Harvard Digital Repository Request for Proposals Announcement

Harvard is issuing a Request for Proposals (RFP) for new digital repository infrastructure supporting both curatorial processing and preservation persistence. The repository system will replace Harvard's existing Digital Repository System (DRS).

Background

Harvard Library Digital Repository Service (DRS) has reached the conceptual and operational limits of its current design and implementation after 22 years of successfully managing and preserving more than 10.7 million digital objects, 913 million files, more than 90 formats, and 1.8 PB. The revitalized repository infrastructure must address identified needs, goals, and aspirations regarding function, scale, performance, sustainability, and innovation. The new system must be capable of supporting effective and efficient preservation of all existing, newly emerging, and unanticipated forms of digital scholarship and institutional records. Historically, the DRS has averaged annual growth of 10-15%. Harvard anticipates new initiatives in research data management, electronic records management, and mass audio/video digitization will increase the preserved corpus upwards of five to tenfold over the next several years. As a generational modernization, it is important that the new infrastructure is flexible and innovative enough to remain robust and productive in the face of ever-evolving organizational mission, strategic priorities, stakeholder ambition, and environmental conditions.

Consequently, Harvard seeks a new repository system to steward and preserve its deep, broad, rich, and unique digital collections.

Scope

Harvard has sufficient storage for its current digital collections and is looking for a flexible, extensible repository management system providing the highest functional levels of preservation service, assurance, and productivity through a clean, intuitive user experience. The system will be interoperable with other systems, including metadata providers and discovery gateways, and provide comprehensive support for asset management and digital preservation. Harvard is not seeking to replace its current storage solution but is open to exploring the possibility of a different storage solution if a compelling repository system requires it.

Harvard would prefer a solution that allows for storage and repository services to function independently, that is, a system in which Harvard is able to change software platforms without migration of data in the storage layer. Harvard requires a system that supports all preservation repository functions while also connecting to existing Harvard systems for cataloging, reporting, access, and delivery to provide a seamless experience to meet the business needs and requirements of our users. The repository system has no responsibility for patron-facing

discovery or access; all patron-facing discovery and delivery is the responsibility of other Harvard services. The repository system must provide content and metadata to those separate services as required but is not responsible for performing those roles.

An Overview of Community Standards and Repository System Expectations

Harvard is committed to engaging with and using industry and community standards. Harvard has incorporated the input of its own community stakeholders as well as wider industry standards as it developed the requirements for the new system. The following are an example of the expectations and priorities detailed in the RFP.

Harvard's RFP is inspired by the Digital Preservation Coalition (DPC) <u>common requirements</u> <u>structure for preservation system procurement</u> which Harvard used to organize the system requirements and technical requirements.

Harvard requires that the repository system **must** support effective, efficient, and persistent access to authentic digital information objects and affordance of legitimate digital information experiences.

The repository system **must** meet mandatory Open Archival Information System (OAIS) responsibilities (ISO 14721:2012, § 3.1).

The repository system **must** support National Digital Stewardship Alliance (NDSA) Levels of Preservation (V2.0) Level 4 guidelines (NDSA, 2019).

The repository system **must** meet mandatory and **should** meet optional Digital Preservation Coalition (DPC) core responsibilities (https://www.dpconline.org/docs/digital-preservation-system-preservation/procurement-toolkit/2581-core-requirements-for-a-digital-preservation-system-v1/file).

The repository system **should** have the storage and service layers technologically independent from each other, in order to facilitate clean separation of concerns, robustness, and interchangeability. It **should** be standards-based so that preservation data is decoupled from the software that manages it.

The current DRS store is based on Oxford Common File Layout (OCFL). The new system **must** either support OCFL as a drop-in replacement or offer such advantages to outweigh the significant disruption of a possible content migration.

The repository system **must** offer modern, accessible, and intuitive user workflows and interfaces for deposit, editing, and reporting.

The repository system **should** streamline the user experience and offer automation of routine tasks.