It Takes A Village: OSS Models of Collaboration & Sustainability

**Organizational Profiles** 

**Sept 2017** 

Archivematica

Purpose: Digital preservation microservices, including ingest, identifier assignment, checksum generation, virus scanning, format identification, format validation, metadata extraction, format normalization, generation of standardized preservation metadata, AIP packaging, fixity

checks and placement in archival storage.

Audience: Archives, libraries and museums

First release date: Analysis started in 2010, first alpha release 2010, first production release

January 2014.

**ArchivesSpace** 

<u>Purpose</u>: ArchivesSpace is an archival information management system that provides support for core functions in archives administration, including acquisitions, accessioning, appraisal, arrangement, description, preservation, and access. It can be used to manage information

about materials in any format, including analog, digital, and hybrid content.

Audience: Archivists, metadata analysts and others responsible for managing archival materials,

as well as their users

**Affiliation: LYRASIS** 

First release date: The merger of Archivists' Toolkit and Archon was first publicly announced in summer 2009. ArchivesSpace 1.0 (our first full release of the software) came out in September

2013.

**Avalon Media System** 

<u>Purpose</u>: Provide a complete and scalable system for managing and providing access to large collections of digital audio and video. This includes the ability to easily curate materials, manage workflows, distribute content, and provide online access to collections for purposes of teaching,

learning and research.

<u>Audience</u>: Libraries and archives, primarily in academic and research institutions.

Affiliation: Indiana University and Northwestern University

<u>First release date</u>: The project started in a planning phase in August 2010. The first non-beta software release (Avalon 1.0) was in April 2013.

#### **BitCurator**

<u>Purpose</u>: The Bitcurator environment is an Ubuntu desktop pre-loaded with open source digital forensics, packaging, metadata analysis, and reporting tools and custom scripts for archivists to use in accordance with general archival appraisal and processing functions and tasks.

<u>Audience</u>: Digital archivists, preservationists in the cultural heritage sector.

Affiliation: Educopia Institute

First release date: July 30, 2013 (ver 0.3)

# BitCurator environment, BitCurator Access webtools, BitCurator Access redaction tools, and BitCurator NLP tools

<u>Purpose</u>: The BitCurator Environment is an Ubuntu-derived Linux distribution geared towards the needs of these institutions. It includes a suite of open source digital forensics and data analysis tools to help collecting institutions process born-digital materials. BitCurator Access Webtools is a web service to simplify access to raw and forensically-packaged disk images, and BitCurator Access Redaction Tools is a toolset to streamline redaction of targeted patterns in raw data streams. The BitCurator NLP project is developing software for collecting institutions to extract, analyze, and produce reports on features of interest in text extracted from born-digital materials contained in collections. The software will use existing natural language processing software libraries to identify and report on those items (such as entities and topics) likely to be relevant to ongoing preservation, information organization, and access activities.

<u>Audience</u>: People working in libraries, archives or museums, who are responsible for born-digital materials, especially (though not limited to) those held or received on removable storage media.

<u>Affiliation</u>: Educopia Institute

<u>Affiliation</u>: The first BitCurator project began on October 1, 2011. The first public release of the BitCurator VM (0.1.3) was in July 2012.

## **Blacklight**

<u>Purpose</u>: To provide a basic discovery interface for searching an Apache Solr (or similar noSql) index

Audience: Principally, installers have been libraries, archives and museums.

First release date: 2009

## CollectionSpace

<u>Purpose</u>: CollectionSpace manages day-to-day collections management activities such as acquisitions, cataloging, loans, media handling, and location management.

<u>Audience</u>: Museums, historical societies, biological collections, and other collections-holding organizations.

Affiliation: LYRASIS

<u>First release date</u>: The program began in 2008, core development in 2009, and the first release was in 2010. The first implementation went live in 2012.

#### CollectiveAccess

<u>Purpose</u>: CollectiveAccess is a museum collections management system with an emphasis on flexibility and adaptability. While initially targeted at cultural heritage organizations, it has taken root across a range of disciplines, from natural history to research (catalogues raisonné, phylogenetic analysis, Etc.) and special projects.

<u>Audience</u>: Initially our target audience were museum collections managers and registrars. The community of interest has expanded since then, with users continuously finding new applications for CollectiveAccess. At this time our primary audiences are: Cultural heritage, including history, fine art, film and related research; Natural history, including fossil and biodiversity management; Archives management, especially where archives and digital asset management meet; Special projects, including participatory data collection in the social sciences.

Affiliation: Whirl-i-Gig

First release date: The project started in 2003. The first open-source release was in 2007.

ConservationSpace

Purpose: A document management system for conservation professionals.

Audience: Conservators and conservation scientists in museums, libraries, and private practice

around the world.

First release date: Began with meetings organized by the Andrew W. Mellon Foundation in

2006. Development began by the partner institutions in 2010. The first release became

available in March 2017.

**CORAL** 

Purpose: An Electronic Resources Management System consisting

of interoperable modules designed around the core components of managing electronic

resources.

Audience: Libraries and information centers that are charged with or responsible for managing

e-resources.

First release date: 2010

**DSpace** 

<u>Purpose</u>: DSpace is an open source repository software package typically used for creating open

access repositories for scholarly and/or published digital content.

(https://en.wikipedia.org/wiki/DSpace)

Audience: DSpace is the software of choice for academic, non-profit, and commercial

organizations building open digital repositories. It is free and easy to install "out of the box"

and completely customizable to fit the needs of any organization.

Affiliation: Duraspace

First release date: 2002

**Evergreen** 

Purpose: The software is used for the integrated library system.

<u>Audience</u>: Individual Libraries, Library Consortia and Library Systems.

Affiliation: Software Freedom Conservancy

First release date: Evergreen began September 5, 2006

**Fedora** 

Purpose: Fedora is a robust, modular, open source repository system for the management and dissemination of digital content. It is especially suited for digital libraries and archives, both for access and preservation. It is also used to provide specialized access to very large and complex

digital collections of historic and cultural materials as well as scientific data.

Audience: Primarily academic and cultural heritage organizations, universities, research

institutions, university libraries, national libraries, and government agencies.

Affiliation: DuraSpace

First release date: The original Fedora paper was published in 1997, and the first software

release was in 2003.

Islandora

<u>Purpose</u>: General-purpose digital assets management system (DAMS).

<u>Audience</u>: GLAMs - (galleries, libraries, archives, and museums) seeking a DAMS.

Affiliation: Islandora Foundation

First release date: 2006

Koha

Purpose: Runs a library (both physical and electronic). Any organisation that has a library. So pretty much every organisation over about 50 people.

Audience: Libraries of all shapes and sizes, Public, Academic, Schools, Special, Corporate, Govt,

etc.

First release date: Code went into production January 3 2000, first release of the software for

download/contributions was June 2000.

## Library Simplified/SimplyE

<u>Purpose</u>: Simplify the borrowing of eBooks from various library ebook content providers in a single unified application. The app provides a unified catalog of content, a transactionally simple, anonymous, secure collection borrowing experience, and an advanced reading environment that is compatible with native screen readers and assistive technologies.

**Audience**: Readers

<u>First release date</u>: Feb 2016 was the first release of the Software under the Open Ebooks initiative for the White House's Connect Ed program. The second was for NYPL's own instance.

#### **Lots of Copies Keep Stuff Safe (LOCKSS)**

<u>Purpose</u>: The LOCKSS software provides decentralized, peer-reviewed, peer-to-peer, resilient, secure digital preservation for all types of content.

<u>Audience</u>: Our partners are communities who have a shared interest in the preservation of particular content. Principally, though not exclusively, these are communities of memory organizations. We are interested in expanding our partnerships among existing and to new audiences to broadly facilitate better digital preservation for more content.

<u>Affiliation</u>: The LOCKSS Program is an Auxiliary Unit (https://adminguide.stanford.edu/chapter-3/subchapter-1/policy-3-1-3#anchor-23781) of Stanford Libraries. As such, it is administratively part of Stanford University but supports itself wholly through external funding. We recently moved into the Digital Library Systems and Services group, which is providing opportunities for cost efficiencies.

<u>First release date</u>: The LOCKSS Program started in 1999, and the first production release of the LOCKSS software came in 2004. More details about the history of the LOCKSS Program can be found here: https://www.lockss.org/about/history/.

#### MetaArchive LOCKSS

<u>Purpose</u>: MetaArchive uses the free open source LOCKSS archiving software to operate a network of preservation servers. Due to the low cost participation, it is affordable for libraries of all sizes. LOCKSS is an ACM award winning digital preservation technology which preserves all formats and genres of web-published content from full-fledged web sites to simple web hosted directories.

Content is stored in and restored to its original format. Participating institutions identify valuable digital assets that they wish to preserve safely. They make the corresponding digital content accessible to MetaArchive network servers, so-called LOCKSS caches, which are configured to copy content, update it to its latest versions on a regular basis, and ensure its integrity over time.

All content is stored in multiple copies on multiple caches at geographically dispersed locations. The MetaArchive network manages the number of replication so that a loss of all copies becomes extremely unlikely. If an institution loses preserved content for whatever reason its content is restored in its original form.

<u>Audience</u>: Any institution seeking a digital preservation storage solution, including but not limited to libraries, archives, museums, and other cultural heritage institutions.

Affiliation: Educopia Institute

First release date: Unknown

# **OLE - Open Library Environment**

<u>Purpose</u>: OLE is an active community of academic and research libraries collaborating to build open source, extensible, and service-driven library management tools. The OLE Partners share a common vision to empower librarians and libraries by pooling our resources and directing our expertise and insights. OLE provides the infrastructure and governance for effective collaboration between institutions with shared interests in developing, using and extending open source library management tools for the global library community. Our focus is on developing strong community organization and vision that drives our activities that include software development, feature specification, and innovation in practice and use of library management tools.

Audience: Academic and research librarians and libraries.

<u>Affiliation</u>: Open Library Foundation

<u>First release date</u>: OLE organized in 2010 to develop software for library management, and our first code release was in 2010. We released code every 6 months until we released production code in 2014. The original OLE effort to determine direction and participation from the library community (not a software build effort) was in 2009 - 2010.

Omeka

Purpose: Web publishing platform for sharing and displaying collections and for creating online

narratives (exhibits).

Audience: Librarians, archivists, museum professionals, scholars, educators and their students,

history enthusiasts and collectors

Affiliation: Roy Rosenzweig Center for History and New Media at George Mason University and

the Corporation for Digital Scholarship

First release date: February 2008, first funded officially as "Omeka" in October 2007

The Public Knowledge Project (PKP) is responsible for the ongoing development and support of an OSS suite consisting of Open Journal Systems (OJS); Open Monograph Press (OMP);

Open Conference Systems (OCS); and Open Harvester System (OHS).

Purpose: PKP's software is primarily intended to support scholarly publishing and related

communications activities.

Audience: Academic researchers, scholars, and students; editors and publishers of scholarly

journals and monographs; publishers and university presses; conference conveners.

Affiliation: Simon Fraser University

First release date: PKP was founded by John Willinsky in 1998 when he was a professor in the

Faculty of Education at the University of British Columbia. The first releases of OJS and OCS

appeared in late 2001/early 2002.

Sakai (an Apereo Project)

Purpose: Collaboration and Learning Environment - essentially, the functionality of a Learning

Management System, with additional functionality to enable less structured collaboration.

<u>Audience</u>: Higher Education

Affiliation: Apereo Foundation

First release date: Project start 2004. v1.0 release December 2004. first "mature" release" June

15th, 2005.

Samvera (formerly Hydra)

Purpose: Samvera offers value to any organization needing to manage and preserve digital

assets. Samvera software was conceived as an open source repository framework. That is to

say that we set out to create a series of free-to-use software "building blocks" that could put

together in various combinations to achieve the repository system that an institution needed –

as opposed to building a "one size fits all" solution.

<u>Audience</u>: The audience includes experts in technology leadership, project managers, service

owners, software developers, dev ops, metadata, data management, digital preservation, etc.

<u>Affiliation</u>: DuraSpace

First release date: A formal release of the software that others could access via github took

place in November 2011.

**Specify Software Project** 

<u>Purpose</u>: The Specify platform is a database cataloging application focused on the specimen

holdings of natural history collections, including plants, birds, fish, herps, mammals, insects,

other invertebrates, and tissue and DNA samples derived from museum specimens.

Audience: Natural History Museums and Biodiversity Repositories, worldwide

**Affiliation**: University of Kansas

First release date: The Specify Project is a descendant of the MUSE software project which was

another natural history museum cataloging application. MUSE was launched in 1987 and was

last updated in 1993. Specify began in 1996, 21 years ago, we have been active since then.

Vega

Purpose: An authoring and editorial management platform for creating open-access publishing

venues, particularly those with high multimedia components.

Audience: People who publish academic research: Publishers, librarians, editors, authors.

Affiliation: West Virginia University

<u>First release date</u>: The project started January 1, 2015. We have not released yet.

## **VuFind**

<u>Purpose</u>: VuFind is a discovery layer that can be easily used as a library OPAC but is also adaptable to many other search applications. It provides abstractions on top of multiple search services and integrated library systems and includes a flexible mechanism for "Bento-style" searching.

<u>Audience</u>: Libraries and other cultural heritage organizations are a primary audience, but the software can be easily adapted to search almost anything.

Affiliation: Villanova

First release date: 2007