LEARNINGS FROM ARCHIVERER PROJECT

How to preserve research datasets

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Abstract – LIBNOVA leads one of the consortia selected for the ARCHIVER Project. This Lighting Talk presentation would be an overview of the proposed solution, together with the University of Barcelona, the CSIC, David Giaretta, Voxility and Amazon Web Services.

The solution developed will provide a Research, Management and Preservation Platform to solve obstacles for research dataset management (including preservation) identified at the beginning and throughout the ARCHIVER project.

Keywords – Digital Preservation, Research Data Management, Digital Archiving, ARCHIVER Project

Conference Topics – 2.2 Sub-theme 2: Scanning the New Development; 2.3 Sub-theme 3: Enhancing the Collaboration.

I. PROPOSAL

LIBNOVA leads one of the consortia selected for the ARCHIVER Project [1]. This Lighting Talk would be a brief overview of the proposed solution, together with the University of Barcelona, the CSIC, David Giaretta, Voxility and Amazon Web Service.

The solution developed by LIBNOVA Consortium will provide a Research, Management and Preservation Platform to solve obstacles for research dataset management (including preservation) identified at the beginning and throughout the ARCHIVER project.

This project will help improving and completing LIBNOVA’s basic research data preservation platform to address the specific needs of Research-centric organizations to the Petabyte Scale.

Four areas comprise the Solution Architecture:

- Containers - keep content accessible with several protocols, organized and protected.
- Dynamic Insights - help users when dealing with personal information, digital preservation and emissions reduction.
- Budget assistant - helps users to plan and follow expenditures.
• Content gateway - connects the platform with discovery solutions such as Invenio or Dataverse.

Additionally, all R&D ideas and activities planned for the project by the LIBNOVA Consortium will find their way into the description of the solution, which will include the following:

• Scalability: sustained high throughput in the 100s of PBs range.

• Digital Preservation Best Practices: OAIS, ISO 16363, PSC-Preservation Storage Criteria, Best Practices recommendations and implementations – OAIS Information Model including Representation Information and Preservation Description Information components, problem detection such as duplicates, hidden encryption, format migration/evolution, exit strategy.

• Metadata management: import/creation and preservation, following OAIS.

• Data integrity management: integrity chain, integrity at rest.

• FAIR principles:
  • F: containers, customized metadata, structured hierarchy,
  • A: multiprotocol access, public sharing, discovery solutions,
  • I: Data policies, research data Representation Information,
  • R: Integrated active integrity control, Representation Information and Provenance Information.

• Cost efficiency: flexibility on deployment, several computation/storage options.

REFERENCES