Preserve your content with LOCKSS-O-Matic

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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
- Harvests content from web, replicates it automatically and securely throughout network
- Nodes in network share a common set of configuration files
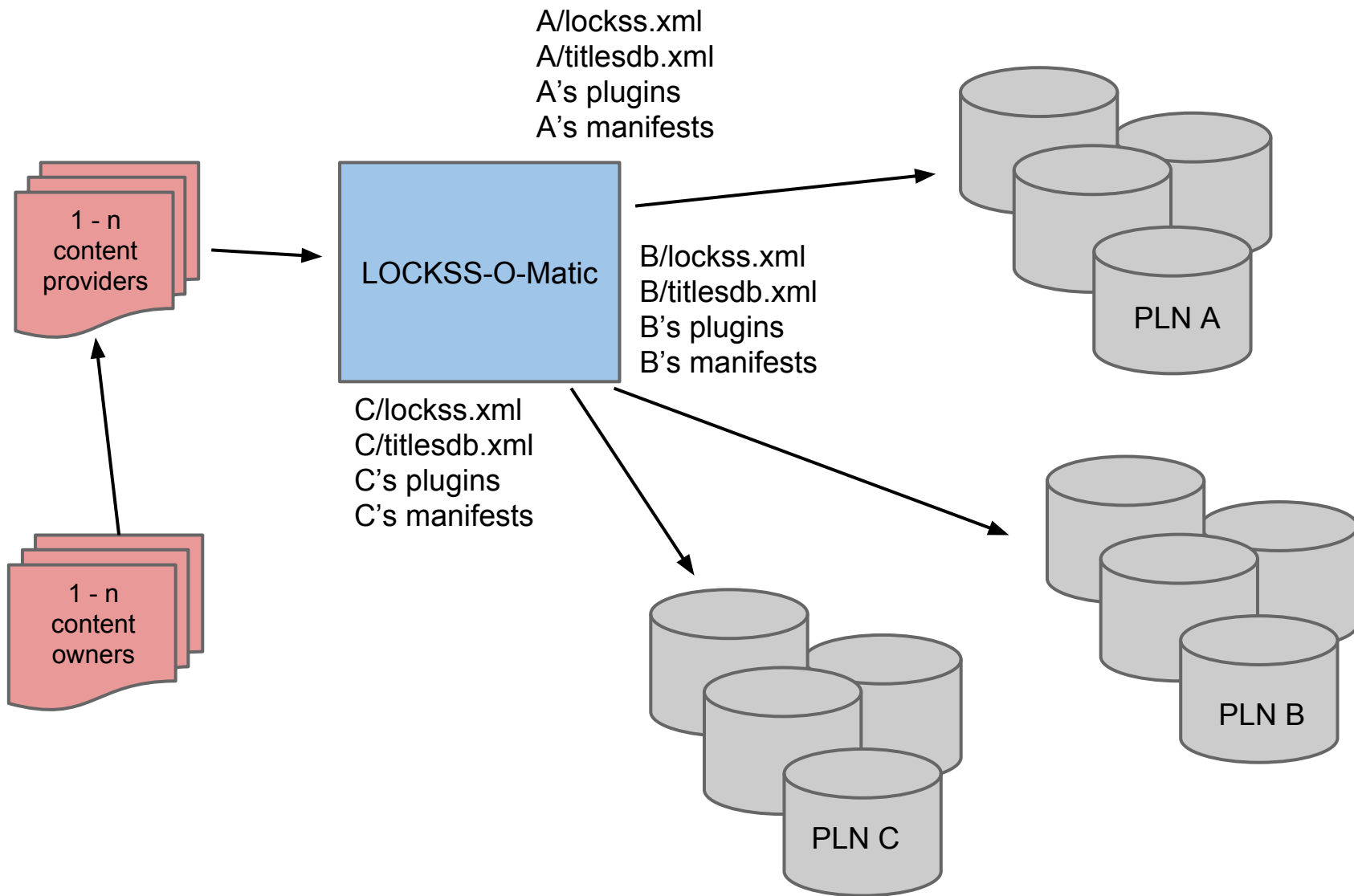
The problems

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
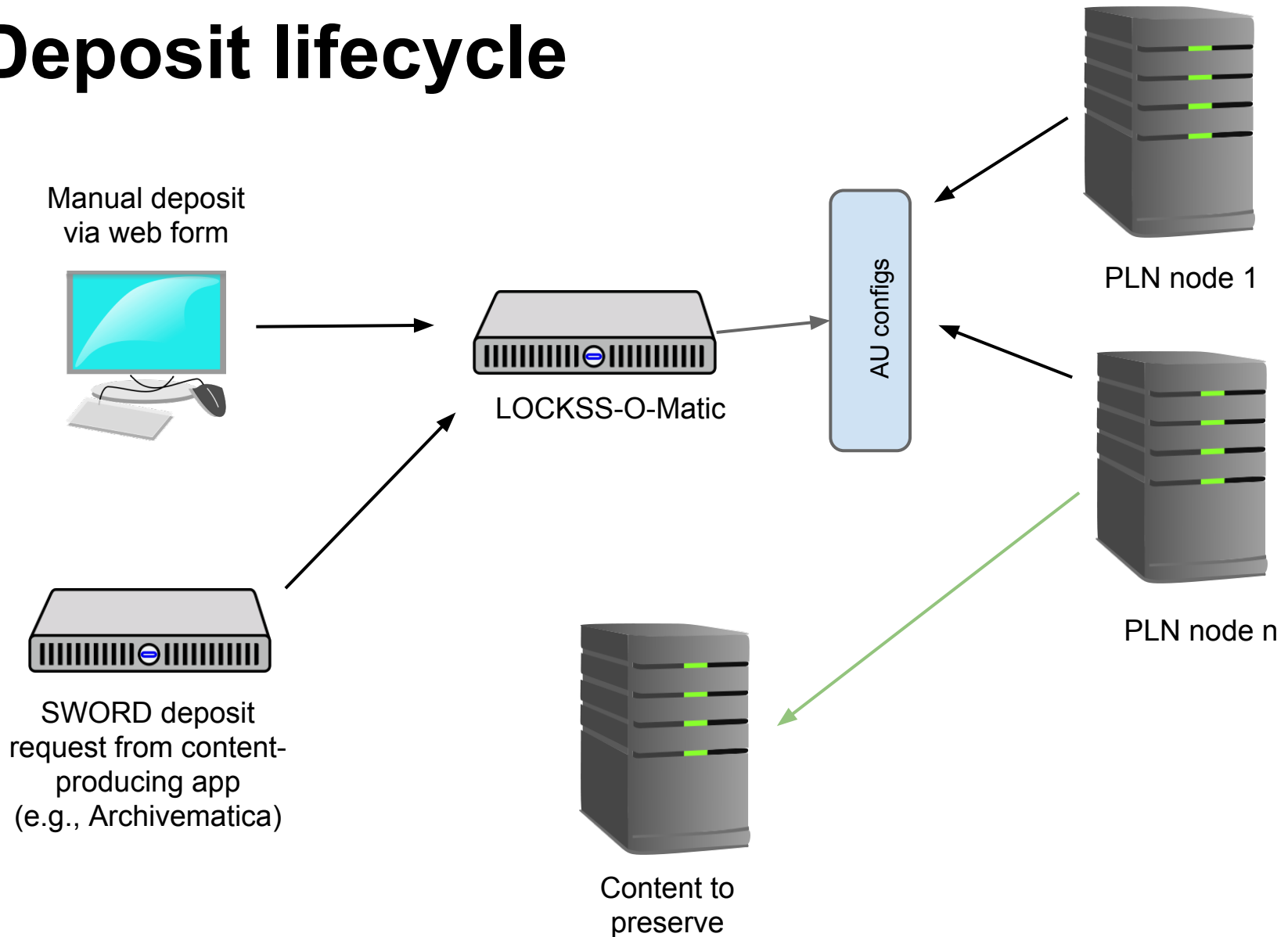
The solutions

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

Deposit lifecycle

Manual deposit
via web form

LOCKSS-O-Matic

AU configs

PLN node 1

SWORD deposit
request from content-
producing app
(e.g., Archivematica)

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