Modelling Roles for eResearch

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Overview

The Modelling Process

Process Output

Capturing the Results

Services, Capabilities and Roles
The BoF – Collect Role Titles

1. Collect Role Titles
   • From AeRO
   • From RSE-AUNZ
   • From FAVeR
   • -> over 220

2. Select Unique Titles
   • Create Cards for Each Title
   • -> 180
The BoF – Is it an eResearch Role?

3. Categorise as eResearch or !eResearch

"eResearch is the application of advanced computing and ICT across the research lifecycle"

eResearch is not:

• The execution, management and governance of research.
• The traditional librarian services.
• The enterprise ICT Roles, as defined by the ACS*.

* Common ICT Job Profiles & Indicators of Skills Mobility
 ICT Skills White Paper
 Australian Computer Society
 30 December 2013
The BoF - eResearch Services

4. Categorise by the Primary Service provided by the role.

These are the services that eResearch personnel provide to researchers.
Within each Service:

5. Aggregate cards by common skills.

6. Identify and Name relationships between cards/groups.

7. Replace groups with a common title.
The BoF - The Output
The Results – Neo4j Database

eResearch
6 Services
34 Capabilities
92 Titles

86 Titles
The Results - Services and Capabilities

**Advise**
- Data Advisor
- eResearch Consultant
- Research Data Librarian

**Promote**
- Director of eResearch
- eResearch Services Management
- Research & Innovation

**Deploy**
- Collaboration
- Delivery
- eResearch Program Director
- Modelling & Workflows

**Develop**
- eResearch Analysis
- Integration
- Networks / Systems
- Research Data Analysis
- Research Data Science
- Research Software Development
- Research Software Engineering
- Specialist Development
- Project Management

**Support**
- Applications
- Bioinformatics
- Clinical Science
- Data Storage
- Genomics
- Research Data Management
- Support Analysis
- Systems Engineering

**Train**
- Trainer
- Training Manager
- Domain Specialist Trainer
Service: Advise

Advise researchers about appropriate technology solutions.

Data Advisor
- Big Data Consultant
- Data Consultant
- Data Service Specialist
- Data Strategy Advisor
- Senior Research Data Analyst

eResearch Consultant
- Business Analyst
- Business Analyst - Research Translation Specialist
- Consultant Advise
- Digital Research Consultant
- eResearch Consultant

eResearch Engagement
- Collections Community Engagement Manager
- Engagements Manager
- Manager, Research Services
- Research services advisor

Research Data Librarian
- Data Librarian
- Digital Services Librarian
- Librarian - Research Outputs
- Research Librarian
- Research services librarian
- Senior Data Librarian
- Senior Librarian (Research Content and Repositories)
Service: Train

Train researchers in the use of research technologies.

**Domain Specialist Training**
- Deep Learning Specialist
- Research Data Specialist
- Research Fellow - Data Citations

**Train Trainer**
- IT Trainers
- Teacher

**Training Manager**
- Library Discipline Group Leader (Science and Engineering)
- Research Knowledge and Data Manager
Service: Promote

Promote and share research technologies and activities.

**Director of eResearch**
- Director of eResearch
- Director, eResearch

**eResearch Engagement**
- PCI Facilitator
- Research Engagement Specialist - Digital Humanities

**eResearch Services Management**
- Services Manager, eResearch Promote

**Research & Innovation**
- Associate Dean - Research and Innovation
**Service: Develop**

Develop bespoke research technologies.

**eResearch Analysis**
- eResearch Analyst
- Image Analyst

**Integration**
- Data Analytics Specialist
- Data Integration Manager

**Specialist Development**
- Compute Integration Specialist
- Digital Library Developer
- Humanities and Social Sciences Informatics Specialist
- Research Software Specialist
- Research Software Specialist/ Senior Research Software Specialist
- Specialist Virtual Lab Systems Programmer

**Networks / Systems**
- DevOps Systems Engineer
- Linux Software Engineer – AIBN
- System Administrator and Software Develop Systems Integrator

**Project Management**
- Project Manager, Data Science and eResearch Service Development Manager

**Research Data**
- **Research Data Analysis**
  - eResearch Data Analyst
- **Research Data Science**
  - Research computing scientist
  - Senior Computer Scientist
  - Spatial Experimental Data Scientist

**Research Software**
- **Research Software Engineering**
  - eResearch Senior Programmer/Web application developer
  - Research Software Engineer
  - Scientific Software Engineer
  - Senior Research Software Engineer
  - Senior Research Software Scientist
  - Senior Software Developer Research & Teaching

- **Research Software Development**
  - Programmer of Scientific Software
  - Research Support -Software Developer
  - Senior FPGA Firmware Engineer
  - Software Developer (Research Data)
Service: Deploy

Deploy and enhance research technologies.

Collaboration
- Executive Manager – Collaboration
- Delivery Manager - #eResearch

Delivery
- Digital Humanities User Experience Coordinator
- eResearch Senior Analyst

eResearch Program Director
- Program Director - Regional Innovation Laboratory

Modelling & Workflows
- Casual Research Data Analyst
- Mathematical modeller / PhD Student
- Scientific Workflows Coordinator

Project Management
- Project Manager – Data Science and Research

Uncategorised
- Lead Bioinformatician
- Research Associate - Digital Literacy Mapping Project
Service: Support

Support reference deployments of research technologies.

**Systems Engineering**  
HPC Ops  
HPC systems administrator

**Applications**  
Applications Support Specialist  
Junior QRIS Cloud Systems Engineer  
Snr Programmer / Software Support

**Data Storage**  
Data Manager  
Data Officer  
Data Technologist

**Domain Data Specialist**  
**Bioinformatics**  
Bioinformatician  
Bioinformatics manager

**Clinical Science**  
Clinical Trials Data Administrator (part time)  
Clinical Trials Data Lead

**Genomics**  
Genomics expert  
Genomics Informatician  
Genomics Data Specialist

**Research Data Management**  
Administration Officer - Data Science and Research  
Research Data Manager

**Support Analysis**  
Research Technologist - Digital Humanities  
Technical Support Analyst Support
Next Steps

FAVeR Project…
• Verification
• Validation
• Collaboration

Advancing the Professionalisation of the eResearch Workforce

The purpose of this activity is to create a white paper that clarifies the roles within the eResearch workforce. This paper will include the following:

• **Scope** and **categorisation** of eResearch roles.
• **List of roles**, including high-level position descriptions for each role.
• **Career paths**, as links between roles.

If you would like to get involved, or stay updated on progress contact: nicholas.may@rmit.edu.au
Thank you

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