



PORTICO

Overview of Portico

An Electronic Archiving Service

Eileen Fenton
Executive Director
eileen.fenton@portico.org

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Portico's History

- Launched by JSTOR in 2002 in response to the need to include electronic journals in the JSTOR archive. Builds upon the seminal work of the E-Journal Archiving Program of The Andrew W. Mellon Foundation (1999).
- Began with a pilot phase involving academic libraries and 10 publishers to identify and understand relevant technological and business issues and to develop a model that addressed needs of the scholarly publishing and academic communities.
- Pilot publishers included a variety of publishers (small scholarly societies, a university press, and commercial publishers) and representative methods of online publishing (SGML or XML, PDF, HTML, etc.).



Critical Issues Identified in Pilot Phase

- Technological challenges are plentiful.
 - Electronic-journals are produced in diverse formats, which may vary in format or data quality within a single title or publisher. The technological infrastructure must meet the challenges of this diversity.
 - Infrastructure required for digital preservation is extensive including hardware and staff with expertise. This infrastructure has real costs.
- Collaboration is essential.
 - The sheer scale of the digital material requiring preservation dictates that libraries build mechanisms for cooperative effort. Centers of specialty expertise may emerge.
 - For e-journal preservation, publisher cooperation is essential in order to ensure the timely deposit of content.



Critical Issues Identified in Pilot Phase

- Access to archived literature is a key issue for publishers and libraries.
 - If publishers perceive a competitive threat from the archive, they will not deposit content.
 - Libraries want assurance that when they need to access archived content it will be available.
- Financial sustainability must be secured.
 - As always, the source of financing for preservation is a key and challenging question. Digital preservation can be sustained only through reliable sources of funding, but who will pay?



Portico's Mission

To preserve scholarly literature published in electronic form
and to ensure that these materials remain available
to future generations of scholars, researchers, and students.



What Portico Is

- An organization with a mission and singular focus to provide a permanent archive of born-electronic scholarly journals to ensure that over the long-term a valid, reliable copy of the work exists and is accessible.
- Protection against the potential loss of access to e-literature that forms a portion of the scholarly record and library collections.
- An centralized archive that is open to all peer-reviewed journals. Archived journals may have a print version in addition to an electronic version or they may be available only in electronic form.



What Portico Is Not

- An electronic publishing platform or system.
- A repurposing or aggregation of previously published content.
- An “open archive initiative” or an “open access solution.”



Portico Assumes Archiving Requires

- A trusted archival partner with an appropriate:
 - Mission: Preservation should be mission-central.
 - Economic model: Long-term sustainability is best secured through diverse funding sources.
 - Technological infrastructure: Technology must support unique preservation functions and be updated as technology evolves.
 - Relationships with libraries and publishers: Both parties have preservation needs and will benefit from an archival service.
- Permission and content from publishers.
- Adoption and ongoing watch of preservation and publishing standards, best practices, and format evolution with action taken well in advance of technology or format obsolescence.



Portico's Approach to E-Journal Archiving

- Publishers deliver to Portico the “source files” of electronic journals (SGML, XML, PDF, etc).
- Portico converts the files from their original proprietary format to an archival format based on the NLM Archival DTD and deposits the content in the Portico repository.
- Portico retains the source files for the long term; the normalized files will be migrated as needed to new formats.
- Portico preserves the intellectual content of the journal, including the text, images, and limited functionality such as internal linking. “Look and feel” and publishers’ value-add features are not preserved.



Portico Archive Service & Access Model

- Assumptions:
 - Material is preserved for eventual use and access. A completely and perpetually “dark” archive is not desirable.
 - Access to audit or verify the integrity of archived content is needed.
 - Under certain conditions, broad access to archived content may be appropriate, and an archive model must articulate these.
 - Access to archived content should not compete with publisher-provided access or threaten publisher revenues.
 - Access model should balance the needs of both publisher and library communities.



Portico Archive Service & Access Model

- For participating libraries, trigger events initiate campus-wide access. Trigger events include:
 - When a publisher ceases operations and no entity purchases and makes titles accessible
 - When a publisher ceases to publish a title and it is not offered by another publisher
 - When back issues are removed from a publisher's site and not available elsewhere
 - Upon catastrophic failure by publisher delivery platform for a sustained period of time
 - When a publisher chooses to rely upon Portico to meet perpetual access obligations.
- Pre-trigger event, select librarians at participating libraries are granted password-controlled access for verification purposes.



Publisher Participation Requirements

- Sign an archiving license.
- At publisher's option, permit Portico to provide post-cancellation "perpetual access" to Portico supporting libraries on behalf of publisher in conformance with their customer agreements.
- Deposit content in a timely way following publication.
- Make an annual financial contribution.



Benefits to Publishers

- Reduces (or eliminates) publisher's internal archiving costs.
- Meets library demand for a trusted, third-party archive.
- Meets library demand for perpetual access without negative impact on publisher's operations.
- Converts source files to archival format and conducts future format migrations. Provides information on evolving formats and archival practices and technologies.



Library Participation Requirements

- Sign an archiving license.
- Make a one-time and annual financial contribution.



Benefits to Libraries

- Creates a means to act upon the traditional preservation mandate.
- Secures protection against eventual loss of access. Provides a practical way to secure perpetual access and maintain continuity of library collections.
- Reduces system-wide preservation costs through a cooperatively developed preservation infrastructure which eliminates the need for each library to independently archive published literature.
- Enables libraries to more aggressively rely upon electronic-resources and reduce their expenditures on the processing, housing, and preservation of print resources.



Sustainability

- Diversified revenue streams are important to the longevity of the archive. Support for the archive comes from the primary beneficiaries of the archive - publishers and libraries.
- Government agencies and charitable foundations are also expected to provide support.
- The Andrew W. Mellon Foundation, Ithaka, JSTOR and the Library of Congress are investing significantly in Portico's infrastructure development.



Sustainability

- Publisher Contribution
 - An annual Supporting Publisher Contribution to fund initial conversion tools development and to defray the cost of adding new content as it is published.
 - Contributions will be tiered and vary according to the size of the publisher's annual journals revenue (subscription and advertising)
- Library Contributions
 - A one-time Archive Development Contribution to fund infrastructure development and to prepare for future migrations.
 - An annual Archive Support Contribution to defray the cost of adding new content as it is published.



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