



Technology Module: Archivematica

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This POWRR Institute is generously funded by the



Expected Outcomes

- ✓ **Become familiarized with the concept of microservices and how they are employed within Archivemata**
- ✓ **Understand installation/deployment options for Archivemata**
- ✓ **Understand how Archivemata utilizes/meets OAIS standards**
- ✓ **Understand the content of packages produced by Archivemata (SIP, AIP, DIP), and how files are normalized**
- ✓ **Process a digital transfer (SIP) from start to finish**

Archivematica Overview

From the Archivematica website:

“An integrated suite of free and open-source tools that allows users to process digital objects from ingest to archival storage and access in compliance with the ISO-OAIS functional model and other digital preservation standards and best practices.”

<https://www.archivematica.org/en/>

Archivematica Overview

- Utilizes microservice design to produce “information packages” (SIP, AIP, DIP) that include files, checksums, logs, submission documentation, and assorted XML metadata
- Microservices are chained together by a series of Python scripts
- You receive feedback as the files make their way through the processing workflow
- Relies on normalization as preservation technique

Microservices within Archivematica - EXAMPLES

BagIt

Bulk_Extractor

ClamAV

Django

Elastic Search

ExifTool

FFmpeg

Fido

FITS

Gearman

Imagemagick

JHOVE

Md5deep

MediaInfo

P7zip

Python lxml

Siegfried

Sleuthkit

Tesseract

Unrar

Zip

Archivematica Deployment Options

- Ubuntu 14.04.5 64 bit Server Edition
- Ubuntu 16.04.2 64 bit Server Edition (beta)
- CentOS 7.3.1611 64 bit
- Virtual Machine (Oracle VirtualBox via Vagrant
- testing environment)

Archivematica Case Study

The Archives has been accepting born digital files from internal offices and donors for about 5 years now, and staff have been using stand-alone tools to perform various preservation actions on them.

The staff feel these processes are getting a little out of hand for the volume of material they presently deal with. For example, they are having a difficult time enforcing policies regarding acceptable file formats and are finding their campus produces a lot of documents that require normalization.

They approach their boss about trying out the open source Archivematica digital preservation system, which includes several of the tools they have become accustomed to using, and offers the promise of a file format registry and file normalization.

Archivematica Walk-Through

1. Open a web browser
2. In the URL bar, type in <http://sandbox.archivematica.org/>
3. For the login, enter demo@example.com and **demodemo** as the password
4. Make sure your browser screen is maximized - otherwise the top of the screen could be half cut off



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QUESTIONS?