



LOCKSS Service for Ensuring Continuity of Access

What it is

The UK Consortial Managed Archive (CMA) for Open Access Content will provide the UK HE community with a disaster recover and business continuity service for Open Access content. The CMA service will comprise a UK-specific Private LOCKSS Network hosted at a number of selected sites, including EDINA, Mimas, and other institutional locations. The LOCKSS technology is content and source agnostic. This means that all HE institutions will be able to use it as a common service platform for ensuring continuity of access, regardless of their local repository software or journal publishing system. It will provide a single shared service environment suitable for the preservation of both Green (i.e. the Institutional Repository) and Gold (institutional OJS-based journals) OA content.

A distributed solution for preservation

The Consortial Managed Archive will be built upon the Lots of Copies Keep Stuff Safe (LOCKSS) software, configured as a Private LOCKSS Network (PLN). A PLN requires six separate installations of the LOCKSS software to operate correctly, with each installation preserving all the content in the network.

For each publishing platform (institutional repository platform, journal publishing platform), a LOCKSS-specific plugin is needed. These plugins can be applied to all individual instances of that publishing platform. Although this is currently undergoing further testing, the OAI-ORE protocol may provide a suitable object-packaging format to assist disaster recovery and interoperability between repository platforms (<http://journal.code4lib.org/articles/1062>).

Running a LOCKSS Box

17 UK HEIs are members of the UK LOCKSS Alliance as of today. As described in the recently released UK LOCKSS Alliance Case Studies¹, libraries at these universities rely on a LOCKSS Box network to ensure continuity of access to their subscription-based contents. There are different models for LOCKSS Box operation, including both local implementation and management and remote operation on a LOCKSS Box kept elsewhere.

Extending the management of subscription-based to Open Access contents

LOCKSS functionality for guaranteeing access to institutional contents has so far been applied to subscription-based contents, with Jisc Collections being a relevant stakeholder in the initiative. The UK Consortial Managed Archive (CMA) for Open Access Content is now aiming to extend its coverage to enable preservation of institutional repository content (including text-based material and beyond) and OJS-based institutionally published Open Access journals.

¹ UKLA Case Studies, <http://www.lockssalliance.ac.uk/2013/04/05/ukla-case-studies-now-available/>

Use cases for LOCKSS application to continuity of access

The post on UKLA Case Studies released at the UK LOCKSS Alliance blog describes the way LOCKSS is implemented and operates for providing continuity of access to subscription-based contents at three UK HEIs, namely De Monfort, Warwick and the LSE. Assuming the LOCKSS infrastructure may be re-used for disaster recovery purposes for Open Access contents, these case studies will provide a useful starting point for the extension of the preserved materials to cover institutional OJS-based Open Access journals and contents filed in the institutional repository.

[Research@StAndrews:Full Text \(University of St Andrews\)](#)

The U of St Andrews Library operates a LOCKSS Box for managing continuity of access to their subscription-based contents. At the same time, the U of St Andrews is a partner in the STARS joint venture together with the RepNet and the Scottish Digital Library Consortium (SDLC). STARS aims to enhance the U of St Andrews Research Information Management Systems, with current configuration covering both the interconnected IR and PURE CRIS. The STARS joint venture provides a very good opportunity to deliver a proof of concept for the application of the already available LOCKSS Box at the U of St Andrews to provide continuity of access to institutional Open Access contents, which include a collection of OJS-based Open Access journals besides contents filed in the full-text-only IR.