PRESERVATION AS VALORIZATION: STRATEGIC APPROACHES TO SUSTAINING DIGITAL HUMANITIES WORKFLOWS

Elena Battaner Moro & Juan Alonso López Iniesta
Departamento de Artes y Humanidades, Universidad Rey Juan Carlos (Spain)

ABSTRACT

Recognizing the multifaceted nature of DH workflows, encompassing datasets, analysis software, custom scripts, documentation, and metadata, we propose a structured strategy to ensure their long-term viability, functionality, and accessibility. Core strategies include integrating Persistent Identifiers (PIDs) and using repositories like Zenodo for long-term storage and accessibility. We also emphasize the development of comprehensive metadata schemas and discuss advanced methods like graph-based representations for maintaining the integrity and usability of these workflows

PRESERVATION CHALLENGES

- Digital obsolescence
- Interoperability
- Complexity (different components/elements of the workflow).

CORE PRESERVATION STRATEGIES

- Assigning Persistent Identifiers (PIDs)
- Using Open-Access Repositories
- Developing Comprehensive Metadata Schemas
- Digital Packaging: a coherent RO

ADVANCED APPROACH #1

Integrated Metadata Schema with Nested PIDS

A comprehensive metadata schema with nested PIDs involves assigning PIDs to individual workflow components and referencing these within a single, overarching PID. This method maintains detailed and organized information about the workflow's structure and components, enhancing both traceability and modularity.

ADVANCED APPROACH #2

Graph-Based Representation and Linked Open Data

Using a graph-based model to represent workflows allows for capturing detailed relationships and dependencies between components. Each element is a node with its own PID. This approach is compatible with linked data principles and facilitates rich semantic relationships and queries.

Define the Ontology -- Assign PIDs -- Create RDF Triples -- Store in Graph Database --Visualization Tools

INTEGRATION WITH WIKIDATA

Wikidata can be used to enhance the preservation and valorization of digital humanities workflows. By creating Wikidata items for each workflow component and linking them using appropriate properties, researchers can leverage Wikidata's linked data capabilities for better discoverability and integration.

Create Wikidata Items -- Define Relationships -- Link to Central Workflow Item --Leverage RDF and SPARQL

SOME REFERENCES

- Borek, L., & al. (2021). Information Organization and Access in Digital Humanities: TaDiRAH Revised, Formalized, and FAIR.
- Concordia, C., & al. (2020). Store Scientific Workflows in SSHOC Repository. Proceedings of LR4SSHOC: Workshop about Language Resources for the SSH Cloud, LREC 2020.
- Cousijn, H., & al. (2020). Connected Research: The Potential of the PID Graph. Patterns, 1(8).
- Islam, S. (2023). FAIR digital objects, persistent identifiers and machine actionability. FAIR Connect. https://doi.org/10.3233/fc-230001.
- Soiland-Reyes, S., Goble, C., & Groth, P. (2023). Evaluating FAIR Digital Object and Linked Data as distributed object systems. ArXiv, abs/2306.07436. https://doi.org/10.48550/arXiv.2306.07436.

elena.battaner@urjc.es - juanalonso.lopez@urjc.es - CLARIAH-CM

SSH Open Marketplace
Social Sciences and Humanities Open Marketplace

DARIAH-EU

CLARIAH-ES

Universidad Rey Juan Carlos