

PKP PN: A sustainable and free preservation service of OJS journals

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BIREDIAL 2019

Topics

Overview of the PKP Preservation Network

Motivation for creating the PKP PN

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Overview

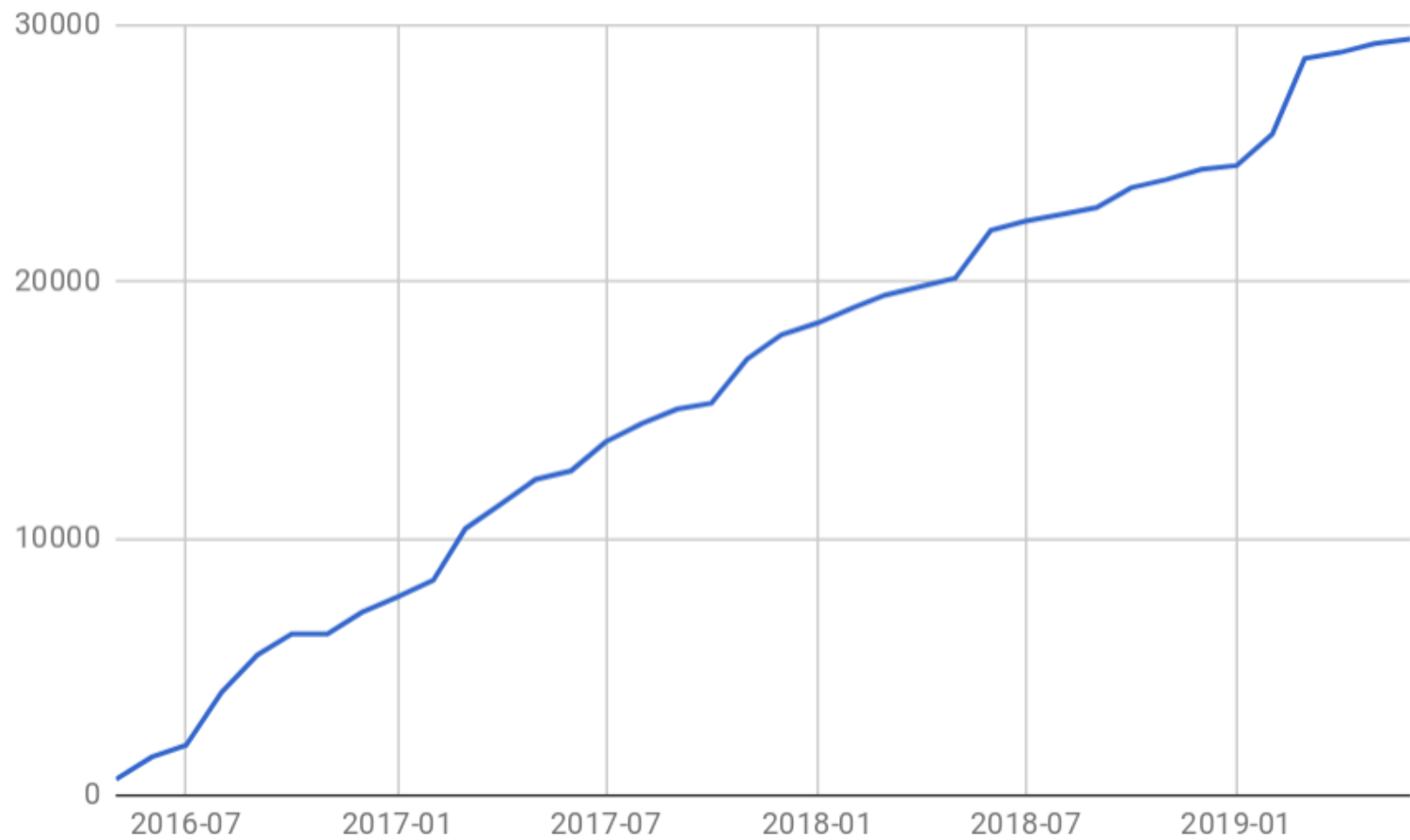
The PKP Preservation Network is...

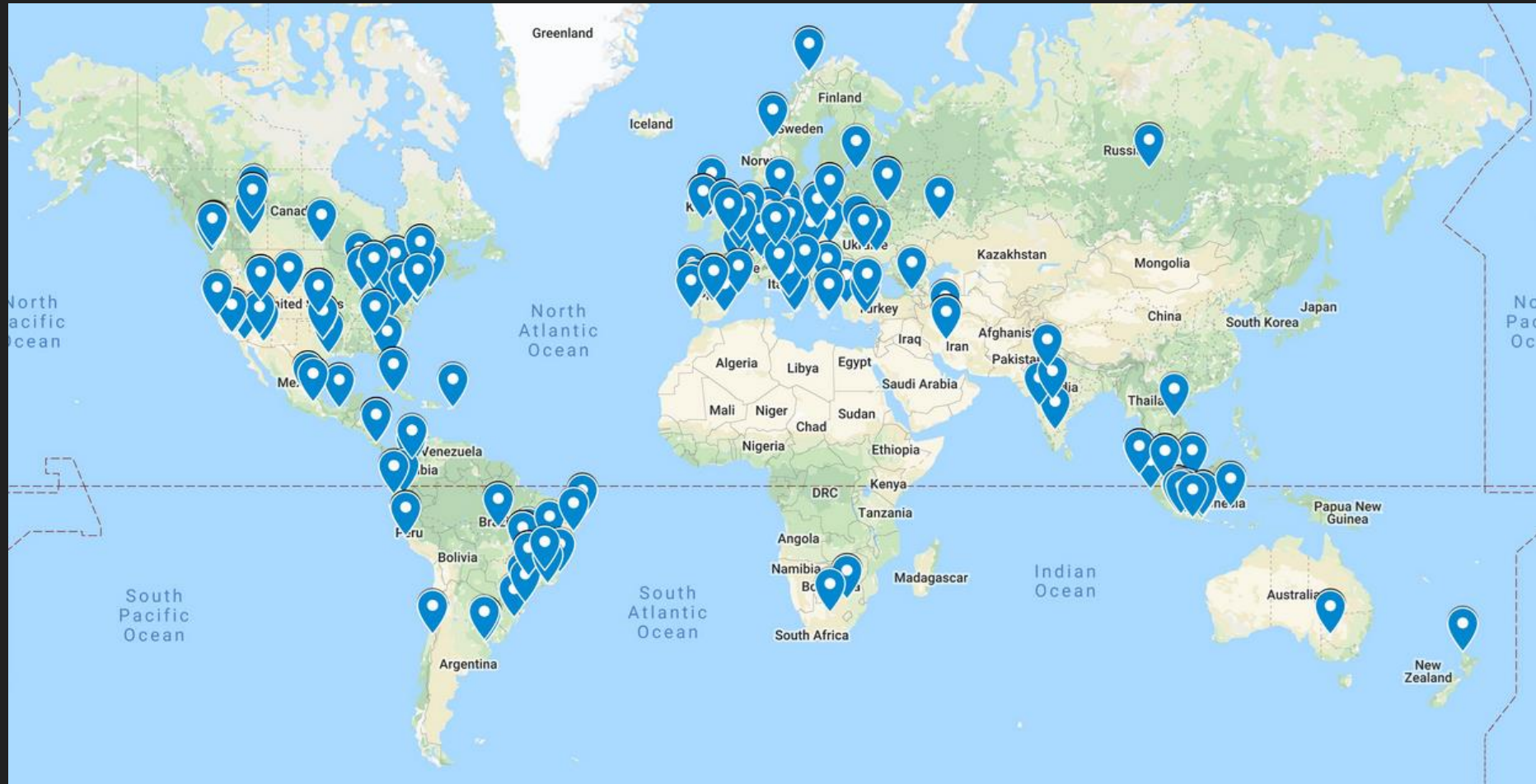
A free preservation service open to all Open Journal Systems journals

Supported by PKP, Simon Fraser University, University of British Columbia, and a network of 9 storage partners

A dark archive

As of end of July 26, the PKP PN contained 30,525 deposits (journal issues) from 1495 different journals.



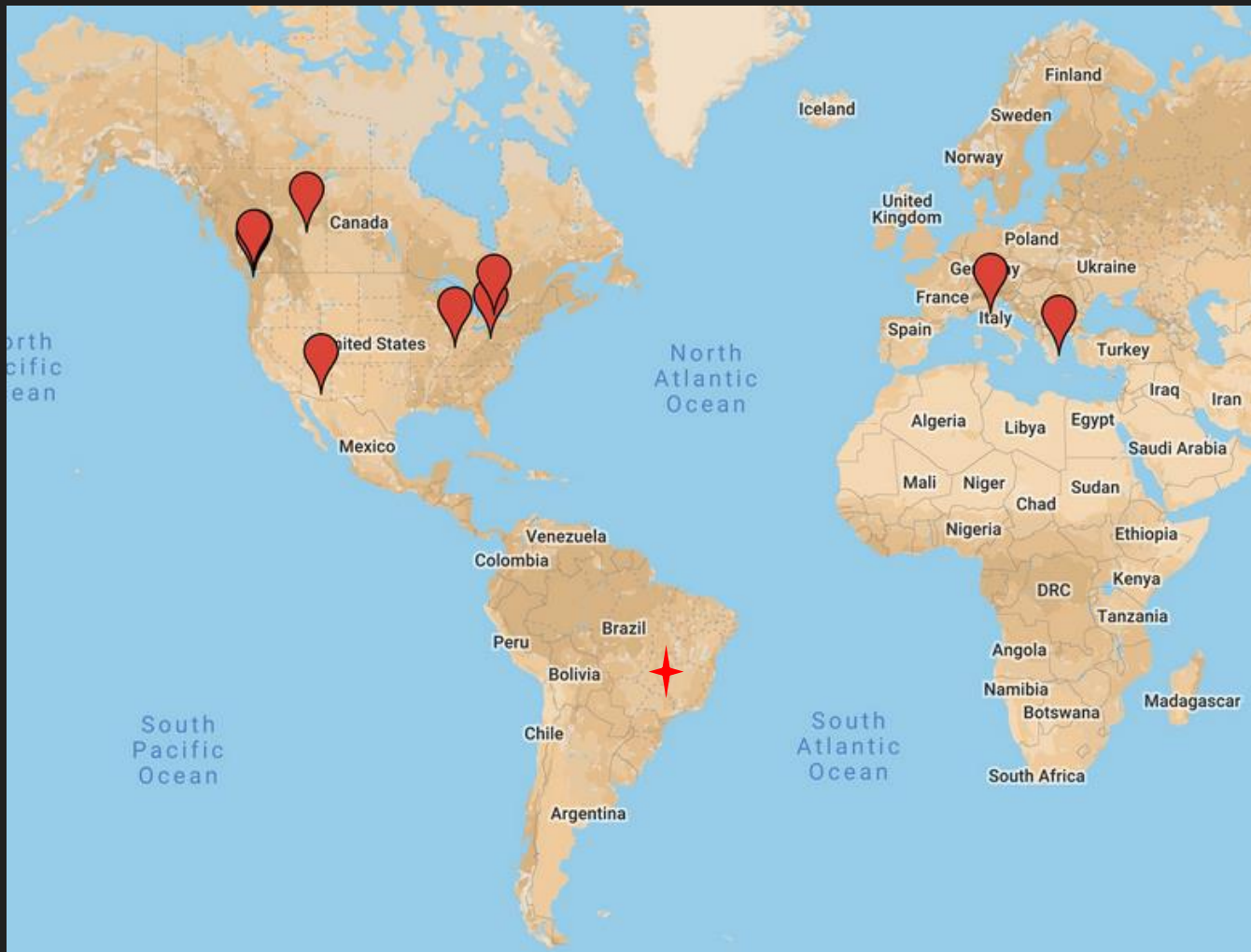


Top countries in the Preservation Network

United States	202
Brazil	147
Indonesia	125
Canada	108
Costa Rica	77
Italy	52
Spain	47
Iran	32
Ireland, Russia	25

Storage partners

- University of Alberta
- University of British Columbia
- Indiana University
- University of Pittsburgh
- University of Victoria
- Simon Fraser University
- Ontario Council of University Libraries
- Italian National Library of Florence
- National Documentation Centre (EKT), Greece



Brief history

Seminário Internacional de Preservação Digital, Brasília, mai de 2014

CNI Fall Meeting, December, 2014

Official launch at the PKP Conference, August 2015

First deposit to the network in early 2016

Motivation for the PKP PN

Ejournal preservation context

Neal Beagrie's 2013 DPC Technology Watch Report identifies use cases for digital preservation: 1) publisher ceases operation and 2) servers suffer catastrophic failure

DOAJ 2014 study: most publishing one or two journals had not addressed the issue of journal preservation

Burnhill and Otty (2015): "journals from smaller publishers - those in the so-called 'long tail' - are less likely to be ingested by organisations with archival intent, and are therefore at much greater risk of loss."

OJS journals and other preservation services

Global LOCKSS Network: Low publisher to journal ratio

CLOCKSS: Small number of publishers participate, it is not free

Portico: Small number of publishers participate, it is not free

Rede Cariniana: Only Brazilian journals

PKP's mission and services

John Willinsky's "original thinking":

"To develop local capacities able to support [...] some autonomy and ownership" of knowledge creation

PKP's central objective:

"To improve both the scholarly quality and public access to the body of research knowledge in a sustainable and globally accessible form"

PKP services: Publishing Services, PKP Index, Open Typesetting Stack, Crossref partner

Service Model

Service overview

1. Journal Manager enables the PKP PN plugin
2. Journal Manager accepts the terms of use
3. From that point on, journal issues are deposited into network on publication
4. Journal's content is kept in a dark archive
5. A trigger event will make journal's content available to reading public

PLUGIN MANAGEMENT

This page allows the Journal Manager to review and potentially configure the plugins that are currently installed. Plugins are divided into categories, according to their function. The categories are listed below, and within each category, its current set of plugins.

- Metadata Plugins
- Authorization Plugins
- Block Plugins
- Citation Format Plugins
- Citation Database Connector Plugins
- Citation Output Plugins
- Citation Extraction Plugins
- Gateway Plugins
- Generic Plugins
- Implicit Authentication Plugins
- Import/Export Plugins
- OAI Metadata Format Plugins
- Payment Plugins
- Public Identifier Plugins
- Report Plugins
- Theme Plugins

- [Install A New Plugin](#)

OJS 2.4.x and higher

• ANNOUNCEMENT FEED PLUGIN

This plugin produces RSS/Atom web syndication feeds for journal announcements.

[ENABLE](#) [UPGRADE PLUGIN](#) [DELETE PLUGIN](#)

• STATIC PAGES PLUGIN

This plugin allows Static Content Management.

[ENABLE](#) [UPGRADE PLUGIN](#) [DELETE PLUGIN](#)

• BACKUP PLUGIN

This plugin generates a backup of the installation.

[ENABLE](#) [UPGRADE PLUGIN](#) [DELETE PLUGIN](#)

• DRIVER

The DRIVER plugin extends the OAI-PMH interface according to the DRIVER Guidelines 2.0, helping OJS journals to become DRIVER compliant.

[ENABLE](#) [UPGRADE PLUGIN](#) [DELETE PLUGIN](#)

• PKP PLN PLUGIN

The PKP PLN plugin will deposit your published content into the PKP Private LOCKSS Network for preservation.

[ENABLE](#) [UPGRADE PLUGIN](#) [DELETE PLUGIN](#)

• DATAVERSE PLUGIN

Deposit data sets and/or other supplementary files to a Dataverse.

[ENABLE](#) [UPGRADE PLUGIN](#) [DELETE PLUGIN](#)

OJS
Open Journal Systems

Website Settings

Appearance Information **Archiving** Languages Plugins Announcements

PKP Private LOCKSS Network (PLN)

PLN Plugin enabled

[Alternate Archiving Options](#)

LOCKSS

Open Journal Systems supports the LOCKSS (Lots of Copies Keep Stuff Safe) system to ensure a secure and permanent archive for journal content. If your journal has been accepted to archive content in the Global LOCKSS Network or participates in a Private LOCKSS Network (other than the PKP PLN), enable it here:

Enable LOCKSS to store and distribute journal content at participating libraries via a LOCKSS [Publisher Manifest](#) page.

CLOCKSS

Open Journal Systems also supports the CLOCKSS (Controlled Lots of Copies Keep Stuff Safe) system to ensure a secure and permanent archive for the journal. If your journal signed a contract with the CLOCKSS Archive, enable it here:

Enable CLOCKSS to store and distribute journal content at participating libraries via a CLOCKSS [Publisher Manifest](#) page.

Save

OJS 3.1.2 and higher

Terms of use

1. I have the authority to include this journal's content in a secure preservation network and, if and when necessary, to make the content accessible in the PKP PN and its successors.
2. I agree to allow the PKP PN to include this journal's title and ISSN, and the email address of the Primary Contact, with the preserved journal content.
3. I confirm that licensing information pertaining to articles in this journal is accurate at the time of publication.
4. I acknowledge these terms may be revised from time to time and will supersede all previous versions. I will be asked to review them and to agree to them in order to continue to include this journal's content in the PKP PN.
5. I agree not to violate any laws and regulations that may be applicable to the content.
6. I agree to make every reasonable effort to inform the PKP PN in the event this journal ceases publication. I acknowledge that PKP PN will also employ automated techniques to detect a potential trigger event and contact the journal to confirm their publication status.
7. I agree that the PKP PN reserves the right, not to preserve or make content accessible.
8. PKP reserves the right to use the aggregated content in the PKP PN for research and reporting purposes and will adhere to the norms of standard research procedures.

Trigger events

Idea borrowed from CLOCKSS and Portico

Two types of events that make content accessible to the reading public:

- Explicit notification by journal manager
- Automatically detected

Administration and governance

Staff

Public Knowledge Project

Simon Fraser University

University of British Columbia

Advisory panel

- Lars Bjornshauge, Directory of Open Access Journals (DOAJ)
- Sioux Cumming, International Network for the Availability of Scientific Publications (INASP)
- Alan Darnell, Ontario Council of University Libraries (OCUL)
- Geoff Harder, University of Alberta Libraries
- Alex Mendonça, SciELO
- Susan Murray, African Journals Online (AJOL)
- Victoria Reich, LOCKSS
- Heather Joseph, SPARC
- Dwayne K. Buttler, J.D., University of Louisville

MOU with storage partners: Responsibilities

Will be responsible for the setup and the maintenance of their node.

Will authorize other members of the network to use their copy for the sake of data integrity.

Agrees the published journal content stored at their node cannot be transmitted to third parties.

Will provide access to the LOCKSS daemon status information to other PKP PN participants.

Will designate one technical administrator and one manager and must inform other members of any change via the general mailing list.

Will participate in PKP PN meetings and/or conference calls as required.

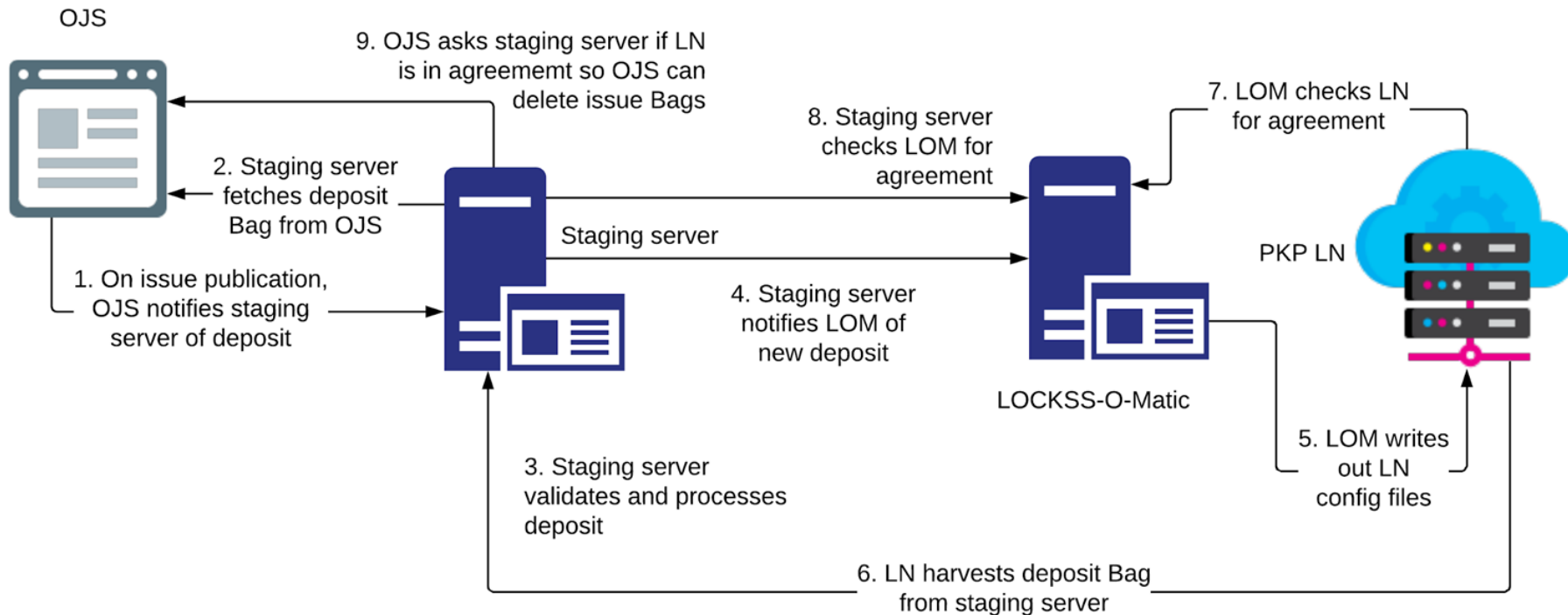
Will not be required to have a membership subscription to the LOCKSS Alliance to participate in the PKP PN but it is strongly encouraged.

MOU with storage partners: Termination

In the event of termination of this MOU and withdrawal from the PKP PN, [partner] agrees to delete all copies of the PN published journal content and related data stored on their infrastructure to maintain the long-term integrity of the PN and to ensure that content is not inadvertently distributed or made accessible.

Technology

Automated deposit



Deposit structure

F5025CA1-EF3C-45BA-8F25-7FB4B7ADAA46

```
├── bag-info.txt
├── bagit.txt
├── data
│   ├── IssueF5025CA1-EF3C-45BA-8F25-7FB4B7ADAA46.xml
│   ├── processing-log.txt
│   └── termsF5025CA1-EF3C-45BA-8F25-7FB4B7ADAA46.xml
├── fetch.txt
├── manifest-sha1.txt
└── tagmanifest-sha1.txt
```

bag-info.txt

External-Identifier: F5025CA1-EF3C-45BA-8F25-7FB4B7ADAA46
PKP-PLN-Deposit-UUID: F5025CA1-EF3C-45BA-8F25-7FB4B7ADAA46
PKP-PLN-Deposit-Received: 2018-04-12T14:18:48-07:00
PKP-PLN-Deposit-Volume: 27
PKP-PLN-Deposit-Issue: 4
PKP-PLN-Deposit-PubDate: 2018-02-28T00:00:00-08:00
PKP-PLN-Journal-UUID: 5AB797C8-BB3E-4D65-8FCE-0E9ACDC55E6F
PKP-PLN-Journal-Title: Pedagogická orientace/Journal of the Czech Pedagogical Society
PKP-PLN-Journal-ISSN: 1805-9511
PKP-PLN-Journal-URL: <https://journals.muni.cz/pedor>
PKP-PLN-Journal-Email: xxxxxx@xxxxxxxxxxx.xxxx
PKP-PLN-Publisher-Name: Czech Pedagogical Society
PKP-PLN-Publisher-URL: <http://www.cpds.cz>

processing-log.txt

2018-04-12T14:18:48-07:00

Deposit received.

2018-04-13T00:42:50-07:00

Deposit harvest succeeded.

2018-04-13T01:00:17-07:00

Payload checksum validation succeeded.

2018-04-13T02:00:43-07:00

Bag checksum validation succeeded.

termsF5025CA1-EF3C-45BA-8F25-7FB4B7ADAA46.xml validation succeeded.

2018-04-13T03:00:48-07:00

XML validation succeeded.

2018-04-13T04:27:48-07:00

Virus check passed. No infections found.

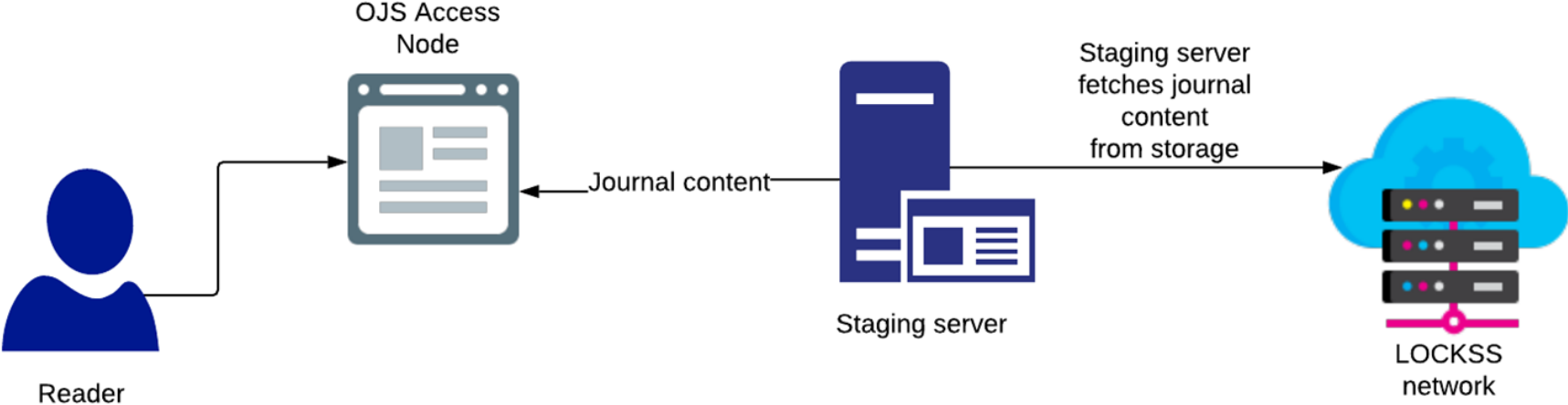
2018-04-13T05:01:51-07:00

Bag Reserialize succeeded.

2018-04-13T06:00:27-07:00

Deposit to Lockssomatic succeeded.

Making content accessible



Challenges

OJS 3.x plugin

2+ years in development

Issues with internal dependencies (specifically, the larger the galley, the more likely the export would fail)

- Will be addressed in the next version of OJS (3.1.2-2)

Ready to test starting mid-August with journals running OJS 3.1.2-1

Low adoption

Study done in mid 2017 (Sprout and Jordan) showed that of the 10,000 OJS journals known to PKP, about 2,500 had the minimum requirements to participate in the PKP PN:

- Running OJS 2.4.8 or higher
- Had an ISSN

Understanding our users better

Preservation may not be a priority for small publishers

PKP does not have a business relationship with the vast majority of OJS users

PKP respects OJS users' right to be anonymous

Tooling

Deal with changes in preserved content

Improve robustness of OJS plugins

Future Plans

More robust OJS Export XML

Provide feedback to journal manager

Investigate adding additional content from OJS (such as supplemental files) and from other PKP platforms

Refine trigger event detection and processes for making triggered content accessible

Update DOIs to point to triggered version

Obrigado!