

Deposit@Harvard Proposal

Summary

The Harvard Kennedy School (HKS) Library & Knowledge Services and the Harvard Law School (HLS) Library are pleased to submit a joint proposal for Library Lab funding consideration. The proposal is to develop a unified web-based deposit tool that enables the user to submit scholarship simultaneously to multiple internal and external repositories. This unified deposit tool will be called Deposit@Harvard. This idea was presented at the November meeting of the Open Access group (consisting of staff from the Office for Scholarly Communication, Faculty of Arts & Sciences, the Business School, Graduate School of Education, Kennedy School, Law School, and Medical School). While these groups have not been formally approached to sign on to this proposal due to time constraints with the December 1 deadline, there was considerable interest in finding a solution to a common problem in supporting open access and scholarly communication initiatives at Harvard.

The proposal is divided into two phases. Phase I will focus on design; Phase II will focus on development and implementation once a more detailed project plan and a cost estimate have been developed in Phase I. Accordingly, the purpose of this proposal is to request funding in the amount of \$14,000 for the initial design work with a determination at the end of Phase I to explore funding a Phase II of development and implementation work.

Need

Harvard faculty, students and staff create scholarly content in the form of published papers, books, working papers, policy briefs, theses and dissertations. This scholarship educates and influences a global community of scholars, practitioners, media and the general public. Scholarship is submitted to a variety of internal repositories such as Harvard's DASH (Digital Access to Scholarship), subject specific repositories such as Social Science Research Network (SSRN) and RePEc (Research Papers in Economics), and funder repositories such as the NIH's PubMed. As libraries play an increasing role in organizing, publicizing and disseminating scholarship to internal and external communities, we see a need for a more streamlined and efficient process for submitting scholarship to multiple repositories.

The process of manually uploading papers to each individual repository will become increasingly inefficient as the volume of scholarship increases and new repositories are created. In addition, the metadata that is input during the manual deposit process may be omitted or applied inconsistently across different repositories. The depositor may miss opportunities to publish or archive their work because of a lack of awareness about the repository options best suited for their needs. For example, a faculty member may submit a working paper to a subject specific repository such as RePEc but neglect to submit the paper to DASH.

Goal

Deposit@Harvard will allow librarians, administrators and faculty from a number of schools across Harvard University to simultaneously deposit scholarship and accompanying metadata into multiple internal and external repositories. The deposit tool will be lightweight and customizable based on each participating library's choice of repositories and local policies and procedures. Deposit@Harvard will be standards-based and interoperable with local information technology infrastructure.

One potentially useful standard is a lightweight repository deposit protocol known as SWORD (Simple Web-service Offering Repository Deposit). SWORD facilitates depositing a publication and its accompanying metadata into multiple repository collections (Figure 1). SWORD has been developed by JISC (Joint Information Systems Committee), a well-known UK group of higher education technologists.

Other universities have developed SWORD-based implementations including MIT and the City University of New York (CUNY). However, these universities have not implemented SWORD to simultaneously send publications to a large number of repositories. Also, they have not incorporated the customization features that we see as a key part of this proposal. Although SWORD has been used by a number of universities and repositories, not all repositories are SWORD compliant. Therefore, an important component of this proposal is to develop open source solutions for delivering scholarship to non-SWORD compliant repositories.

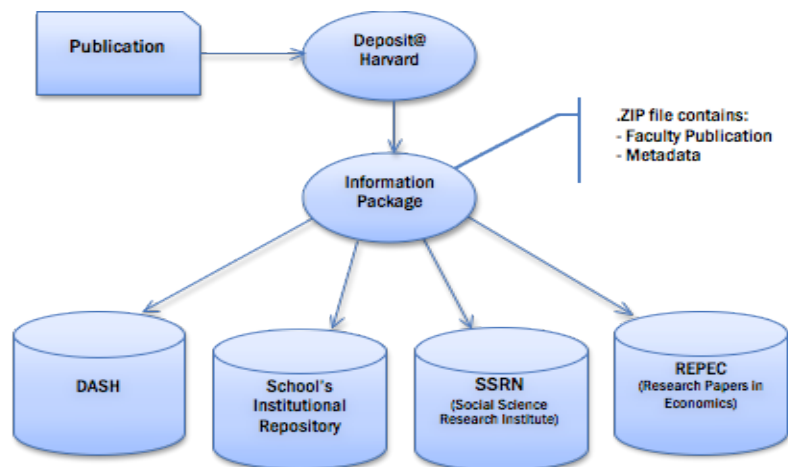


Figure 1. An author-generated publication is uploaded to the web-based form for Deposit@Harvard. An information package containing the publication and accompanying metadata is then submitted to a variety of repositories.

Requirements

- use a unified web-based interface to simultaneously deposit content into multiple internal and external repositories;
- include a menu of repositories that is customizable for each individual school;
- apply local taxonomies as metadata and include standard metadata associated with the content;
- allow standards-based interoperability for different Harvard local infrastructure; and
- contain open source solutions for delivering scholarship to non-SWORD compliant repositories

Project Deliverables

Phase I- Design (Months 1-3)

- collect core functional requirements for all participating libraries
- create list of repositories that Deposit@Harvard will support
- test functionality with a SWORD-compliant repository (proof of concept)
- investigate collaboration with other scholarly communication tools such as Harvard IQSS's Open Scholar, an open-source tool designed to build the next generation of web sites for scholars
- evaluate feasibility and costs of developing open source solutions for non-SWORD compliant repositories
- provide participating libraries with functional specifications for Deposit@Harvard
- develop work plan, costing analysis and timeline for Phase II
- secure commitment from participating libraries to continue with Phase II, based on functional specifications for Deposit@Harvard

Phase II – Development and Implementation (Months 4-9)

- build a beta version of Deposit@Harvard
- develop open source solutions for non-SWORD compliant repositories
- create customized interfaces for each participating library
- perform usability testing
- release final version of Deposit@Harvard
- develop plan for continued OSC maintenance and support of Deposit@Harvard
- develop metrics to assess the efficiency gains and overall success of using the Deposit@Harvard tool

Project Team

Valerie Weis, Research & Knowledge Services Librarian, Harvard Kennedy School & Knowledge Services
Valerie will have overall project management responsibilities. She will serve as a liaison with scholarly communications librarians and staff at other Harvard libraries to ensure that the Deposit@Harvard tool can be customized for their scholarship needs and is interoperable with their IT infrastructure.

Michelle Pearse, Librarian for Open Access Initiatives and Scholarly Communication, Harvard Law School Library

Luke Gaudreau, Research & Instruction Librarian, Harvard Kennedy School Library & Knowledge Services

Michelle and Luke will play key roles on the project team. They will coordinate the needs and technical requirements of developers and librarians. They will also work with their respective user groups (administration, faculty, staff), to ensure the system meets local needs.

Library Lab-funded developers will manage the development process of Deposit @Harvard. The developers will be responsible for communicating functional specifications to the participating libraries to ensure that requirements are met. They will build and customize the deposit tool, including testing and soliciting feedback from participating libraries. The Office for Scholarly Communications will maintain and provide ongoing support for the deposit tool once it is released.

Harvard libraries that commit to the project will use local labor to identify requirements for their implementation.

Anticipated Benefits

We believe that many schools at Harvard will use the Deposit@Harvard tool. Participants from the open access meeting suggested an initial list of repositories. This list included the following repositories:

- DASH
- Individual School's Local Repository
- SSRN (Social Science Research Network)
- NBER Working Papers (National Bureau of Economics)
- RePEc (Research Papers in Economics)
- PubMed
- ArXiv
- ERIC

The Deposit@Harvard tool will be scalable for all Harvard Libraries and for the entire higher education community. The source code will be made available to the public. Although some universities have implemented tools to push scholarship to one or two repositories, no other universities have implemented a unified deposit tool with the capacity to simultaneously send publications to a significant number of internal and external repositories. Furthermore, we are not aware of any universities that

have addressed the problem of delivering scholarship to non-SWORD compliant repositories. In addition, we believe that the customizable menu of repositories and the ability to apply local taxonomies are a unique feature of this unified deposit system.

Harvard University has been a leader in developing the open access mandate and developing DASH as an institutional repository. By developing a tool to facilitate the deposit of scholarship into DASH and other open access repositories, we are showing our continued commitment to the dissemination of open access scholarship to a global community.