

Summary of Breakout Session - Infrastructure

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Context of engagement

The breakout session to discuss Infrastructure issues was described in these terms: The recently announced capital investment into the ARDC's has provided an opportunity to reflect on previous infrastructure investments across RDS, ANDS, Nectar and other NCRIS funded colleagues. Planning for this 5 year capital investment has begun and this consultation will directly influence the approach taken to continue building a cohesive national data infrastructure. We are particularly interested in hearing from existing and new stakeholders to identify and prioritise investments in a cohesive research data ecology for the greatest benefit to Australian research.

Framing Questions used in the sessions:

1. Discussing good experiences with existing infrastructure components.
2. Discussing less good experiences (lessons)
3. Opportunity for new models
4. Grey area of expanded services (overlaps between infrastructure and platforms)
5. Infrastructures required for NEW services

Themes arising

Good Experiences:

- Participants generally liked the idea of a free service, particularly end users or service providers. It was acknowledged by most attendees that this planning could be a transition to a different model and they were interested in understanding the options.
- There was general positive uptake of data publishing services
- Most of the data storage discussions focused on Cloudstor (are we competition or complement), third party cloud storage solutions and the future of the 'national collections'

Challenges (less good experiences)

- Significant component of legacy infrastructures that are at, or approaching, end of life.
- Integration has been slow and where it has happened it is generally driven by research need, e.g. clear research advantage rather than infrastructure operational advantage. Can be used to encourage movement from of the long tail to the peak.

- Responsibility for much of the infrastructure required for data focussed eResearch is moving away from RESEARCH concerns, i.e. from the DVC(R)s and academics, and toward the CIO and ICT groups, i.e. operational concerns. Academic derived infrastructure does not generally stack up to enterprise infrastructures, in terms of performance and maintenance but is highly configured/ bespoke and often critical. Standardising these infrastructures could prove tricky and end up limiting the end-user.
- Imperative that distributed investments and facilities work together. There was a note that the DDeRP partners were moving further away from providing infrastructure features to handle sensitive data.
- Legacy services, and their implementation, have led to the creation of a false economy that encourages poor service utility (and thus impacts service efficiency), but also artificially supported unsustainable service provision practices.
- Storage services are not easily accessible and favour static data needs.

Goals for capital exposure (alternative models Part 1)

- Minimise hardware investments, thus minimise investment risk
- Build value of platform services with investment in service development and participation
- Invest in integrating existing services from platforms, storage and data publishing.
- Establish richer storage services according to data staging
- Re-establish value of underlying infrastructure by dismantling false economy
- Establish exit pathway for decommissioning nodes

Possible solutions (alternative models part 2)

- Move away from project value to business value. These two concerns can co-exist but will speak to different institutional decision makers. Business to CIO, Project output to DVC(R).
- ARDC to coordinate and propagate business value (e.g. national charging model) with strong governance role in node coordination and oversight.
- Migrate national collections to more appropriate service, complement AARnet Cloudstor with capacity and possible repository services
- Advocate for institutional policy that facilitates service access based on service value (platforms).
- Invest in service integration tasks with ADRC services and NCRIS services

Missing services (requiring infrastructure investments)

- Consistent messages about the lack of data archiving services (discussion about potential partners).
- Consistent messages about the lack of sensitive-data handling services.
- Consistent messages about the current inefficiency of ID and authentication services for non-university sector.

- Consistent message about the lack of an accessible federated data storage environment