
  - Tools, hosting, social+technical networking, ...
- IT Consulting and Management:
  - Advice, Scoping, sourcing, coding, management, ...
- Aggregation/deployment of services:
  - ANDS/ARCS services, commercial services, data and tools,
- eResearch Uptake:
  - Advocacy, training, awareness, helpdesk, ...
- Trialing new methodologies
- Administration and management of eResearch infrastructure purchased through grants etc
  - High performance computing, large data stores for collaborative research data

In close coordination with members:
IT centres, libraries, Research Offices, ANDS, ARCS collaborating partners, ...
Interacting with others: A conceptual view

Collaboration data repositories, frameworks and tools

UNSW

researchers

Local data & computation

ITS

Library

Intersect office

and

researchers

Local data & computation

ITS

Library

Intersect office

researchers

Local data & computation

ITS

Library

Intersect office

researchers

Local data & computation

ITS

Library

Intersect office

Commercial providers

Intersect Project
Intersect: Member Support

Head Office - Sydney CBD

Services Division
Member Support

Projects Division
Admin

UNSW office

UTS office

Macquarie office

Newcastle office

USC office

Others...

eResearch Analyst

Developers
L&D activities
HPC support

Student(s)

Others…
**eResearch Analyst: Key Responsibilities**

- **Act as a contact** for research staff from the member university on matters relating to Intersect or eResearch.
- **Work closely with university divisions such as ITS, Library, Research Office etc** to ensure efficient and collaborative delivery of service.
- **Carry out business requirements analysis** for research groups.
- **Architect information systems solutions** for members research groups.
- **Lead or participate in the deployment** of information systems solutions.
- **Act as the project manager** as necessary to ensure project delivery.
- **Develop and deliver material** aimed at improving the knowledge and skills in areas of eResearch.
- **Assist the member’s research staff in effectively utilising Intersect’s services and resources.**
- **Carry out a range of activities in order to raise the profile of Intersect and its services and resources, and of good eResearch practice** among the member’s research staff.
Thank you