

Digital Preservation In Academic Libraries: Recent Canadian Initiatives

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What We're Going To Be Talking About

- Andrew

- What is digital preservation?
- Why is digital preservation necessary?
- The COPPUL Private LOCKSS Network (PLN)
- Other PLNS, including Synergies and the Alabama Digital Preservation Network (ADPNet)

What We're Going To Be Talking About - Wayne

- Trusted Digital Repositories
 - Overview
 - Scholars Portal TDR
 - Library and Archives Canada TDR
- Research data management
 - Background
 - the role for libraries
 - Agri-Environmental Research Data Repository

What Is Digital Preservation?

- Short definition: “Digital preservation combines policies, strategies and actions that ensure access to digital content over time.”
- Slightly longer definition: “Digital preservation combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media failure and technological change. The goal of digital preservation is the accurate rendering of authenticated content over time.”

Why Is Digital Preservation Necessary?

- Stuff (hurricanes, floods, etc.) happens
- Hardware breaks
- Software crashes
- Files get corrupted
- Publishers fold, merge, disappear
- Somebody hits the wrong button
- Somebody drops something
- Burning files to CDs and DVDs isn't enough
- It costs time/money/hassle to restore lost collections

It Can Happen To You!

(Freezing and flooding, University of Calgary,
Calgary, 2011)



COPPUL

- COPPUL=Council of Prairie and Pacific University Libraries
- www.coppul.ca
- Regional university library consortium in Western Canada; same sort of thing as OCU
- 22 members in British Columbia, Alberta, Saskatchewan, and Manitoba, plus some associate members within the COPPUL area and elsewhere in Canada
- Almost all publicly-funded institutions

COPPUL PLN - History

- Came out of the COPPUL Collections group in spring 2006
- Task group investigated options
- LOCKSS was selected – a distributed digital preservation solution
- Two-year pilot with eight initial partners
- COPPUL paid for some of the LOCKSS Alliance membership costs initially
- Has been an official COPPUL program since start of 2010
- One of two PLNs in Canada
- Learned/borrowed much from ADPNet

COPPUL PLN – What Do We Preserve?

- Collections of local or regional interest that would not be preserved elsewhere
- This includes:
 - Locally-hosted OA journals, esp. those using OJS
 - Locally-digitized collections
 - Small university press publications
 - Journals with a western or local focus
 - Websites and online resources that form an important part of a member's collection

COPPUL PLN – The Basics

- Closed or “dark” archive
- LOCKSS nodes at all nine member institutions
- Each institution contributes and archives content
- Self-supporting since 2010
- Not too big yet - 521 archival units – but much more is on deck
- <http://www.coppul.ca/pln.html>
- <http://coppullockssgroup.pbworks.com>

COPPUL PLN - Governance

- The COPPUL PLN falls under COPPUL's umbrella – is an official program of COPPUL
- Steering committee – 1 official rep from each member institution; others also at meetings
 - Chair is Andrew Waller, University of Calgary
- Technical committee – drawn from member institutions; reports to steering committee
 - Chair is Mark Jordan, Simon Fraser University
- Report twice a year to the COPPUL directors
- Work closely with ADPNet and the Synergies PLN

COPPUL PLN - Membership

- Open to all full COPPUL members
 - Athabasca University*
 - Simon Fraser University*
 - University of Alberta*
 - University of British Columbia*
 - University of Calgary*
 - University of Manitoba*
 - University of Saskatchewan*
 - University of Victoria
 - University of Winnipeg*
- *=pilot phase participant

COPPUL PLN – Costs

- No PLN fees, just need to be able to pay LOCKSS Alliance fee (no financial support from COPPUL beyond the pilot phase)
- Local hardware, software, and staff costs
- Communication: Near-monthly Skype calls involving steering committee
- Essentially no travel costs (some conferences)

COPPUL PLN – Some Issues

- Adding more content
- Keep plug-in development going e.g. CONTENTdm, DSpace
- New members – maybe one or two?
- Relationship with COPPUL Digital Curation and Preservation Task Group

COPPUL PLN - Summary

- A success – PLN is established, functional, stable
- Still can grow – there's lots of content that meets the criteria that can be added
- Still can develop
- Job is not done (as if it ever will be)

Other PLNs

- Synergies:
<http://www.synergiesprairies.ca/preservation>
- Alabama Digital Preservation Network (ADPNet): <http://adpn.org/>
- PLN list (partial):
http://www.lockss.org/lockss/Private_LOCKSS_Networks

Some Resources (part 1)

- Associations for Library Collections and Technical Services (ALCTS) Definitions of Digital Preservation:
<http://www.ala.org/ala/mgrps/divs/alcts/resources/preserv/defdigpres0408.cfm>
- LOCKSS: www.lockss.org
- Synergies: <http://www.synergiescanada.org/>
- Synergies Prairie Node:
<http://www.synergiesprairies.ca/>

Some Resources (part 2)

- A Guide to Distributed Digital Preservation:
http://www.metaarchive.org/sites/default/files/GDDP_Educopia.pdf
- SPEC Kit 325: Digital Preservation:
<http://www.arl.org/bm~doc/spec-325-web.pdf> (TOC and executive summary only)

Trusted Digital Repository

OAIS compliance

- Organizational infrastructure
- Digital object management
- Technical infrastructure and security risk management

Digital preservation

DIGITAL PRESERVATION OUR WAY: OCUL'S TRUSTED DIGITAL REPOSITORY

Stephen Marks, Digital Preservation Librarian, Scholars Portal; Karl Nilsen, Digital Preservation Assistant; Aurianne Steinman, Digital Preservation Assistant; Scholar's Portal

Discuss the process by which Scholars Portal has moved toward its accreditation as a Trusted Digital Repository seeking to join the ranks of other well-known repositories such as Portico and HathiTrust.

This presentation will center around TDR requirements and how Scholars Portal had changed to meet those requirements, through both the adoption and rejection of common tools and protocols.

*Convenor: Mary Claire Vandenburg,
Queens University*

- o Collections
 - Consortial Products
 - OCUL Model Licenses
- o Scholars Portal
 - Digital Collections
 - Services
- Preservation
- Publications & Presentations

Services › Preservation ›

Trusted Digital Repository

Scholars Portal is in the process of developing a robust long-term platform for all its collections, beginning with the 23,000,000+ articles hosted on its current platform. Working from concepts set out in the Open Archival Information System (OAIS) reference model and codified in the Trustworthy Repositories Audit & Certification (TRAC) checklist, Scholars Portal seeks to create a digital preservation platform that ensures the long-term integrity and usability of the objects in its collections.

Our Commitment

We commit to ensure the **Integrity, Authenticity** and **Usability** of our digital collection now and in the future.



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Digital Initiatives at LAC

Digital Projects

LAC Trusted Digital Repository

Abstract

In all domains the amount of digital information is increasing at a rapid rate, this raises crucial questions of preservation. Our intellectual capital, as laid down in educational, scientific, public, cultural and other intellectual resources, is increasingly at risk by the volatile character of digital objects and the rapid developments in information technology.

The growing need for adequate management and preservation of digital information is recognized in many stakeholder communities. The Library and Archives Canada (LAC) is committed to being a Trusted Digital Repository (TDR), to provide reliable and long-term access to the digital documentary heritage of Canada.

Research data management

- Accelerates scientific progress
- Increases the visibility and impact of research
- Ensures compliance with funding agency policies
- Avoids duplication of research
- Enables replication and verification of research results
- Enhances collaboration

Research Data: Unseen Opportunities

Canadian Association of Research Libraries, 2009

OECD Principles and Guidelines for Access to Research Data from Public Funding





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Social Sciences and Humanities Research Council

www.sshrc-crsh.gc.ca



The 2011 Canadian Research Data Summit

OTTAWA CONVENTION CENTRE
SEPTEMBER 14TH - 15TH, 2011

**MAPPING THE DATA
LANDSCAPE**

Library Trends

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At the Watershed: Preparing for Research Data Management and Stewardship at the University of Minnesota Libraries

Leslie M. Delserone

“Like many research universities, the University of Minnesota (UMN), and its Libraries, attempts to understand the nature and intensity of data produced by its researchers, and address the management and stewardship of its institutional research output. The recent activities of the Libraries, in support of and in conjunction with campus-wide efforts, illustrate a set of approaches that show the Libraries to be at the watershed, integrated into and contributing leadership to the growing river of campus-wide exploration and planning of cyberinfrastructure needs.”

Agri-environmental Research Data Repository: proposal

All too often the results of expensive and time-consuming research as represented by rich data sets are lost due to the absence of sound data management plans. Redundant research is undertaken because the previous research data is no longer available. Opportunities for analysis of data across time are lost along with the historical data sets. Even when data has been properly stored and preserved it benefits no one if it isn't easily discovered, retrieved and repurposed.

Agri-environmental Research Data Repository: work plan

- needs assessment
- data audit
- environmental scan
- standards, policies, protocols
- data capture and migration
- data discovery and retrieval
- data citation and linking
- research data technician
- pilot the system
- move into production
- promotions and outreach
- sustainability strategy
- service level agreement

Agri-environmental Research Data Repository: needs assessment, data audit

- Interviews with key stakeholders
- Email broadcast to all researchers
- Public education component

“When I read your letter I got pretty excited as the lack of dissemination and use of data generated in the ‘public’ sector has always worried me. [...] If the Final Report is already stored at the Library, and there is already a system of cataloguing and searching it, why not entrust the same institution to store the data.”

Agri-environmental Research Data Repository: early data sets

- Agrometeorology
- Capacity development
- Environmental geology
- Food processing
- Food safety
- Soil physics

The
**Dataverse
Network**[™]
Project



An Open-Source Application for
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Agri-environmental Research Data Repository

[All Scholars Portal Dataverses >](#)

Agri-environmental research data repository Dataverse

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Helping you to find,
access, and reuse data



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National Research Council Canada

www.nrc-cnrc.gc.ca/datacite/

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Metals in the Human Environment Strategic Network (MITHE-SN)

Search within this community and its collections:

[Advanced Search](#)

Principal Investigator, Dr. Beverley Hale, University of Guelph

The MITHE Strategic Network is a collaboration of academia, government, and industry. The Network conducts research in support of science-based environmental and human health risk assessments for metals in water, soil and food, within well articulated and planned inter-disciplinary research themes.

The research program is strongly linked across Canada, with field sites in the Maritimes, Québec, Ontario, The Prairies, British Columbia, the Yukon and Nunavut. The Network also features strong links among academic and government scientists. Implicit in the MITHE-SN approach is a commitment to joint, interactive, centralized planning, project accountability for both intellectual and financial objectives, and regular reporting of research progress beyond the usual publication in scientific journals.



Collections in this community

- [Aquatic Ecosystems](#) [9]
- [Foods and Ingested Particles](#) [7]
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Questions? Discussion?

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