Skills Framework

Linking service capabilities to data stewardship competences for professional development

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Outline

• Why focus on ’stewardship’
• Overview of skills workpackage
• What, Who, Where – assumptions
• Competences, and our use of EDISON
• What service capabilities
• Skills framework – linking services and competences to help plan skills development and find training resources
Why ‘stewardship’?

“An important aspect of the EOSC is... professional data management and long term data stewardship.”

A Cloud on the 2020 Horizon, EOSC HLEG

“The necessary skills and education in research data management, data stewardship and data science should be provided throughout the EU ...”

“Researchers need the support of adequately trained data stewards”

EOSC Declaration, European Commission D-G Research & Innovation
Overview of WP7 Skills

Partners

DCC
DANS
EGI
KIT
LIBER

Skills landscape and gap analysis
Skills workshops - how to fill the competence gaps
Skills framework linking EOSC services to competences
Recommendations to service providers and governance
Scoping training-as-a-service in EOSC
Layered model for delivering training/information

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What is ‘stewardship’?

Formalisation of roles and responsibilities to ensure that data and research objects are managed in accordance with FAIR principles and for long-term reuse.

D7.1 Skills Landscape Analysis and Competence Framework
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Roles involved in stewardship

**Intermediary role** - overlapping 2 or more areas

- Domain research
- Data science & analytics
- Data management & curation
- Data science engineering

**stewardship**
Where are data stewards?

Skills applied at three organisational levels

**Team** – specialist in the team, or by external providers without institutional involvement

**Individual** – by personal practice

**Organisation** – by services from the institution, or external providers
Where are data stewards?

- **Teams** differ in tools, standards and services used
- **Domains** differ in standardization of data, metadata and tools
- **Research organisations** differ in academic independence

Cultural differences will affect where roles and skills are required
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Skills Groups
Levels of competence and responsibility

Competence

• Comprehend
• Apply
• Synthesise, evaluate

Responsibility

• Full accountability
• Objective setting
• Substantial discretion
• Discretion
• Support
EDISON competence groups for Data Management (DM) Data Science Engineering (DSENG) Data Science Analytics (DSDA) Scientific/ Research Methods (DSRM).

RDA Education & Training in Data Handling IG Competences for researchers, RI managers and research librarians

Data Information Literacy (Purdue University Libraries) Division between individual, team and organisation

SFIA – Division of responsibilities
Skills groups mapped to list of 78 topics from the sources

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For planning skills development – “given the services we plan to use, what will we need people to be able to do”?

Formulate competence and capability statements

For planning individual training ”as a researcher using service X I need to be able to apply competence Y”

Formulate search on training resource catalogue
Competence and capability statements

Formulate statements for recruitment or professional development (service users)

“You will have substantial discretion in supporting research teams with data management planning and preservation planning, work with EOSC services for metadata enrichment and VRE to monitor service levels, help deliver services, manage risks”

Formulate user stories relevant to finding training (service users) or profiling customers (developers)

“As a [role x] [using service Y], I need to be able to [apply competence Z]”
Competence and capability statements

Formulate statements for recruitment or professional development (service users)

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Formulate user stories relevant to finding training (service users) or profiling customers (developers)

“As a data manager using a repository service, I need to be able to evaluate repository certification schemes”
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Next steps

Testing the approach with focus on the Science Demonstrators and Services
Next steps

Workshops & surveys -

• Are we missing competences?
• Which represent the biggest skill gaps?
• How may EOSC amplify your training?
• What resources have lasting value?
• Can we apply FAIR to training?

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