Intersect Australia and support for the eResearch community

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Australian context

- Population: 22 million
- Universities: 40, almost all public
- Area: = US, but far more urbanised
- GDP around $AU(=US) 1 trillion
- Very strong States and Territories (8)
- Research grants funding ~$2billion p.a.

- A strong sense of pragmatism
Research Infrastructure

• Started with a multitude of research support grant schemes
  – Competitive, small-medium scale (<$1m), short-term (<2yrs)
  – Maximise flexibility and innovation
  – Maximise risk
  – Minimise nationally strategic outcomes
  – Major infrastructure took concerted lobbying
    • And yielded a one-off result!
Along came NCRIS

- **National Collaborative Research Infrastructure Strategy**
  - Merge collaborative elements,
  - leave the competition to the research
  - $540m/\sim 4\text{ years}, +$900m ‘stimulus’

- Identified 15 “Capability” Areas
  - National research priorities/strengths
  - And one for infrastructure

- Required ongoing business plans
Capabilities:

• BioPlatforms, BioSystems, BioTech, BioSecurity,
• Characterisation(2), Fabrication
• Health(2), Security
• Astronomy, Ecology, Marine, Geology
• Power/Environment
• Platforms for Collaboration [now at ~ $400m]
Platforms for Collaboration (PfC)

• “The IT bit”: look at common, enabling, infrastructure for all research disciplines

• What do you need?
  – Computing[NCI], Data[ANDS], AAA[AAF], Collaboration[ARCS], Connectivity[AREN],

• Ensure they are globally aligned
  • Research collaboration is international
  • Australian researchers deal with a multitude of technology enthusiasms, by discipline and by geography – and we need to support all of them...
What don’t we have?

- Researcher Engagement!
- National framework programs struggle to get to the coalface
- ‘State’ organisations as intermediaries
  - QCIF, Intersect, VeRSI/VPAC, TPAC, eRSA, iVEC, ANU and CSIRO
  - With widely varying levels of maturity, funding, governance, planning, ...
- Approaching a wholesale/retail model
Researcher service provision

- Has to occur at institutional level!
  - Through discipline – strongest allegiance
- Has to be with institutional support
  - IT Dept, Library, Research Office, ...
- Has to be seamless regardless of provider
  - International, national, state or institutional? They don’t care!
- Has to lift institutional capability
  - Because that scales, and that endures
About Intersect

• Provide e-Research services, for NSW (mainly)
  – Building institutional and state capabilities & capacity
  – Currently ~40 staff
  – Members: 8 of 10 NSW Universities today
  – Around 40,000 researchers
  – Also provide services to other organisations
  – Incorporated, non-profit...

• Engagement:
  – eResearch Analysts, at least one per institution – the friendly face of Intersect, as translators
  – Participation in governance, planning
Intersect provides...

• Services
  – Delivered through institutional service frameworks as appropriate, for researchers and support staff

• Engineering
  – Projects (internally & externally funded), professional software development, infrastructure

• Other things
  – Grants facilitation
  – Support strategic (international->institutional) planning
    • Requirements gathering, e-Research needs analysis, Surveys
    • Also international planning processes, like EUAsiaGrid
Services Portfolio Overview

**Direct Services**
- Awareness, outreach, advocacy
- Support for community building
- Project development support for research during scoping, development and operation
- Solution development and “hardening”,
  - i.e. making new or existing tools more robust, user-friendly, higher-performance and properly supported
- Skills development, training, for researchers and for support staff
- Helpdesk services in collaboration with member institutions.

**Strategic services**
- Requirements analysis to support institutional, state and national planning frameworks
- Enhancing the community’s skills-base, including finding appropriate people, growing and developing their skills, and offering career paths beyond research projects
- Assisting and coordinating funding applications to maximise outcomes.

**Technical services**
- High-performance computing infrastructure, (3-tiered: national, state and institutions)
- Data storage, management, preservation and access
- Collaboration technologies
- Authentication and authorisation services
- Connectivity support, working with networking providers to optimise solutions
Summary

- Australia has invested a lot of dollars
  - Per capita it’s probably world-leading
- It’s a model that’s fairly rare and new
  - Enforced collaboration where it counts
- It has some problems to sort out
  - Boundary issues between providers
- It has engagement as a key element
  - And where it’s done well, things work well