

The SFU logo consists of the letters 'SFU' in a white, bold, sans-serif font, set against a solid red rectangular background.

SIMON FRASER UNIVERSITY
ENGAGING THE WORLD



The PKP Private LOCKSS Network

Mark Jordan, Simon Fraser University

PKP is a multi-university initiative developing (free) open source software and conducting research to improve the quality and reach of scholarly publishing.

Public Knowledge Project

- Based at Simon Fraser University Library
- Director: John Willinsky
- Managing Director: Brian Owen
- ~10 developers
- Publishing Services Coordinator, Communications and Member Services Officer, Education Coordinator
- SFU affiliates
- Development and research associates
- Development partners, sponsors, donors

PKP organization

- 1998: John Willinsky, UBC
- 2001: Open Journals Systems (OJS)
- 2005: Partnership with SFU Library & Canadian Center for Studies in Publishing
- 2007: First International PKP conference
- 2007-11: Canadian Foundation for Innovation funded project (Synergies)
- 2011/12: Sustainability Initiative
- 2103: Open Monograph Press (OMP)

PKP history

- Target: \$1,000,000 annually
- SFU Cost Centre & Business Plan
- Sources
 - Partners & Sponsors: \$350,000
 - Hosting & Related Services: \$350,000
 - Grants: \$200,000
 - Donor Agencies: \$100,000

PKP Sustainability Initiative

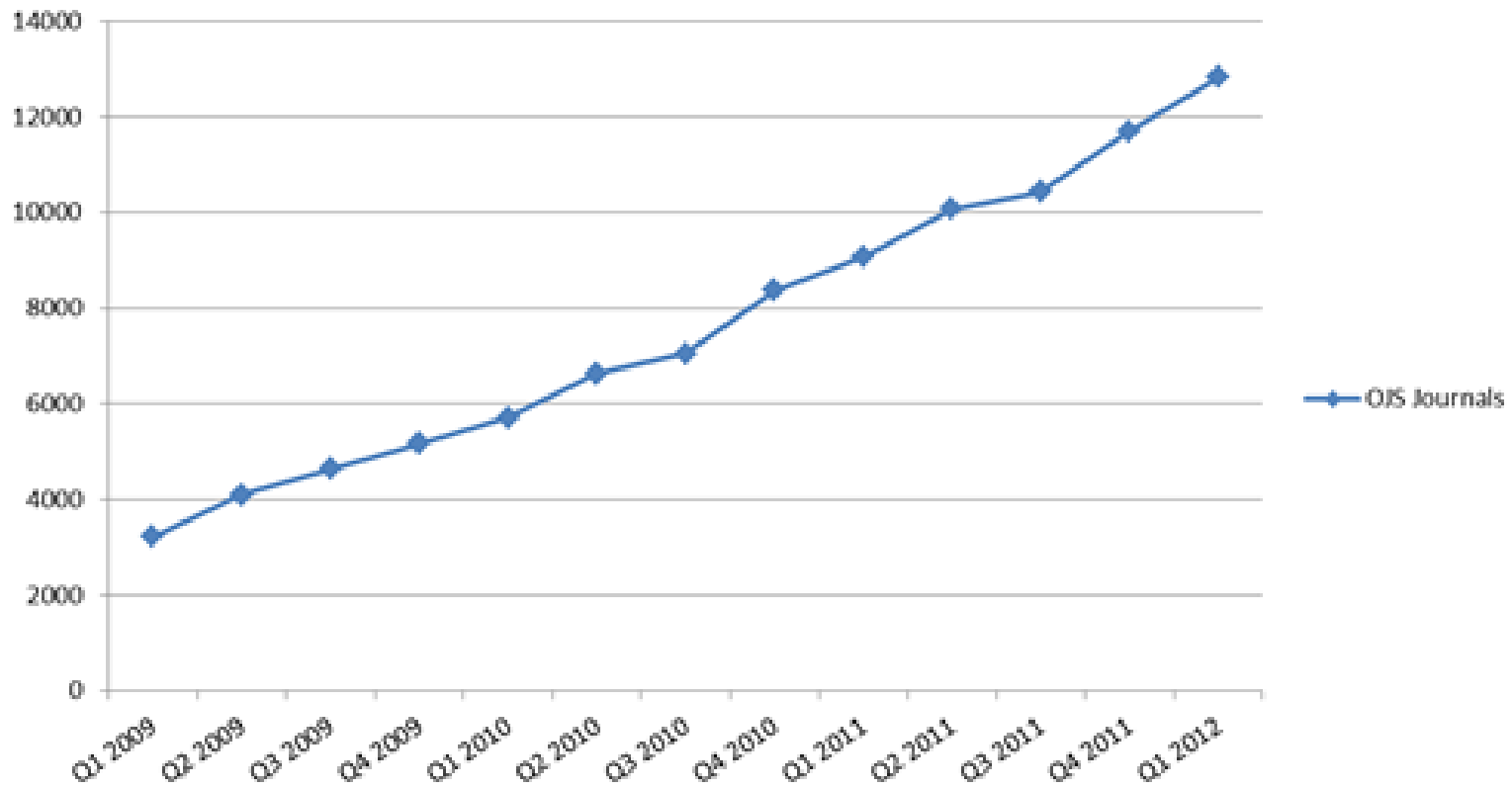
- California Digital Library
- Ontario Council of University Libraries
- Simon Fraser University Library
- Stanford University School of Education
- University of British Columbia
- University of Pittsburgh Library

Development partners

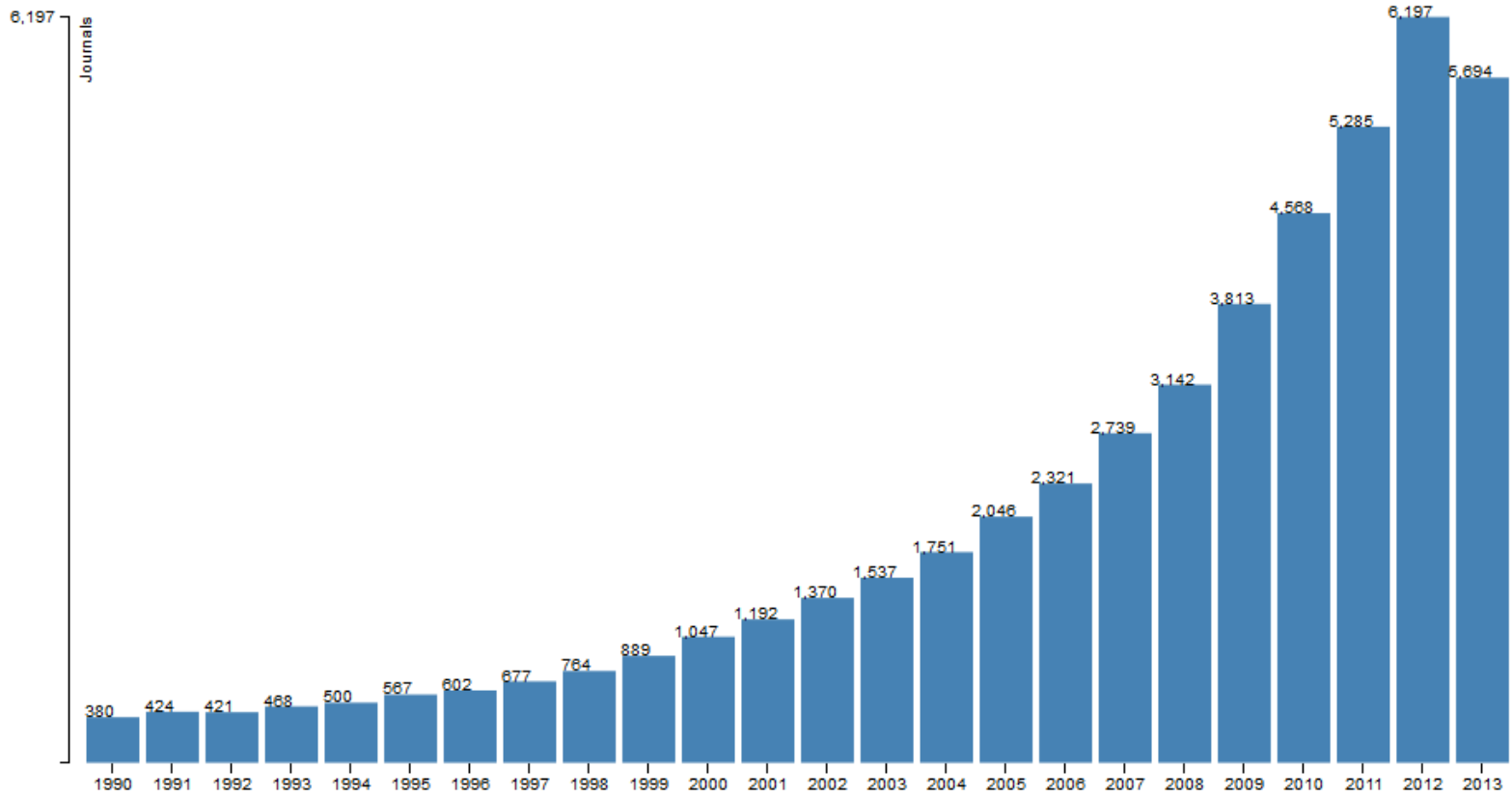
- 480+ OJS journals
- 20+ OCS conferences
- 20 OMP titles
- Custom development, consulting, training

PKP Publishing Services

Journals Using OJS by Quarter, 2009 - 2012

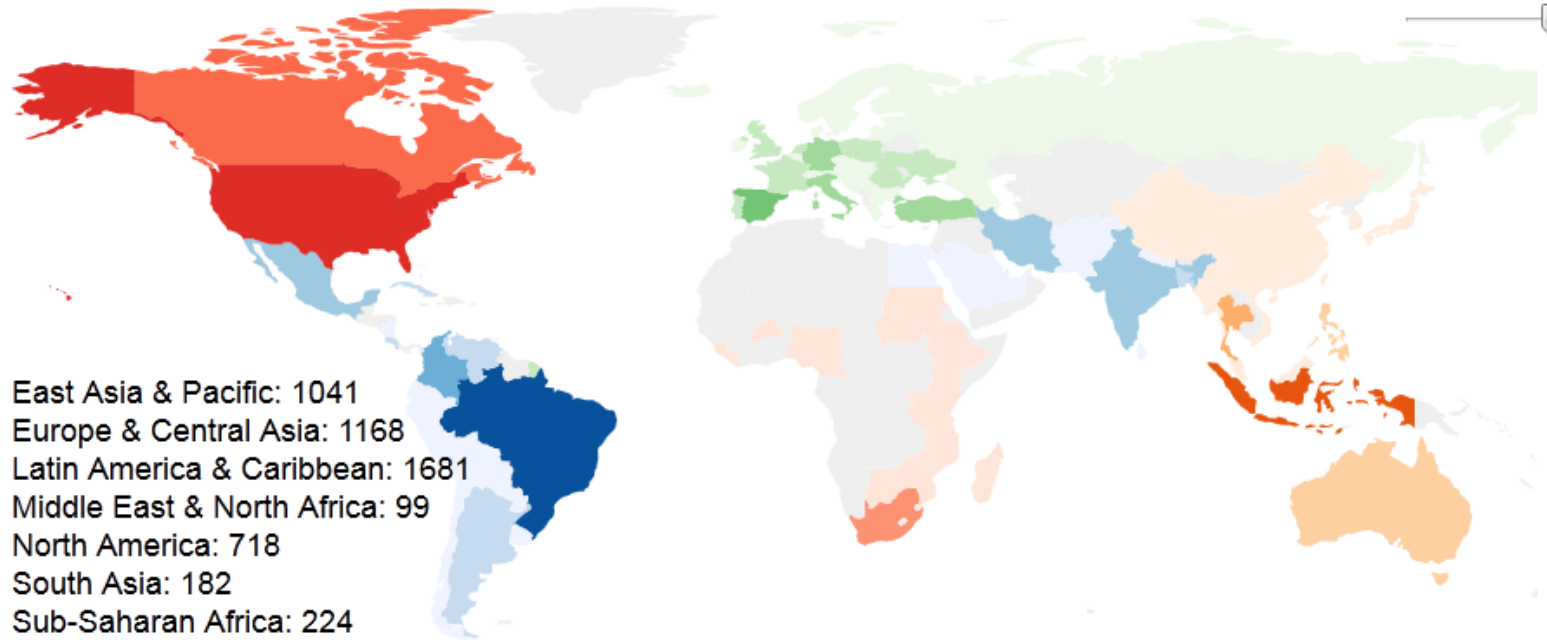


OJS adoption



Journals with 10 or more articles

2013



East Asia & Pacific: 1041
Europe & Central Asia: 1168
Latin America & Caribbean: 1681
Middle East & North Africa: 99
North America: 718
South Asia: 182
Sub-Saharan Africa: 224
unknown: 581
Total: 5694

<https://pkp.sfu.ca/ojs/ojs-usage/>

- 998 (36%) of 2748 OJS journals responded
 - Commercial publishers: 6%
 - Scholarly societies: 32%
 - Independent or scholar publisher: 62%
- Open Access policy: 83% (another 8% embargo OA)
- Average first copy cost: \$188 (compare with RLIN 2008 estimate of \$1784)

OJS Journal Survey: March 2009

- Dataverse (Sloan)
- Altmetrics
- XML Rendering (MediaX at Stanford)
- CrossRef DOIs
- Digital preservation

Ongoing R & D

- Background
- Service model
- Technical architecture and tools
- Current status and roadmap

PKP Private LOCKSS Network

- Demand for (or at least interest in) preservation exists among journal managers
- Some OJS journals exist in the Global LOCKSS Network and in other PLNs
 - IBICT
 - COPPUL
 - ADPNet
- Most OJS journals will never be preserved in the Global LOCKSS Network (GLN)

Background

- Currently, the Global LOCKSS Network (GLN) preserves content from 111 OJS titles
 - 812 volumes
 - 28 OJS instances
- Potential reasons
 - Too many “publishers” to negotiate with
 - Quality, consistency, and legitimacy sometimes unclear
 - Not top priority for LOCKSS Alliance libraries

Why so few OJS journals in the GLN?

- There is a gap in preservation services for OJS journals
- PKP is starting to develop coordinated services for the OJS community
 - CrossRef, Altmetrics
- Several PKP Development partners are members of the LOCKSS Alliance
- A PLN for OJS journals is consistent with LOCKSS's "community" focus

Rationale for the PKP PLN

- Based generally on CLOCKSS
- Any OJS journal that meets minimum requirements can participate at no cost
- Journal manager needs to sign off on several requirements
- Content is included in PLN automatically
- After “trigger event,” content will be made available under OA license

Service model

- They are opting into the PKP PLN
- They acknowledge the journal's copyright and licensing policies are accurate
- They will contact PKP to initiate a trigger event

Journal manager agrees...

- The journal's content is currently available under an Open Access license (CC or non-CC)
- The journal or publisher owns the copyright to the content and can assign PKP the ability to make it available under a CC license after a trigger event
- Other copyright / licensing arrangement
 - e.g., the journal is a toll journal and the publisher is not in a legal position to allow the content to be released under a CC license

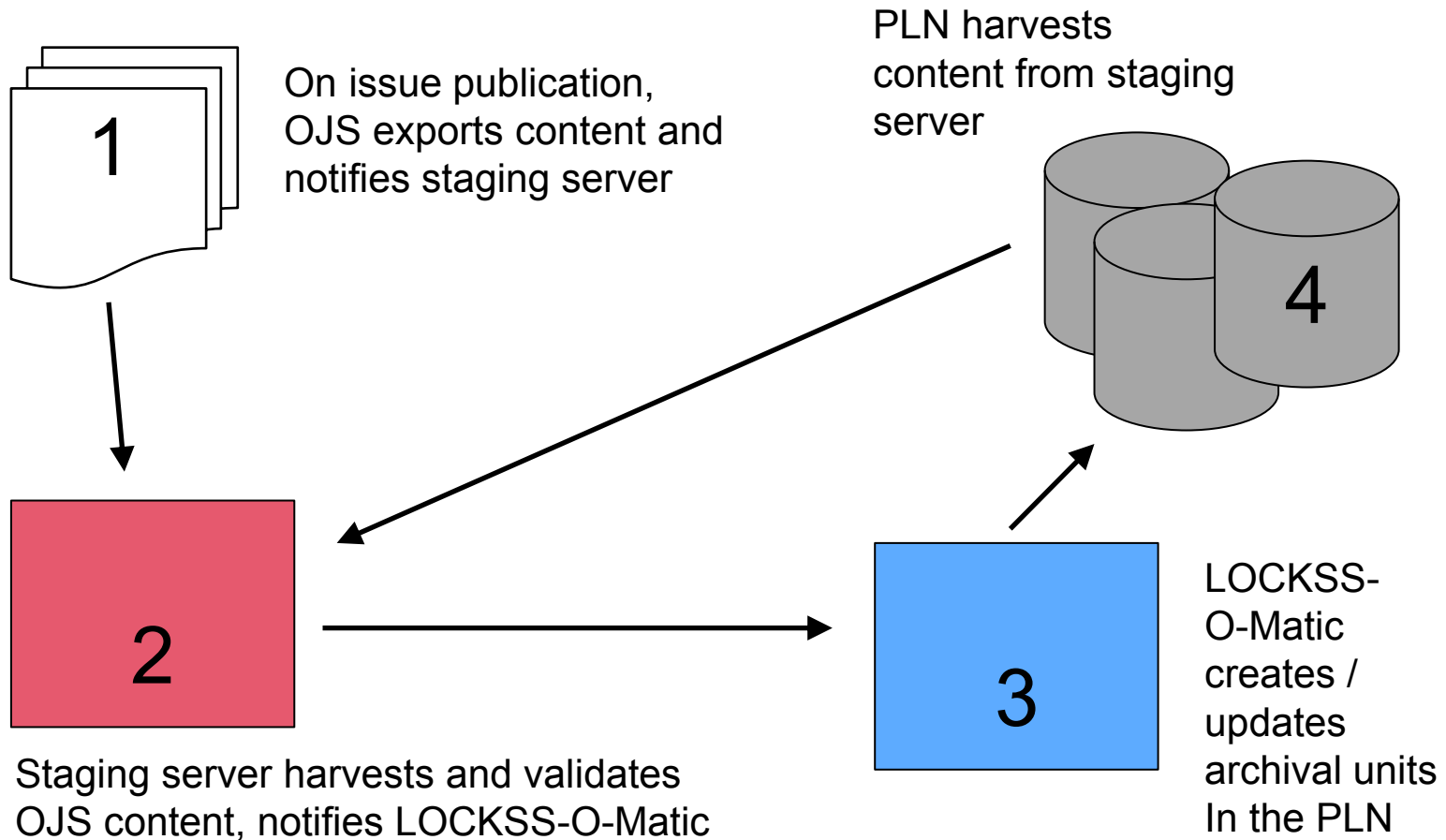
Copyright and licensing

- **Journal-initiated**
 - Publisher or journal no longer “in business”
 - Journal no longer available
 - Catastrophic and permanent failure of journal’s infrastructure
- **Automated**
 - Journal has not deposited to the PKP PLN staging server for 6 months, and
 - We receive a negative response from email verification to journal manager

Trigger events

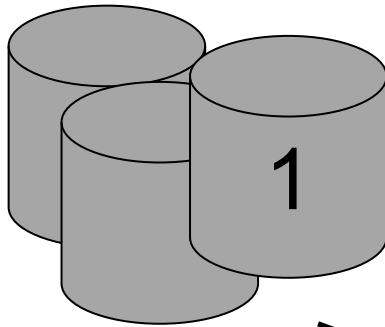
- Focus is on persistent access for designated community
- No file format risk analysis, identification, or normalization
- Preserved objects: OJS issue/article export XML, copyright XML, and journal metadata
- Priorities
 - bit-level integrity
 - robust distributed storage
 - ease of restoring access

Preservation strategy

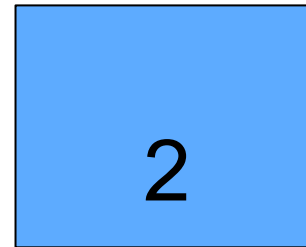
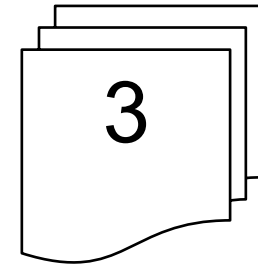


Technical architecture - preservation

On trigger event, content is retrieved from the PLN



Journal is made available under a CC license in one or more OJS instances



Content is prepared for importing into OJS

Technical architecture - access

- Distinct from existing LOCKSS plugin
- Hard-coded to work with the PKP PLN
- Inspects the journal's copyright and licensing configuration
- Provides a user interface to journal manager for sign off and preservation status
- On issue publication, packages content and informs the staging server
- Will be shipped with OJS 2.4.5

OJS plugin

- Acts as intermediary between OJS instances and LOCKSS network
- Functions
 - Receive new deposits
 - Harvest deposits
 - Verify payload and validate Bag
 - Virus check
 - Validate OJS export content
 - Stage for harvest into PLN
- <https://github.com/mjordan/pkppln>

Staging server

- Standard Private LOCKSS Network
- Nodes at U Alberta, U British Columbia, U Indiana, U Pittsburgh, U Victoria, SFU, FUB (Belgium)
- Pilot will start with 2 TB storage
- Configuration managed by LOCKSS-O-Matic
 - <https://github.com/mjordan/lockss-o-matic>

LOCKSS network

- Remaining organizational, policy, and governance issues being finalized
- Pilot phase being planned
- PKP PLN plugin for OJS will be shipped with OJS 2.4.5 (summer 2014)
- Staging server is complete, undergoing testing
- LOCKSS-O-Matic ready by fall 2014

Status and roadmap

- Acceptance by PKP Membership
- Appointment of PKP PLN Coordinator
- Development of trigger event processes
- Creation of a PLN Advisory Committee
- 1-year pilot starting summer 2014
- Full production

Organizational development