

EOSC EDEN

EOSC EDEN D2.1: First Iteration of Specifications and Architecture

Wesley Middelbos

Task leader T2.1

Grant agreement 101188015

Deliverable 2.1



Work Package 2

T2.1 Define system requirements and specifications

T2.2 Develop registry based on T2.1, develop API specs and create reference implementations

T2.3 Use cases will implement selected services, integration with the EOSC Federation, share reusable code, and follow a common approach for development and testing.



Objectives & Scope



Coverage & Objectives

Deliverable 2.1 contributes by describing the **first iteration** of system requirements, repository attributes, and service specifications that support the goals of creating a registry for long term preservation services, enhance or create new services for automated curation or long term preservation actions.

Relation to other Work Packages

The work done in Deliverable 2.1 is based upon the core preservation processes[R1] of Work Package 1 and on the domain-specific requirements collected in Work Package 3[R2] and a variety of external sources, with the aim of establishing a system for further iterations.



Methodology

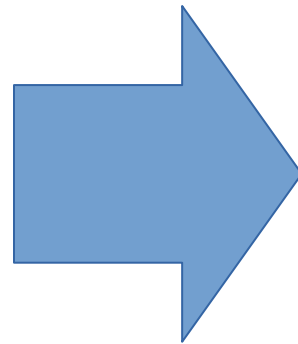
1. **Information Gathering**
 - a. Collecting landscape information
 - b. **Output:** First initial set of services
 - c. **Output:** First set of requirements
2. **Requirement alignment**
 - a. Align requirements with
 - i. WP1 CCP (Core Preservation Processes) &
 - ii. WP3 Discipline specific requirements
3. **Considerations & Aspects**
 - a. Define design considerations & break them up into aspects
 - b. **Output:** Extra requirements & services
4. **Attribute Identification**
 - a. Define repository attributes
 - b. **Output:** Set of attributes, used for the Input of the registry (T2.2)
5. **Service Structuring & Creation**
 - a. Consolidating identified services
 - b. Align with frameworks and requirements
6. **Specification Development**
 - a. Draft high-level specifications for services

* (Feedback Loop to Step 1–3 if new requirements emerge)



Key Concepts

The work of Task 2.1 was split in 3 domains:



- Attributes
- Services
 - Requirements
 - Specifications



Results

- ✓ **First iteration of specification (D2.1 completed)**
- ✓ **Draft inventory of repository attributes (+100 attributes)**
- ✓ **List of services (125 in total)**
- ✓ **Draft specifications (5 specs)**
- ✓ **A comprehensive list of requirements (+200 requirements)**
- ✓ **Design considerations on Quality, Right & Ethics, and Interoperability**
 - Based on standards, frameworks and input from related initiatives
 - 64 Considerations (high-level problems/opportunities)
 - 116 aspects (related problems to considerations)



Alignment with EOSC

- **EOSC EDEN**
 - **Work Package 1: Core Preservation Processes:**
 - Used to derive requirements to fulfil the process
 - Services assigned to processes
 - **Work Package 1: Re-use fitness framework**
 - Used to structure the information gathering of the “Quality” group
 - **Work Package 3: Discipline Specific requirements**
 - Generalized requirements used to assign to services



Next steps

- **Community validation**
 - Validate the identified services
 - Align further with community needs
 - To prioritize to be developed services
- **Further alignment with other EOSC and external initiatives**
- **Refine and extend specifications**





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github.com/EOSC-EDEN



[EOSC EDEN Zenodo Community](https://zenodo.org/communities/eosc-eden)

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Thank You



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References

No	Description/Link
R1	EOSC EDEN T1.2, Lindlar, M., Caron, B., Benauer, M., Kylander, J., Dekeyser, K., Addis, M., Levlin, M., Laukkanen, M., Lehtonen, J., Burger, F., Koho, T., Schwab, F., Molloy, L., & Zhang, F. (2025). M1.1 Report on Identification of Core Preservation Processes. Zenodo. https://doi.org/10.5281/zenodo.16992452
R2	Andreassen, H. N., Flügel, A.-L., Klemetsen, T., Smart, K., Benauer, M., Cannizzaro, G., Ciesla, M., Conzett, P., Huber, R., Høier, S., Laik, A., Lammert, A., Le Meur, J.-Y., L'Hours, H., Lindlar, M., Mehl, F., Mendes de Farias, T., Middlebos, W., Parkes, O., ... Märkälä, A. (2025). D3.1 - Report on Discipline Requirements and Needs (V1.0). Zenodo. https://doi.org/10.5281/zenodo.15789261

