

# **The Canadian Information Network for Research in the Social Sciences and Humanities**

<http://www.synergiescanada.org>

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***“Synergies is a national project  
... whose intent is to provide a  
platform for the potential  
transformation of the Canadian  
scholarly record.”***

***(DEVAKOS AND TURKO, 2007)***



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# BACKGROUND

- A national project funded by CFI, with matching contributions from provincial and other agencies
- For the Prairies, our matching comes from the Alberta government, vendor in-kind, and “in-cash” matching from the libraries
- The project is four years and began in 2007



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# SYNERGIES GOALS

- Build capacity for online publishing and scholarship in the Social Sciences and Humanities
- Provide access to peer-reviewed journals, data sets, theses, conference proceedings and scholarly books



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# SYNERGIES GOALS

- Through common standards and interoperability mechanisms
  - Provide a platform for access to publicly funded research
  - Build a technical infrastructure that will support digital preservation



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# SYNERGIES NATIONAL PARTNERS

- University of New Brunswick
- Université de Montréal
- University of Toronto
- University of Calgary
- Simon Fraser University



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- University of Calgary
- Athabasca University
- University of Winnipeg
- Affiliate members

# SYNERGIES SERVICES

Publishing Services Workflow Self-publishing tools (all scholarly genres and data)	Dissemination Services Interoperability Link to bibliographic databases	Long-term Preservation and Permanent Referencing
General public Web interfaces Search tools, etc.	Digital Warehouse Storage, Distribution and Archives	Copyright
Research-specific Web interfaces Data mining, etc.	Metadata Preparation and Distribution	e-Commerce? Individuals or Institutions







# **DIGITAL PRESERVATION**

# DIGITAL PRESERVATION

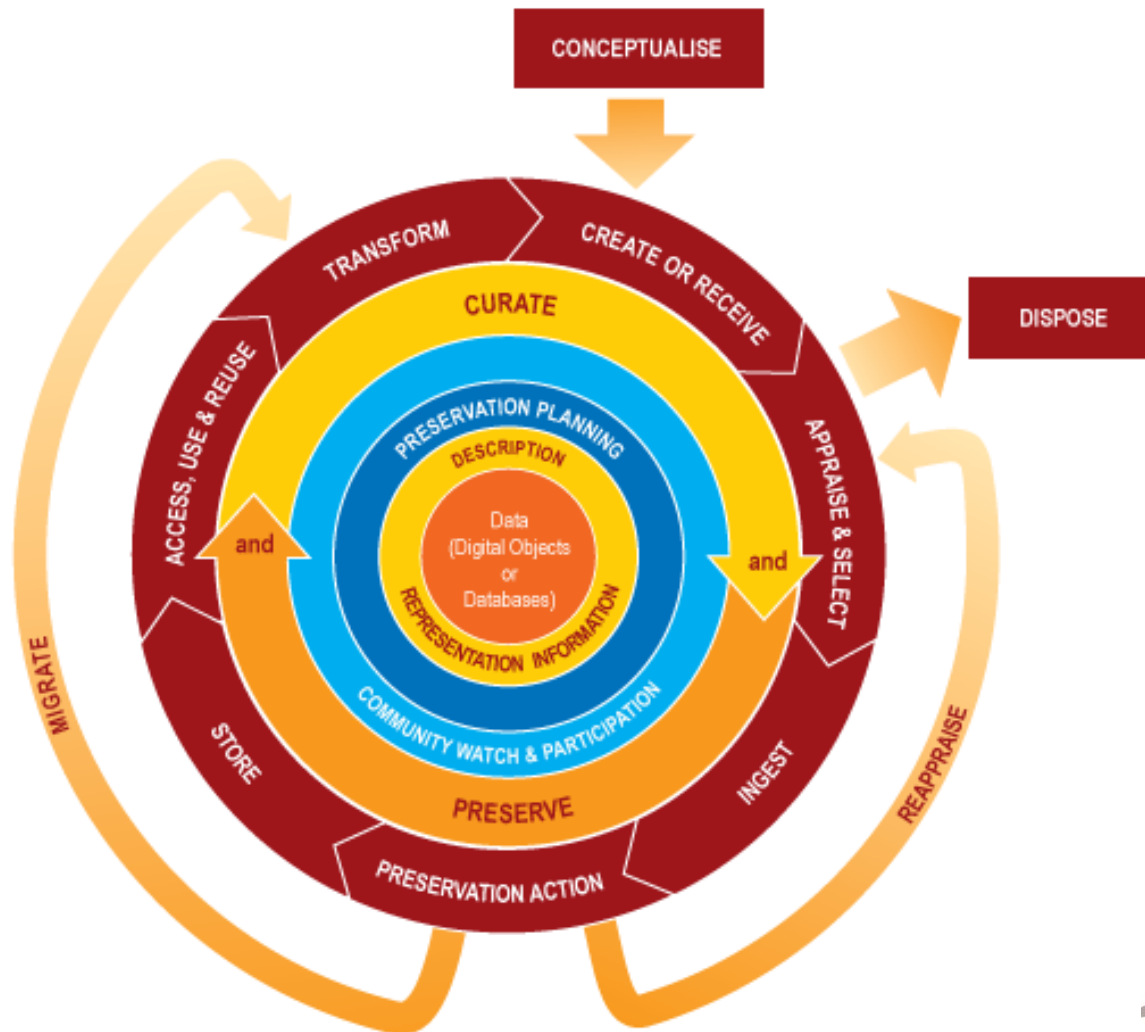
*“Digital preservation combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media failure and technological change. The goal of digital preservation is the accurate rendering of authenticated content over time.”*

*ALA Association for Library Collections & Technical  
Services, Preservation and Reformatting Section,  
June 24, 2007*

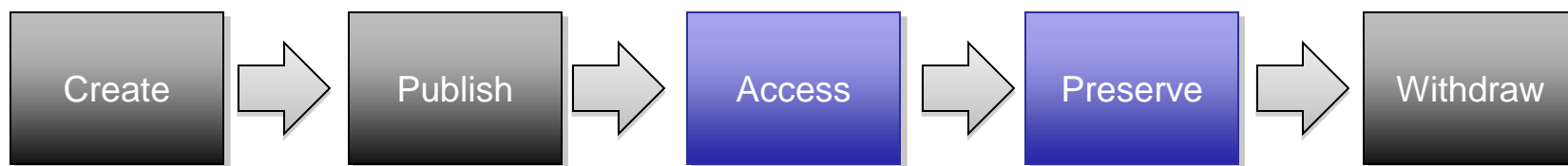


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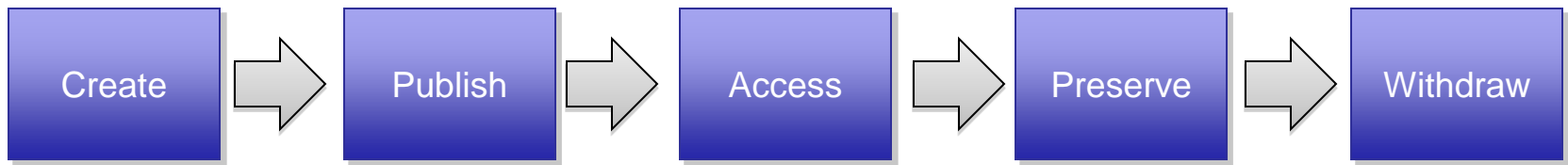
# DCC DIGITAL OBJECT LIFECYCLE MODEL



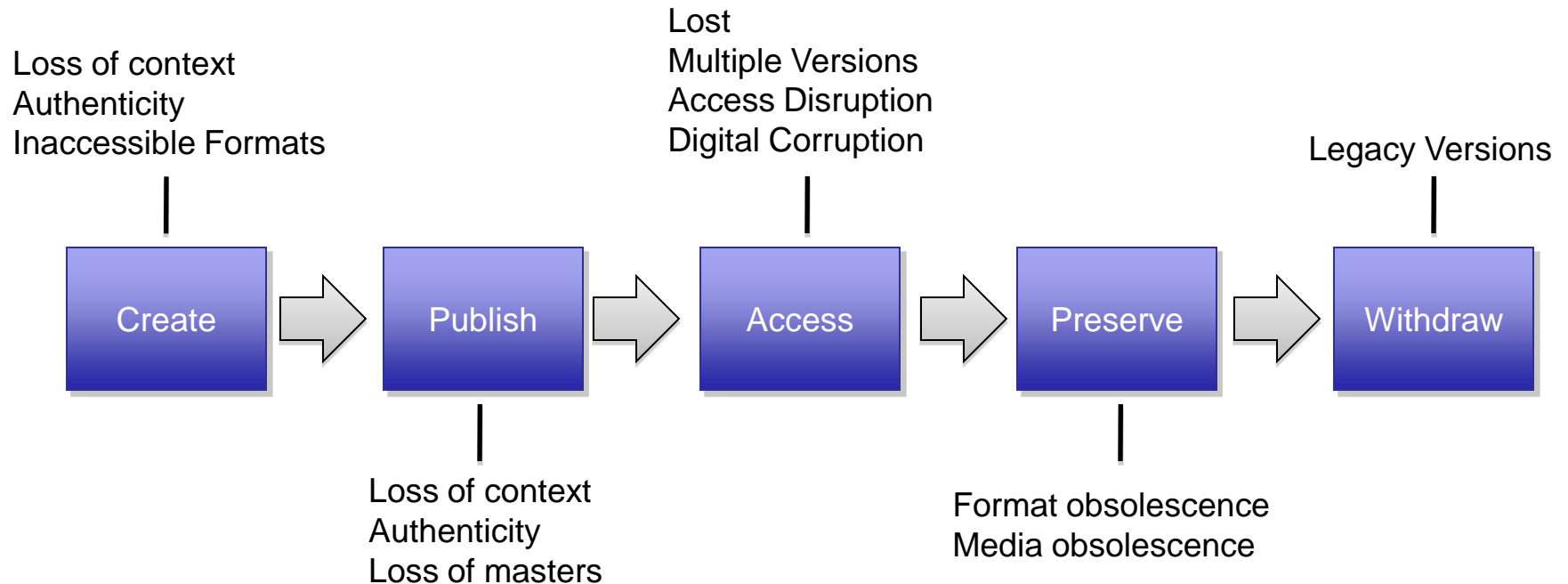
# ROLE OF LIBRARY (TRADITIONAL)



# ROLE OF LIBRARY (SYNERGIES)



# DIGITAL LIFECYCLE CHALLENGES



# DIGITAL LIFECYCLE CHALLENGES

Loss of context

Authenticity

Metadata

Inaccessible Formats

Guidance

Lost

Multiple Versions

Persistent Identification

Access Disruption

Digital Corruption

Perpetual Access

Loss of masters

Format obsolescence

Media obsolescence

Legacy Versions

Central Archive



# METADATA

- Packaging metadata (METS)
- Technical metadata
- Provenance metadata (PREMIS)





# GUIDANCE

- Best practices for creators and publishers
- Recommendations for
  - File formats
  - Creation of descriptive metadata
  - Retrospective digitization standards
- Central information website

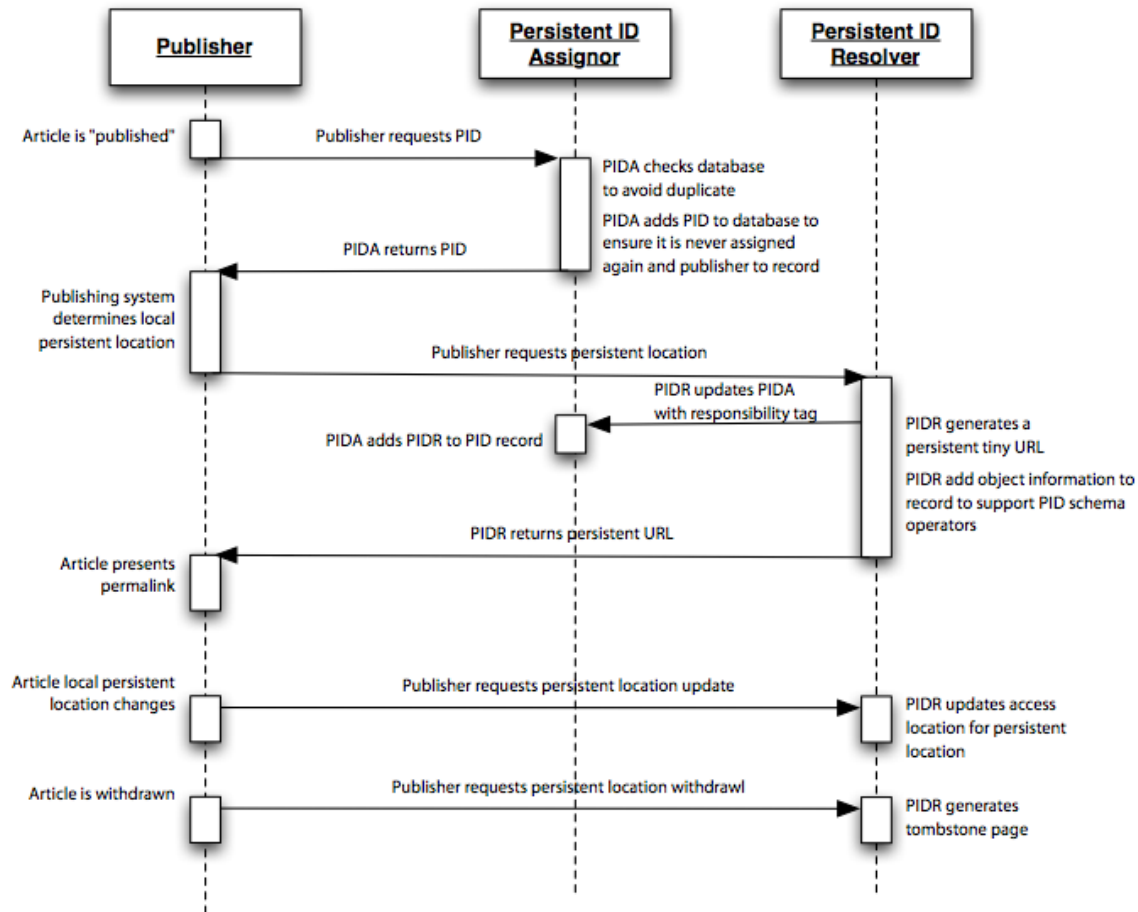


# PERSISTENT IDENTIFICATION

- Persistent identification allows
  - Distinguishing between versions of content
  - More durable location
- Requires
  - A standard means of assigning an identifier
  - An assignor authority responsible for preventing duplicates
  - A resolver authority responsible for location resolution



# PERSISTENT IDENTIFICATION



# PERPETUAL ACCESS

- Goals
  - Multiple copies synchronized across multiple geographic locations
  - Redundant modes of access in event of network / local failure
  - How? Secure storage and distributed access
- Approach
  - Private LOCKSS network (PLN)
  - Canadian administration of configuration

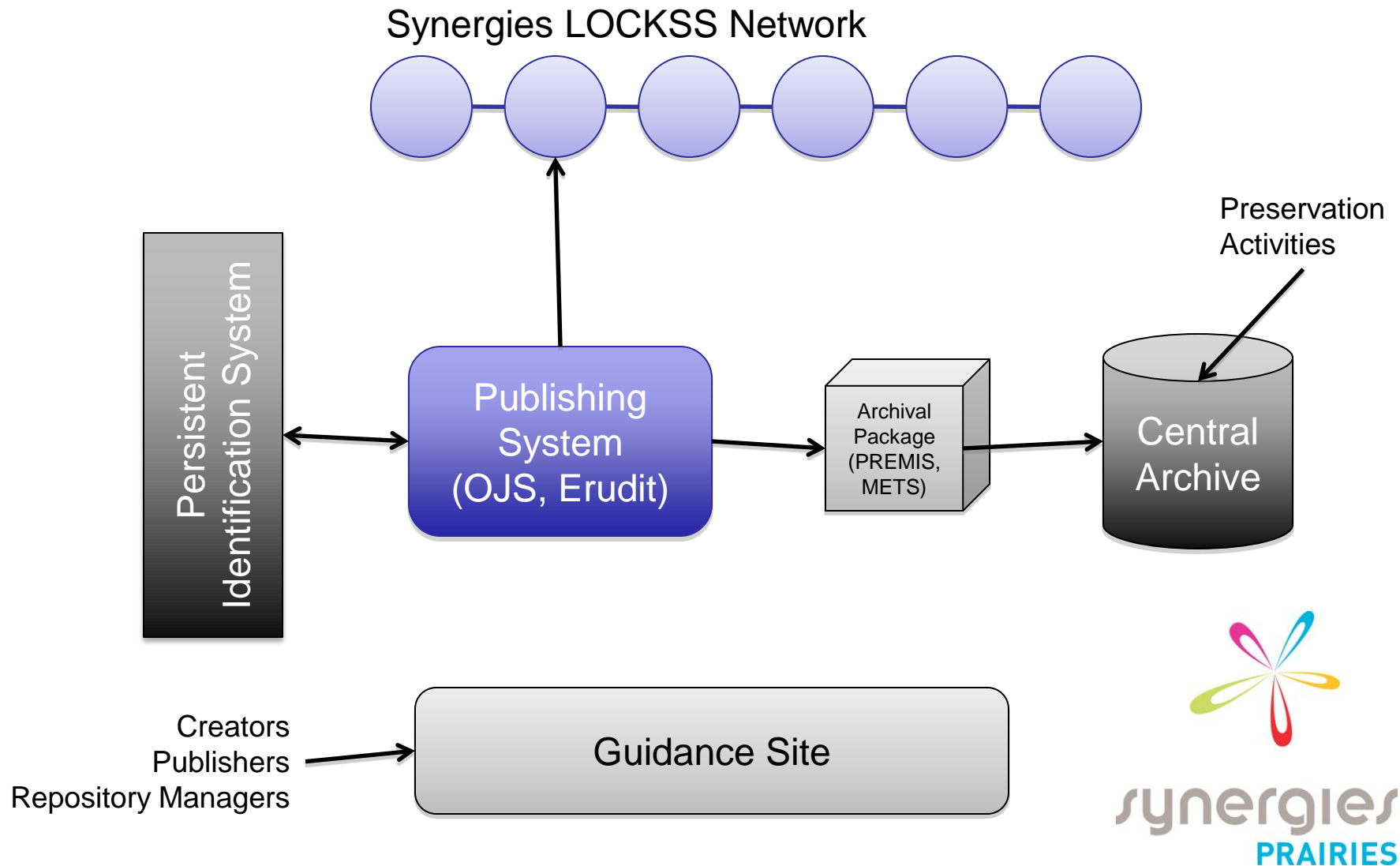


# CENTRAL ARCHIVE

- A central archive for master files allows for:
  - Reduced resource requirements for file / media migration
  - Greater awareness of threats
  - Resource sharing for preservation activities
  - Envisioned to be a “cloud” service



# OVERVIEW OF INFRASTRUCTURE



# PRESERVATION DELIVERABLES

- Develop a central resource for creators and institutions to support creating preservable content
- Establish a set of technical minimum standards for depositing into the Synergies platform
- Create a network of persistent identifier servers to provide long term access handles



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# PRESERVATION DELIVERABLES

- Establish secure storage for content
  - Create/identify plugins for common platforms like DSpace and OJS to preserve content and ancillary materials
  - Deploy a private LOCKSS network for Synergies nodes
  - Deploy archival servers for master files





# PRESERVATION DELIVERABLES

- Validate the Synergies infrastructure in terms of trusted digital repository certification
- Ensure future accessibility
  - Establish a technology watch system to monitor key formats, applications and standards
  - Identify and/or develop tools to aid in place migration of content, including distributed migration





**QUESTIONS?**



**[WWW.SYNERGIESCANADA.ORG](http://WWW.SYNERGIESCANADA.ORG)**