

Project Charter: Digital Repository Evaluation and Selection Working Group

Project Title and Description

Digital Repository Software Evaluation and Selection

The Digital Repository Evaluation and Selection Working Group (DRESWG) will evaluate commercial systems and open source software and select one (or combination of systems/software) for use as an NLM digital repository. The goal of this project is to select a repository system/software to aid in building NLM's collection in the digital environment. The DRESWG will evaluate systems and software identified by the Digital Repository Working Group Report and Recommendations dated March 16, 2007, in addition to other available software. The sponsor for this project is Sheldon Kotzin, Associate Director, Library Operations.

Business Case

In order to fulfill the Library's mandate to collect, preserve and make accessible the scholarly and professional literature in the biomedical sciences, irrespective of format, it is essential that the Library develop the robust infrastructure needed to manage a large amount of material in a variety of digital formats. A number of LO program areas are in need of such a digital repository to support their existing digital collections and to expand the ability to collect a growing amount of born-digital resources.

Dozens of digital collections have already been created by the History of Medicine Division that require long-term management and preservation. Collection development and acquisitions staff is seeing an increasing availability of born-digital materials that NLM needs to add to its collection. NLM's preservation program has embraced digitization as a preservation format to replace microfilming.

A first group, the Digital Repository Working Group (DRWG), created functional requirements and identified key policy issues for an NLM Digital Repository to aid in building NLM's collection in the digital environment. Senior NLM management, including the Deputy Director, NLM, signed off on these functional requirements with only a few editorial changes. On the recommendation of the DRWG, senior management concurred that the next logical step should be evaluation of existing systems/software and a recommendation on whether to use any product(s) currently available.

Working Group Members

Working Group members include:

- Jennifer Marill (chair), TSD
- Diane Boehr, TSD
- Brooke Dine, PSD
- John Doyle, PSD
- Laurie Duquette, TSD
- Jenny Heiland, PSD
- Felix Kong, PSD
- Kathy Kwan, NCBI

- Edward Luczak, OCCS
- Michael North, HMD
- Deborah Ozga, NIH Library
- John Rees, HMD

Most team members will allocate an estimated 5-8 hours per week to the project for a period of up to 6 months. This project will be considered part of their job assignment for those hours. The OCCS team member will be dedicated full-time to the project and is expected to be a key player in system/software installations for testing, configuration and evaluation.

Working group members will likely work in smaller subgroups on defined activities, and may request help from additional staff to perform specific evaluation and testing tasks.

The Chair will have the authority to:

- Coordinate with the Sponsor, LO Division Chiefs, and Applications Branch Chief, OCCS, as appropriate, on all matters relating to this project, including staff commitment, assignments, priorities and project direction.
- Perform appropriate communication tasks with stakeholders.
- Lead, direct and coordinate project-related activities.

Project Scope

The scope of this project is to perform an extensive evaluation of existing commercial and open source digital repository systems/software. The evaluation will include those systems/software already identified by the Digital Repository Working Group, and additional software that may be available. Each system/software evaluation shall include the same test load of a variety of digital objects including digitized pamphlets, video files, images, integrated resources (e.g., WORM book), etc., from the Library's collections.

The group will evaluate how well the system/software meets the functionality of the OAIS model – ingest, archival storage, data management, administration, preservation planning, and access - as specified in the NLM's Policies and Functional Requirements Specification dated March 16, 2007. In addition, the group will evaluate related system/software aspects, which could include code review, heuristic evaluation of the administrative and user interfaces, available system/software documentation, ease of installation, etc.

The group will also evaluate the level of additional programming support that may be needed and the risks/benefits involved in using the commercial system or open source software, or combination of both, recommended for NLM implementation.

Identification of policy and metadata issues related to the digital repository will be documented. Depending on the nature of the issues, they will be forwarded to either the Digital Projects Oversight Group (a new standing group) or the future group handling implementation.

Policy issues related to the priorities for digital preservation are outside the scope of this group.

Critical Success Factors

- System/software shall be able to handle digital content NLM has already digitized or acquired.
- System/software shall be able to handle content types/formats NLM has identified as desirable to collect.
- System/software shall not exclude other software or interfere with the operation of other software.
- System/software shall be able to integrate with other NLM products, such as the Voyager ILS.
- System/software shall meet NLM/NIH security standards.

Stakeholders

Staff at NLM who are responsible for conversion, acquisition, management, preservation and access to digital resources at NLM and users of NLM collections.

Deliverables

The primary deliverable for this project will be a recommendation on which system/software or suite of software to implement for NLM's digital repository. This recommendation will be forwarded to the project sponsor, who will make the final determination. The recommendation will be based on the following:

- How well the system/software performs against a set of performance measures and evaluation criteria agreed to by the working group, and based on NLM's Policies and Functional Requirements Specification dated March 16, 2007.
- Consideration of software costs, staff resources, and the need for additional staff/consultant costs for initial implementation.
- Consideration of software lifecycle costs, security concerns and configuration management costs.

Other deliverables:

- Testing costs (due June/July)
- Projected implementation costs
- Policy issues and recommendations on digital repository implementation, management and oversight, captured from Group discussions.

All deliverables, except the testing costs due in June/July, are due November 1, 2007. However, this timeframe is dependent on the number and complexity of systems and software to be evaluated, and the availability of software, particularly vendor software, for testing. This timeframe may be adjusted when the project schedule is elaborated.

Costs

Costs may be associated with obtaining test instances of vendor software and vendor assistance in set-up and configuration consultation.

Costs are generally not associated with open source software for testing purposes, but OCCS may need to consult additional staff in software set-up or obtain additional equipment.

Working Group members may perform site visits or invite key staff to NLM from libraries/organizations that are currently running identified software for testing. If physical visits aren't feasible, phone interviews will be conducted. Site visits for 2-3 staff members will likely require travel funding.

Risks

During this initial phase of the project the following risks have been identified:

- **Schedule:** Failure to complete the project in accordance with mutually agreed to milestones, which would result in continued inability to collect and manage digital materials for the Library's collections.
- **Technical:** Inability to find a system/software that meets a minimum score on an evaluation criteria matrix. If no system/software is found, NLM will need to consider doing significant in-house, add-on development work.
- **Programmatic:** Failure to retain staff and/or equipment needed to complete the project.
- **Cost:** Failure to obtain budget for additional resources that may be needed for the evaluation (staff/contractors, equipment, travel costs).

Meetings and Communication

- Weekly meetings of the working group with sub-groups meeting separately, as needed. Working documents and correspondence will be posted to a project wiki, which will be available (view-only) to NLM staff. Additional information can be exchanged via email. Final documents and group recommendations will also be posted to a more permanent website or archive.
- Reports of activities and issues will be presented to the Digital Projects Oversight Group and more general information forums as needed.

Signed and Approved By

Authorizing Signature:

Sheldon Kotzin, Associate Director, Library Operations Date: May 29, 2007