



# Library of Congress Digital Preservation Newsletter

## Digital Preservation Pioneer: Jerry McDonough

Millions of people immerse themselves daily in games and virtual worlds. But only recently have cultural institutions begun attempts to document and preserve games. It is a thorny problem, even for those with substantial experience archiving other varieties of digital content. Jerry McDonough, Assistant Professor in the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign, is one of the NDIIPP-funded [Preserving Virtual Worlds](#) scholars working on the challenge.



Digital Preservation Pioneer Jerry McDonough.

Previously he worked at New York University as manager of the Digital Library Development Team and was part of the NDIIPP [Preserving Public Television](#) project team. In that project he helped establish best practices for archiving digital video and creating and maintaining a large-scale digital video archive.

McDonough also helped launch the [Metadata Encoding and Transmission Standard](#), an XML-based standard for encoding descriptive, administrative, and structural metadata for objects within a digital library. In 2002, he served as the first chair of the METS editorial board and was instrumental in building a user community for the standard.

Preserving virtual worlds and games involves several elements, including software, media (sounds and images), metadata and sometimes hardware. Since most games are commercial products, intellectual property rights are another preservation factor; McDonough is an advocate of working closely with game publishers as preservation allies.

Maintaining the authenticity of the game-play

experience for the user is an elusive goal. Using “good enough” preservation methods might satisfy researchers who want a general idea about a game but those methods do not satisfy devoted gamers. “People who’ve worked with emulating older games, players sensitive to minor changes – the speed of the game, aspect ratio of display – they pick up on the minutest details,” said McDonough.

In virtual worlds, hundreds of thousands of users interact not only with the game but also with each other. How do you preserve that experience?

“It’s really not technologically possible or socially possible to document everything in a virtual world,” said McDonough. The best that can be done is to preserve some contextual aspects, such as the software and some specific game states—snapshots taken at particular times. One approach is to record the behaviors that develop around the games. “When we talk about preserving these worlds we have to approach that problem like sociologists and anthropologists having to go in and document a culture.”

Video is one of the best ways to chronicle interactions, and members of the game-playing community have been active in recording their own gaming sessions. This helps capture the players’ roles, interactions, jargon and etiquette. Henry Lowood, Curator for Stanford University Libraries’ History of Science & Technology Collections and a member of the Preserving Virtual Worlds project, was instrumental in creating an area on [Internet Archive](#) devoted to [game-play videos](#) and [archiving virtual worlds](#). Enlisting the community that you are serving is a solution that works well. “It’s participatory ethnography,” said McDonough.

As with other NDIIPP projects, collaboration is one of surest methods of successful digital preservation. McDonough calls for re-thinking relations between users, content producers and archivists. He identifies a number of questions that need to be addressed. “Who’s responsible for what? How do we collaborate? And who has resources for what?”

It is a multiplayer challenge. Read more about [McDonough](#) and the Preserving Virtual Worlds project on [digitalpreservation.gov](#).



## Understanding PREMIS Metadata

*Understanding PREMIS* is now available on the Library of Congress Standards Web site.



PREMIS (PREservation Metadata: Implementation Strategies) refers to both an international working group and to the Data Dictionary the group released in 2005. The Library supports the [PREMIS Maintenance Activity](#) for coordinating updates to the Data Dictionary, maintaining the associated XML schema, and communicating PREMIS-related news.

*Understanding PREMIS* is an introduction to the Data Dictionary, giving an overview of its scope and goals. The Guide aims to make the PREMIS Data Dictionary document easier to approach.

The full [PREMIS Data Dictionary](#) is available at the PREMIS Maintenance Web site. •

## Digital Preservation Interest Group

The American Library Association Digital Preservation Interest Group met during the 2009 ALA Midwinter Meeting in Denver, Colorado. The Interest Group is co-chaired by Emily Gore of Clemson University Libraries and Becky Ryder of the University of Kentucky. The Group provides librarians from large and small institutions the opportunity to share and discuss plans and experiences in establishing digital preservation programs.

Lisa Schmidt from [MATRIX](#), a humanities research center at Michigan State University, described utilizing the [Trustworthy Repositories Audit & Certification Checklist](#) to establish a preservation plan for the H-Net listserv files. H-Net is an international consortium of scholars and teachers working in the arts, humanities, and social sciences. Among H-Net's most important activities is its sponsorship of over 100 listservs, the files of which have grown to over one million messages. The TRAC checklist was deemed by Schmidt to be flexible yet useful for improving preservation practices and policies for the H-Net listservs.

Abigail Potter from the Library of Congress gave a brief [overview](#) of the National Digital Informa-

tion Infrastructure and Preservation Program, highlighting its work in building a national network of preservation partners. NDIIPP partner Martin Halbert of Emory University and Program Director of the [MetaArchive Cooperative](#) updated the group on the distributed digital preservation services available through MetaArchive. The MetaArchive allows libraries, archives, and other cultural heritage institutions to preserve collections in a [LOCKSS](#)-software network at three different levels of membership.

Liz Bishoff provided a report of [iPres 2008: The Fifth International Conference on Preservation of Digital Objects](#) meeting and Emily Gore updated the group on the [4th Annual Digital Curation Centre Conference](#) "Radical Sharing: Transforming Science". Ongoing discussions on these and other digital preservation topics will take place on the [ALA digipres listserv](#). •

## Web Archiving Newsletter

LiWA, or Living Web Archives, has published the first issue of the *LiWA News*. LiWA seeks to develop Web capture and preservation tools in the increasingly complex and dynamic Web environment. LiWA research projects relating to complex site capture, spam cleansing, temporal coherence, and semantic evolution are covered in the newsletter.

Other areas of focus for LiWA include Web archive fidelity, preserving the social Web, and capturing rich media. For more information and to sign up for the newsletter, visit <http://liwa-project.eu>. •

## Campbell Keynote Address

Laura Campbell, Associate Librarian for Strategic Initiatives at the Library of Congress, spoke at Information Online, the 14th meeting of the Australian Library and Information Association in Sydney.

Campbell focused on Library of Congress initiatives that expand online offerings through new channels while also embracing networks of diverse partners to share the work and spread the message. Read more at [www.digitalpreservation.gov](http://www.digitalpreservation.gov). •

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