LOCKSS:

Test Implementation at the ETH-Bibliothek

Ensuring perpetual access to licensed content
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• Reasons for implementing a LOCKSS Box
• Experiences and difficulties:
  • Setting up a LOCKSS Box
  • Loading content
  • Granting access to archived content for test users
• Support provided by LOCKSS
• Further course of action regarding LOCKSS
Ensuring access to digital data in the long term

• **Unique data** of ETH Zurich
  • Research data, theses, archival records, digitised content...
  → *Must be stored and preserved by ETH-Bibliothek (locally?)*

• **Licensed content** form publishers, *used* in many places
  • E-Journals, E-Books
  → *ETH-Bibliothek has acquired archival rights, but cannot well exercise them*
  → *Main interest: post cancellation access (PCA)*
  → *Two different approaches*
REASONS FOR IMPLEMENTING A LOCKSS BOX

Contrary approaches for licensed content

• Storage and long-term preservation in one/few central trusted archives
  → Portico, e-Depot of the KB in the Netherlands...
  → Dependency shifts from publisher to a central facility
  → No local component

• Numerous distributed but networked copies
  → Comparison of copies protects against unwanted change
  → «Lots of Copies Keep Stuff Safe»
  → Local component which can / needs to be tested
QUESTIONS TO BE ANSWERED

- **Effort** required
  - during set up (technical)
  - during operation (technical)
  - for administration

- **Functionality**
  - harvesting
  - voting
  - delivery (via link resolver)
  - access

- **Coverage**

- **Cost**
EXPERIENCES AND DIFFICULTIES: SETTING UP A LOCKSS BOX

• **Infrastructure at ETH-Bibliothek:**
  • VMWare (2 CPU / 2GB RAM)
  • 1 TB NAS storage

• **LOCKSS provides an «installation guide» and an «installation CD» on their website**
EXPERIENCES AND DIFFICULTIES: SETTING UP A LOCKSS BOX

Problem:
The LOCKSS installation CD requires CentOS (RedHat-Clone)

but...

because VMWare does not officially support CentOS, the ETHZ would have preferred to use RedHat

The LOCKSS-support informed, that other institutions originally wanted RedHat, too, but after some study they decided to use the LOCKSS CentOS, because it is much easier to setup and maintain the LOCKSS-Box.

→ We agreed to use the CentOS Netinstall-CD for LOCKSS, as well
EXPERIENCES AND DIFFICULTIES: SETTING UP A LOCKSS BOX

Installation:

After all clarifications, the actual installation and configuration
– using the LOCKSS installation guide and the
Netinstall cd from LOCKSS –
took around 1 day.
The administration page for the LOCKSS box offers an easy way to load content. The administrator selects collections or titles from a list and afterwards the respective volumes.

Select one or more collections of titles to add, then click "Select Titles".

- All Titles (3115)
- All Absinthe Literary Review AUs (0)
- All Academy of American Franciscan History AUs (10)
- All Academy of Natural Sciences of Philadelphia AUs (0)
- All Advertising Educational Foundation AUs (10)
- All African Studies Association AUs (8)
- All American Arachnological Society AUs (0)
- All American Association of Avian Pathologists AUs (0)

Select the AUs you wish to add. Then click "Add Selected AUs".

Disk Space

<table>
<thead>
<tr>
<th>Location</th>
<th>Size</th>
<th>Free</th>
<th>%Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>local/cache0/gamma</td>
<td>1008GB</td>
<td>992GB</td>
<td>2%</td>
</tr>
</tbody>
</table>

Select AUs

Add

Archival Unit    Ext. size (MB)

- The Americas Volume 57
- The Americas Volume 58
- The Americas Volume 59
- The Americas Volume 60
- The Americas Volume 61
- The Americas Volume 62
- The Americas Volume 63
- The Americas Volume 64
- The Americas Volume 65
- The Americas Volume 66

Select All  Clear All

Add Selected AUs
There are two ways users access content in a LOCKSS box:

1. Through a content proxy (which requires an institutional proxy)

or

2. Via direct access to the LOCKSS box by sending the content server either the original publisher URL or an OpenURL (by SFX)

In our case we choose the second way, using the LOCKSS SFX-target in the OPAC.
EXPERIENCES AND DIFFICULTIES: GRANTING ACCESS TO ARCHIVED CONTENT

After defining the host and port for the SFX-target and activating it for the selected journal, LOCKSS access will show up in the SFX-popup.

The user has the possibility to select either the publishers target or the LOCKSS target. In both ways, the user should see the same content.
If choosing the LOCKSS target, he will see the content from the LOCKSS box if available and up to date, otherwise the LOCKSS box will redirect the user to the publisher if a more recent version of the content is available there.
At the beginning we faced many problems to understand

- how the LOCKSS box works
- when content will be served from the LOCKSS box and when from the publisher etc.

The LOCKSS support helped us a lot and took the time to answer all our questions in a very good way. Thanks again to Clay, Phil & Vicky
• **Effort required**
  - during set up (technical) ☺ depending on use of proxy/resolver
  - during operation (technical) ☺
  - for administration ☺ higher with link resolver target

• **Functionality**
  - harvesting ( ) depending on publishers’ sites
  - voting ( )
  - delivery (via link resolver) ☺ working fine, potentially confusing
  - Access ( )performance with high loads not tested

• **Coverage** ☹

• **Cost** ☻
Recommendations of the project team to the head office

• **Implement** a productive LOCKSS-box as...

• *...one of potentially several* solutions

• **Decide on operation** as local dark archive or as SFX-target or as content proxy

  ➢ Benefits of use as link resolver target currently limited

• As a library and as member of the Consortium of Swiss Academic Libraries: **Urge more publishers to join** LOCKSS and/or other initiatives
Questions?

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