

# **LOCKSS: BUILDING PERMANENT ACCESS FOR E-JOURNALS –PRACTICAL STEPS TOWARDS AND AFFORDABLE, COOPERATIVE, E-PRESERVATION, AND E-ARCHIVING PROGRAM**

**VICTORIA REICH**

Director, LOCKSS Program  
Stanford University Libraries

**DAVID S. H. ROSENTHAL**

Chief Scientist, LOCKSS Program  
Stanford University Libraries

## Abstract:

The decentralized, cooperative, preservation and archiving model embodied in the LOCKSS Program capitalizes on the traditional roles of libraries and publishers. The open source software enables institutions to locally collect, store, preserve, and archive web based journals thus safeguarding their community's access to that content. The model enforces the publisher's access control systems and, for many publishers, does no harm to their business models. The LOCKSS Program is moving towards implementation by:

- Building production quality software
- Exploring best practices for collection development
- Specifying collection management requirements, including metadata
- Founding an Alliance for longer term support of the program

## Further Description:

For centuries libraries and publishers have had stable roles: publishers produced information; libraries kept it safe for reader access. There is no fundamental reason for the online environment to force institutions to abandon these roles.

The decentralized, cooperative, preservation and archiving model embodied in the LOCKSS Program capitalizes on the traditional roles of libraries and publishers. The open source software enables institutions to locally collect, store, preserve, and archive authorized content thus safeguarding their community's access to that content. The LOCKSS model enforces the publisher's access control systems and, for many publishers, does no harm to their business models.

Publishers are urged to grant libraries written permission to cache and archive their content and "machine readable permission" to the LOCKSS caches themselves to collect and preserve their content. The LOCKSS system uses a "crawler" to collect and cache content as it is published, so it's recommended that publishers grant blanket permission to libraries, which would allow them to hold copies of subscribed materials, use those materials consistent with original terms, provide access to the local community, and provide copies for audit and repair to other caches, providing they've had a copy in the past.

Librarians are encouraged to make and implement collection development decisions and then make the locally cached content available to their local community of readers. The Stanford LOCKSS team is working closely with staff from Emory University, Indiana University and the New York Public Library to implement the program and address the myriad questions surrounding collection development, collection management and collection access that have arisen.

LOCKSS is an open source Internet "appliance" or "easy to use" software; it runs on inexpensive computers and requires very little system administration.

The Andrew W. Mellon Foundation has funded LOCKSS as one of two alternative strategies for addressing e-journal preservation and archiving. With the Mellon funding, LOCKSS is building production quality software. LOCKSS has NSF funding to research issues that would allow the expansion of LOCKSS to accommodate other formats in addition to journals.