Securing perpetual access to licensed electronic content: Lessons learnt from project NatHosting in Germany

Dr. Hildegard Schäffler, Bavarian State Library, Munich

Journées RNBM 2023 (21.11.23)
The Problem

- Ensuring the sustainable and uninterrupted availability of (licensed) digital resources for research and teaching
  - Applies to both immediate availability as well as perpetual access rights
- Safeguarding substantial library investments

- The need for action arises when trigger events occur, i.e.
  - resources are cancelled (post-cancellation)
  - resources change publishers (transfer)
  - temporary but massive disruptions occur (catastrophic failure)
  - the publisher ceases operation (ceased operation)
  - the publisher only offers unstable access mechanisms (especially in the "long tail")

- Requires a safety net strategy in case of a trigger event
Existing Solutions: Portico

- Not-for-profit digital preservation service based in the US (ITHAKA)
- Cooperation with 1289 libraries and 1075 publishers
- Financed by contributions from both publishers and participating libraries (flat-rate annual membership fee)
- Archives e-journals (approx. 40,000 titles), e-books (approx. 2.2 million titles) and digital collections (330)
- Provides access to participating libraries in case of defined trigger events

- Service based on the insurance principle
Existing Solutions: LOCKSS, PLN and CLOCKSS

- **LOCKSS**
  - as open source software (developed at the University of Stanford)
  - that harvests web content from publishers’ servers
  - archives it in distributed “LOCKSS nodes” (servers), forming the Global LOCKSS Network (GLN)
  - makes it available in case of a trigger event

- **Private LOCKSS Network (PLN)**
  - Several institutions operate a system with only a few networked servers for a closed circle of participants
  - "Managed PLN": a few networked nodes only so that participating libraries do not have to operate their own LOCKSS box

- **CLOCKSS**
  - LOCKSS-based Dark Archive: Triggered for Open Access in case content disappears from the Web
The Two-Pillar Concept

- **Pillar 1:** Conclusion of a national consortium with Portico to secure the e-journals and e-books archived there

- **Pillar 2:** Establishment and operation of a national "Private LOCKSS Network" (PLN) with several nodes to successively secure the relevant content, esp. if not covered by Portico

- Establishment and operation of a Rights Management System to be linked to the PLN and fed from an established Electronic Resource Management System (ERMS)

- Establishment of a "hosting agency" with control and coordination tasks

- Implementation project funded by German Research Foundation (DFG) (until 2022)
The Project Results: Portico Consortium

- Negotiation and conclusion of a nationwide Portico consortium on an opt-in basis (in place since 2017)

- Price scale according to institution type and size with consortium discounts dependent on the number of participants

- Currently 74 participating institutions
  - University libraries and libraries of Universities of Applied Sciences
  - Non-university research organisations
  - State libraries

- Annual sales threshold for transition to national licence (not reached yet)

- Few trigger cases so far
The Project Results: Content Analysis and Acquisition

- Surveys carried out amongst libraries and publishers

- Content prioritized for the PLN
  - not covered by Portico, esp. in the long tail
  - not covered with all relevant trigger events in Portico (esp. post-cancellation access)
  - with significant investment, e.g. Project DEAL agreements and licences concluded at the national level with DFG funding
  - in Open Access (exploratively)

- Conversations with about 50 pilot publishers for the PLN
The Project Results: Pilot PLN & Funding Models

- Evidence of the technical feasibility of a PLN provided
  - Pilot PLN set up with two nodes and test content
  - Despite major delay in LOCKSS software development
- Use of ERMS (LAS:eR) trialled for rights management
- Examination of requirements for the integration of third-party systems
- Cost forecast prepared for the ongoing operation of the two-pillar model
- Funding and organisational models examined
The Modification of the Concept

- Technical basis of the PLN
  - High costs for the independent operation of a second pillar
  - Special risks with the LOCKSS software development

- Content acquisition for PLN proves difficult
  - Reservations of the publishers, e.g.: sustainability concerns, safeguarding of content only for German institutions, technical costs

- Financing concept
  - Funding of a PLN only possible through a cost allocation scheme: no prospect of basic central funding

- Portico as an established international solution
  - Significant content development in recent years, incl. long-tail publishers, open access content and digital collections
  - Willingness to enter into dialogue on extended cooperation

- Abandonment of the PLN concept and expansion of the cooperation with Portico
Possible Dimensions of Cooperation with Portico

- NatHosting/responsible German institutions can conduct negotiations with publishers not yet represented in Portico

- NatHosting/responsible German institutions can enter into additional agreements with publishers who already have existing contracts with Portico, e.g. with regard to post-cancellation rights

- Option to set up a mirror server in Germany
  - Can be implemented optionally if and when financially feasible for both parties
  - Legally identical restrictions to the Portico server itself
  - Trigger cases would initially continue to be served by Portico
Portico consortium growing gradually
  - Aiming at the broadest possible coverage of German institutions, ideally reaching the national licence threshold

Option of conducting negotiations with publishers not yet represented in Portico
  - Current activities on a small scale

Option to set up a mirror server financially not feasible at the moment
  - But: existing mirror server at the National Library of the Netherlands (KB)

Growing complementary environment of other hosting solutions in Germany, e.g.
  - Central specialist libraries
    - TIB – German National Library of Science & Technology (e.g. for Project DEAL)
    - ZBW – Leibniz Information Center for Economics
  - Göttingen State and University Library: some DFG-funded national licences
Thank you for your attention!