Australian National Data Service (ANDS) Update

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Acknowledgements

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Context

Research data focus

Research infrastructure setting

Public policy

Implementation challenges

National Collaborative Research Infrastructure Strategy
  - High performance computing
  - Grid and collaboration services
  - Repositories, science collections and data services
  - Networks

The ANDS strategy
Australian National Data Service

• Established late 2008

• Collaboration:
  – Monash University
  – Australian National University
  – Commonwealth Scientific and Industrial Research Organisation

• Operations began Jan 2009

• $72m over 3 years ($48m restricted - infrastructure only)

“An Australian Research Data Commons is required to support the discovery of and access to research data held in Australian Universities, publicly funded research agencies and government organisations for the use of research” - Federal Government 2009
The Australian National Data Service
Goals

Enable and support research through data re-use and sharing through low-costs capture, discovery, access.

Create an Australian Research Data Commons; and tools to enable its effective use.
Four activity areas

- **Infrastructure Provision**
  - Online Services, Web-services
  - *Registries, discovery services, identifier services…*

- **Consultancy**
  - Information sharing; advice
  - Capability building

- **Resourcing**
  - Community infrastructure projects
  - Data re-use applications
  - Institutional change

- **Policy development**
Key Approaches

**Institutional responsibility**
Catalyse emergence of a distributed research data commons based on institutional responsibility for major nodes supporting research strengths

**Access to Public Sector Information**
Access to key public sector data sources

**Multiple approaches to Discovery**
Institutional, disciplinary, national, and international discovery frameworks

**Populate, then Exploit**
Data capture and data management priorities ahead of data re-use
ANDS ‘products’ and ‘services’

- Available products:
  - Register My Data (inc. Research Data Australia)
  - Identify My Data

- Soon products:
  - Publish My Data
  - Classify My Data
Types of Services

1. ANDS Online Services
   Accessible to **individual users** on the world wide web. Eg:
   - Collections Registry
   - Self-Service Identifiers

2. ANDS Web Services
   Designed for **machine-to-machine** transactions. Eg:
   - Collections Registry Web Services
   - Persistent Identifier Service
ANDS Products use both kinds of services

Eg:

- Identify My Data
  - ANDS Self Service Identifiers
  - ANDS Persistent Identifier (Web) Service

- Register My Data
  - ANDS Collections Registry
  - ANDS Collections Registry (Web) Services
Register My Data

- Provides for researchers organisations to register collections of research data
- Publishes descriptions, *(cf data publication)*
- Currently 875 collections – building ...
The ANDS Collections Registry

- Web search and browse interfaces
- “librarian view” of records
- Interactive record creation, editing;
  - authorisation
  - Registry Web Services preferred (providing feed)
Collections Registry main page
Search results

Dynamics of two populations of humpback whale, Megaptera novaeangliae (Borowski).
Collection-Type: dataset
Collection-Reg: 516811d7-db85-207a-e0440003bab879dd
Group: IVEC MEST - Western Australian Marine Data and Projects
Identifiers: local: 516811d7-db85-207a-e0440003bab879dd
Relation: Luke Edwards; RG Chittleborough;
Subjects: local: biota
Description: Dynamics of two populations of humpback whale, Megaptera novaeangliae (Borowski).
Group IV: Humpback whale calving ground and monitoring program 1995.
Collection-Type: dataset
Collection-Reg: 516811d7-db85-207a-e0440003bab879dd
Group: IVEC MEST - Western Australian Marine Data and Projects
Identifiers: local: 516811d7-db85-207a-e0440003bab879dd
View record in Collections Registry
View record in collections registry (continued)
Same record in Research Data Australia
Same record in Research Data Australia
Research Data Australia

- Discovery interface - “Window on the Commons”
- Search results panel
- Google Map - KML for Google Earth
- Links to associated records
- Discovery services development program
Links

- ANDS Services site: [http://services.ands.org.au/](http://services.ands.org.au/)
- ANDS Services email: services@ands.org.au
Original record in source repository
Administrative interface
Add new record interface
RIF-CS

- Registry Interchange Format - Collections and Services
- Four top-level data types: collection, service, party and activity
- XML data format
- A profile of ISO 2146
Source: Figure 1. Registry Object and its sub-classes. ISO 2146 Registry Services for Libraries and Related Organisations (Consultation Draft 10 March 2008, p.3)
Collections Registry Web Services

- harvests feeds from multiple registries
- preferred way to add content to the Collections Registry
- Harvesting method is OAI-PMH
- Based on RIF-CS transfer format
Soon ANDS Services/Products

- Publish My Data
  - Builds on Register My Data
  - Interface to a national storage service (and others)
- Classify My Data
  - enables access to multiple vocabularies
  - Initial provision for ANZSRC
Summary:

- Infrastructure Provision
  - Online Services, Web-services

- Consultancy
  - Capability building; Information sharing

- Resourcing
  - infrastructure projects (data capture priority)

- Policy agenda

Thanks for listening - FINIS
Seeding the Commons Program
Frameworks and Capabilities Program