Session Overview

- Digital archives and digital preservation systems.
- These open source tools are being developed and used in the digital archives and digital preservation communities to address the needs and gaps in systems for meeting standards, such as OAIS, PAIMAS, and Trustworthy Digital Repositories.
- They enable description, discovery, delivery, and preservation of digital collections.
- Some of these are currently being assessed and/or implemented at MIT Libraries.
Systems and Tools to be presented

- **ArchivesSpace** – archives collection management and discovery

- **Archivematica** – digital preservation system (processes files chosen for preservation and creates Archival Information Packages and Dissemination Information Packages)

- **(atom) Access to Memory** – archives and special collections discovery and delivery system and collections management system
At MIT Libraries we have these elements:
Storage Pathways
Digital Content Management Workflow
External Content Creators
Archives Collections Security Requirements
Storage Pathways

Steps in Manage Digital workflow showing Storage Areas and Activities
http://libaxis23.mit.edu:8000/
Manage Digital Workflow

Diagram showing steps in the Manage Digital Workflow and the Storage Areas.

Digital Content Management – Lifecycle Workflow [on the DCM wiki]

Archivematica plugs into steps D3-D6
ArchivesSpace

- Archives Management System

“Software that provides integrated support for the archival workflow, including appraisal, accessioning, description, arrangement, publication of finding aids, collection management, and preservation.”

Access to Memory (atom)

- Archives Management System
  Software that provides integrated support for the archival workflow, including appraisal, accessioning, description, arrangement, publication of finding aids, collection management, and preservation.

- Digital Content Delivery system

  http://demo.accesstomemory.org/
**Archivematica**

- Process your files for Preservation and Delivery
- May include arrangement & deaccessioning
- Workflow engine that
  - Sends your files through a set of tools
  - You make decisions during the workflow
  - You set the locations for the files to live
  - Archivematica collects and combines the metadata about all of the tasks, processes, and results into a METS file and uses PREMIS semantics
  - Archivematica produces Bags (Bag-It)
Possible Integrations

ArchivesSpace – **Archivematica** – ArchivesSpace

https://wiki.archivematica.org/ArchivesSpace_integration

ArchivesSpace – **Archivematica** – DSpace

ArchivesSpace - atom – **Archivematica** – atom

BitCurator – ArchivesSpace – **Archivematica** – ArchivesSpace

**Archivematica** – Archivum (*preservation storage*)
Archivematica is OAIS based
Placing the Ecosystem in Context

Content Lifecycle Management

Manage Digital = IASC Ecosystem
Primary function of Archivematica

- To process digital transfers (accessioned digital objects), turn them into Submission Information Packages (SIPs), apply format policies and create high-quality, repository-independent Archival Information Packages (AIP) using METS, PREMIS, and BagIt.

- Archivematica is bundled with AtoM, but is designed to upload Dissemination Information Packages (DIP), containing descriptive metadata and web-ready access copies, to several access systems (e.g. Dspace, ContentDM, etc.).
Impact at MIT Libraries

- Using Archivematica at the MIT Libraries will:
  - Provide consistently applied workflow tools
  - Provide consistently applied preservation strategies
  - Allow us to set and use our storage pathways appropriately and across departments
  - Allow us to streamline our QC by using the Archivematica Transfer-Backlog workflow and reviewing logs/reports
  - Allow us to apply MD and Rights Info to SIPs
  - Connect MD from DIPS to Archivists’ Toolkit resource records
Demo of Archivematica

Requirements
https://wiki.archivematica.org/Requirements

Format Policy – Preservation Planning
https://wiki.archivematica.org/Media_type_preservation_plans

OAIS functional diagrams
https://wiki.archivematica.org/OAIS_Activity_Diagrams

Digital Sustainability Lab – Archivematica instance
http://libaxis23.mit.edu/ingest/ [MIT IP only]

THANK YOU FOR YOUR ATTENTION!

JULY 17 (10AM): ACCESS TO MEMORY (ATOM)

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