Preserve your content with LOCKSS-O-Matic

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Open Repositories 2014 :: 2014-06-1
Outline

- LOCKSS refresher
- The problems and their solutions
- LOCKSS-O-Matic overview
- Deposit lifecycle
- Current use cases
- Remaining development work
LOCKSS overview

- Open source software for creating private networks ("PLNs") of preservation appliances
- Can use commodity hardware or even reused PCs
- Harbors content from web, replicates it automatically and securely throughout network
- Nodes in network share a common set of configuration files
The problems

1. Configuration files for nodes (a.k.a. “LOCKSS boxes”) are more or less manually maintained
2. Additionally, each new type of content to be preserved needs a harvester plugin, which are difficult to develop and test
The solutions

1. Provide a tool to automate the maintenance of PLN configuration files
2. Provide a way to automate ingestion of new content into the network
LOCKSS-O-Matic

- A “Wordpress for Private LOCKSS Networks”
- LAMP application (written in Symfony) that provides
  - a user interface
  - SWORD server API
  - network monitoring tools
- Supports automated or manual deposits
- Supports multiple PLNs
- Can “convert” an existing PLN
- https://github.com/mjordan/lockss-o-matic
LOCKSS-O-Matic

A/lockss.xml
A/titlesdb.xml
A’s plugins
A’s manifests

B/lockss.xml
B/titlesdb.xml
B’s plugins
B’s manifests

C/lockss.xml
C/titlesdb.xml
C’s plugins
C’s manifests

1 - n content providers

1 - n content owners

PLN A

PLN B

PLN C
Deposit lifecycle

- Manual deposit via web form
- SWORD deposit request from content-producing app (e.g., Archivematica)
- AU configs
- PLN node 1
- PLN node n
- Content to preserve
Current use cases

- Archivematica integration
  - Archivematica Storage Service (version 0.4.0) can submit SWORD deposit requests for AIPs (Archival Information Packages) into a PLN

- Public Knowledge Project PLN
  - “Staging server” will submit SWORD deposit requests

- Islandora integration
  - Proof of concept Drupal module to submit Bagged Islandora objects into a PLN
Work remaining

- User interface
- Update network monitoring code to use new API in LOCKSS Daemon 1.65
- Testing and documentation
- First complete release planned for late summer 2014