

DIGITAL ARCHIVES & PRESERVATION SYSTEMS

Part 4 Archivematica (presented July 14, 2015)

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Session Overview

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- 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

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- **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

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Lifecycle Environment

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/>

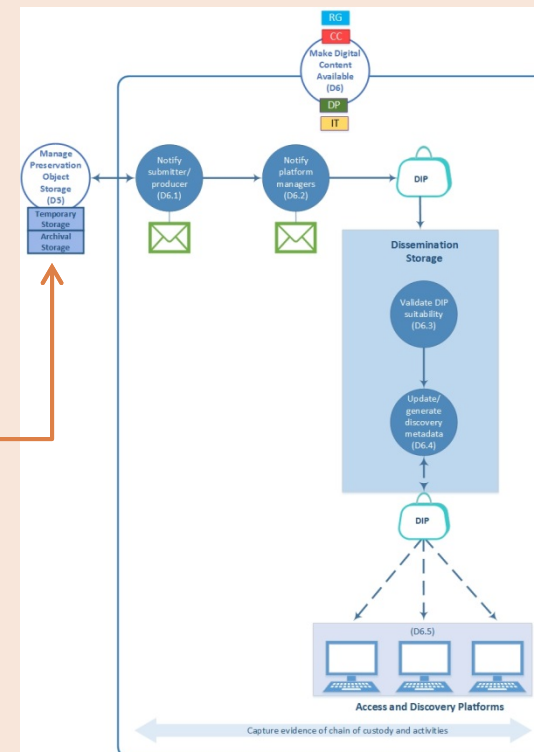
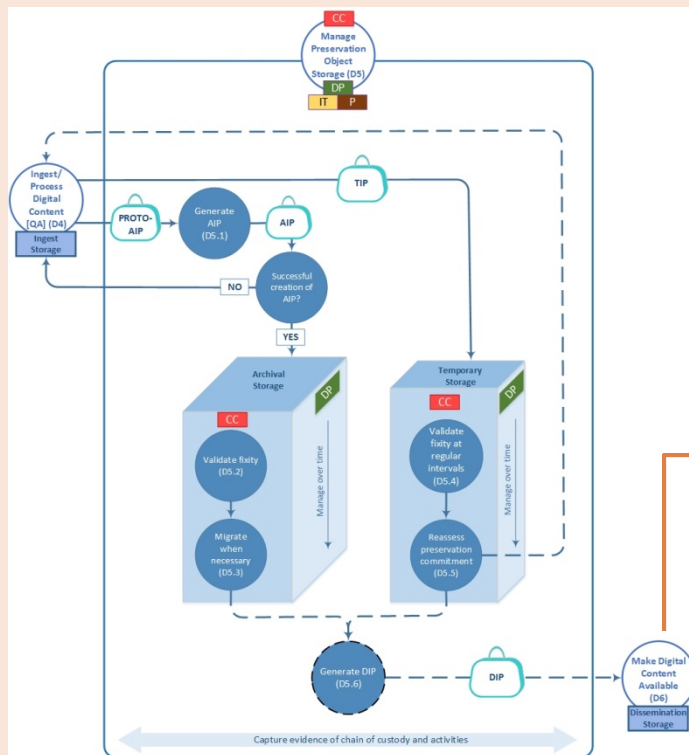
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Submission Storage

Ingest Storage

Archival Storage

Dissemination Storage



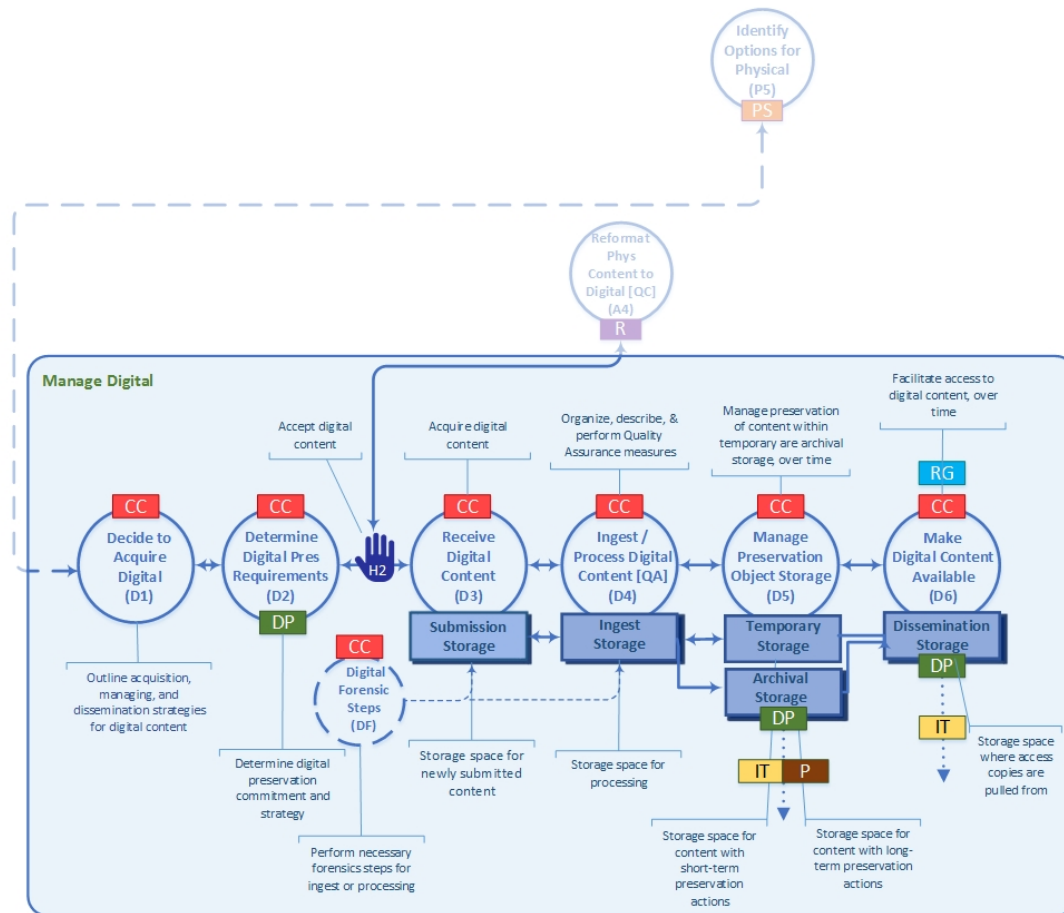
Manage Digital Workflow

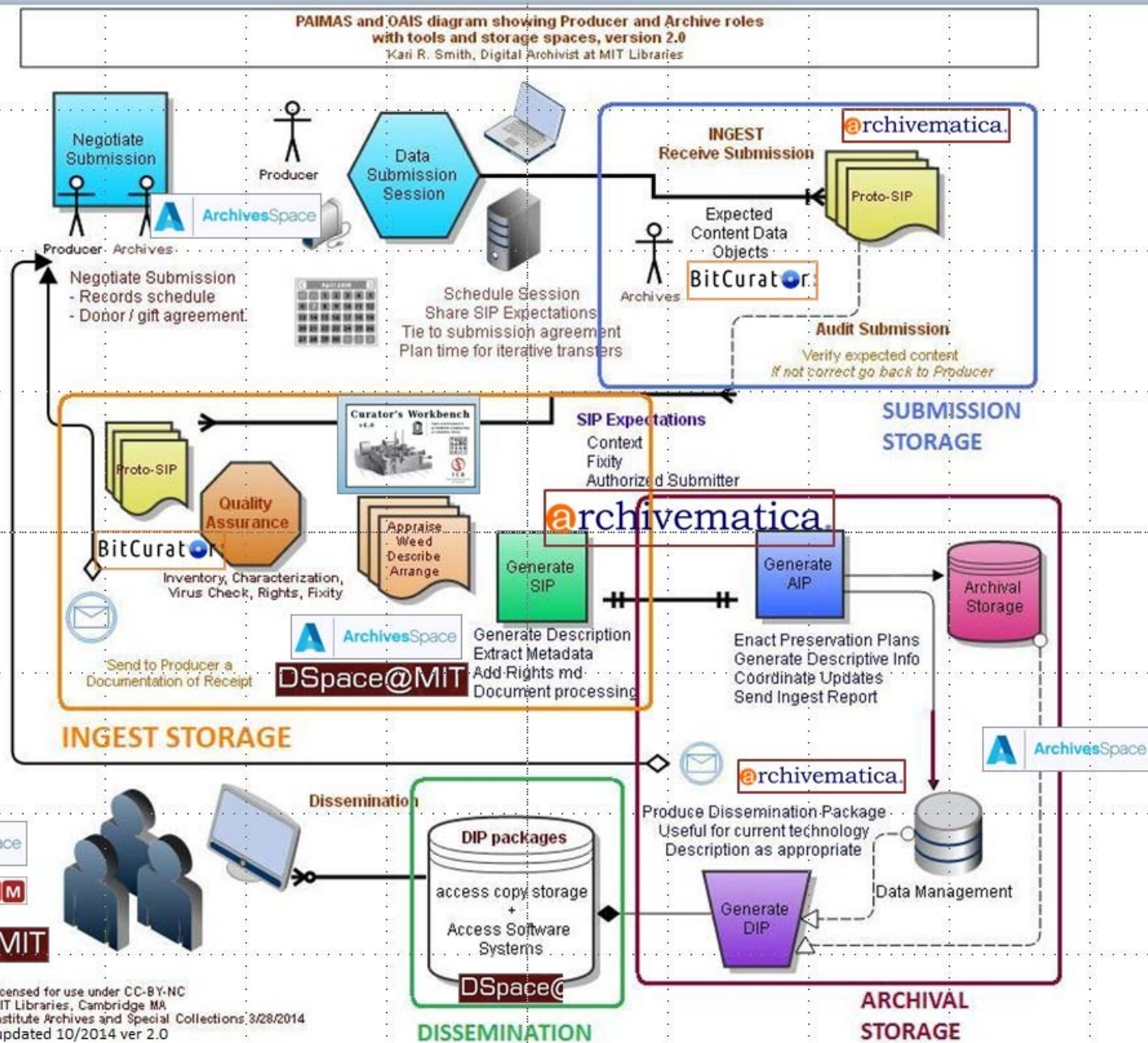
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Diagram showing steps in the Manage Digital Workflow and the Storage Areas.

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

Archivematica plugs into steps D3-D6



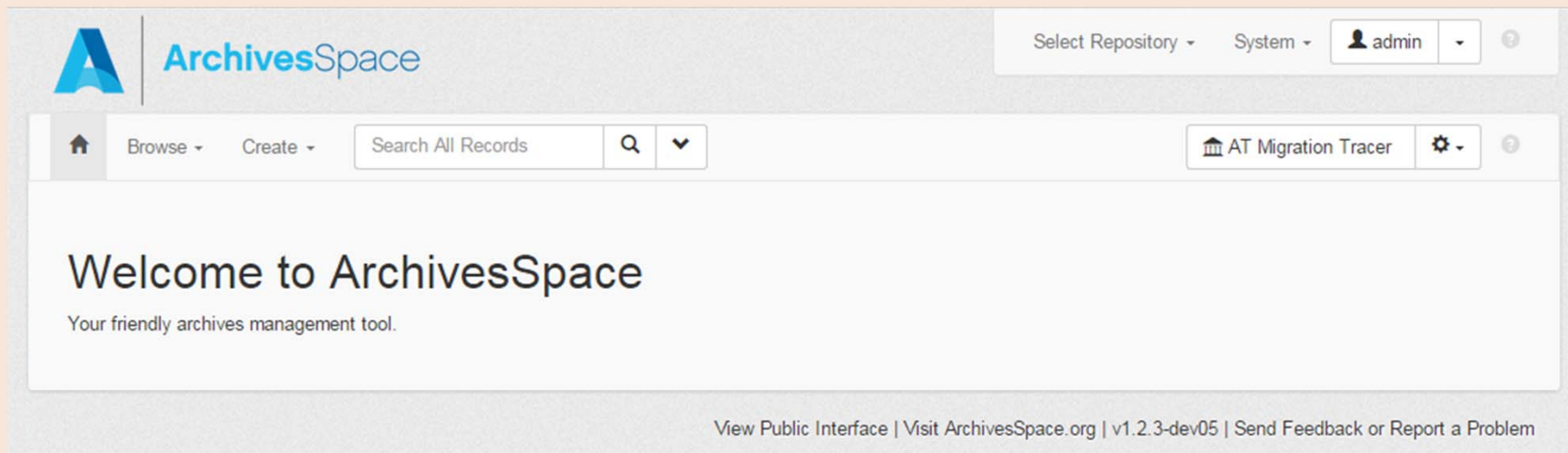


ArchivesSpace

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□ 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)

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□ 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

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- 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

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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

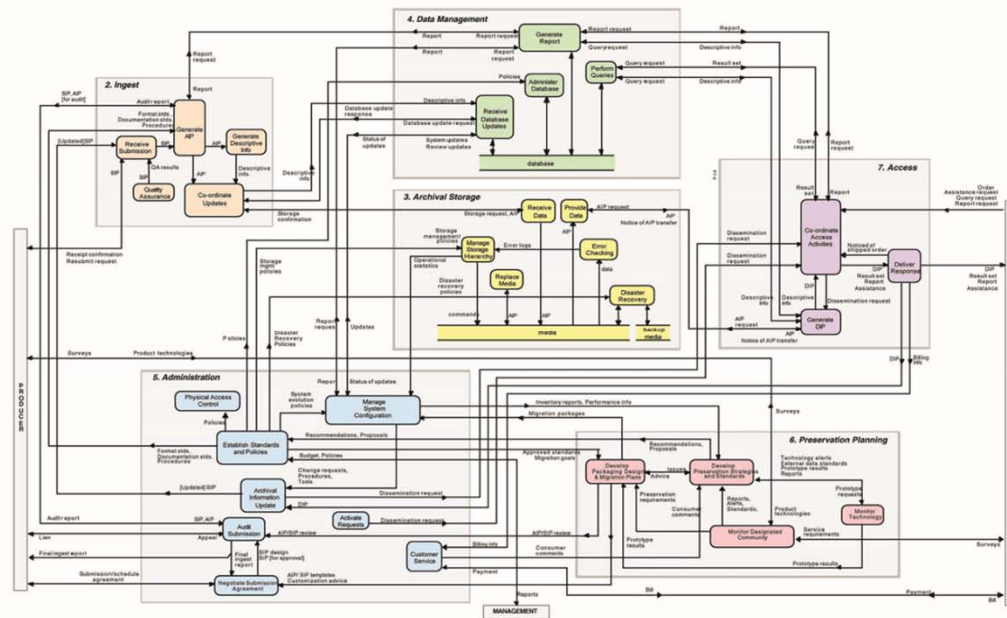
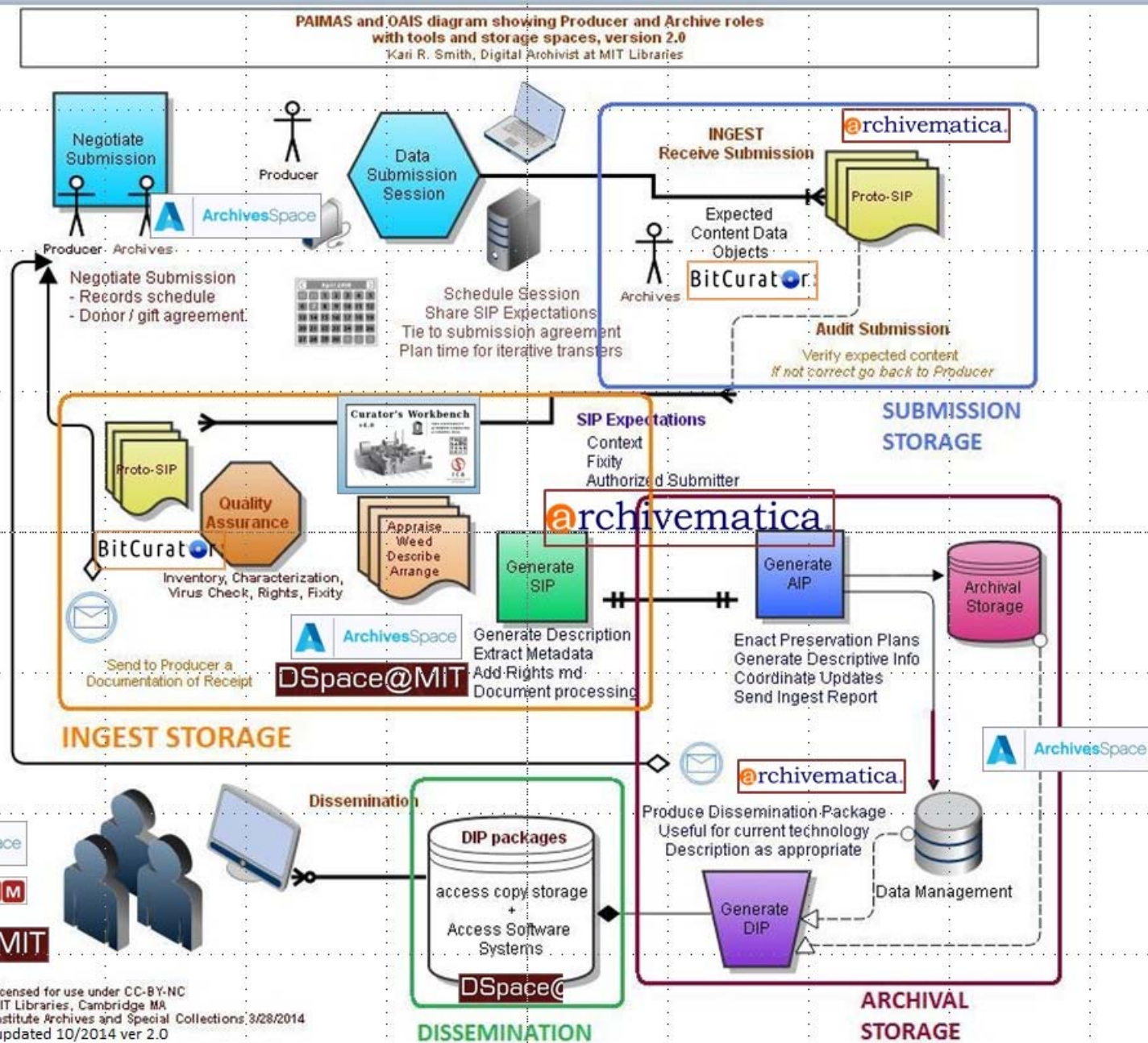


Figure F-1: Composite of Functional Entities

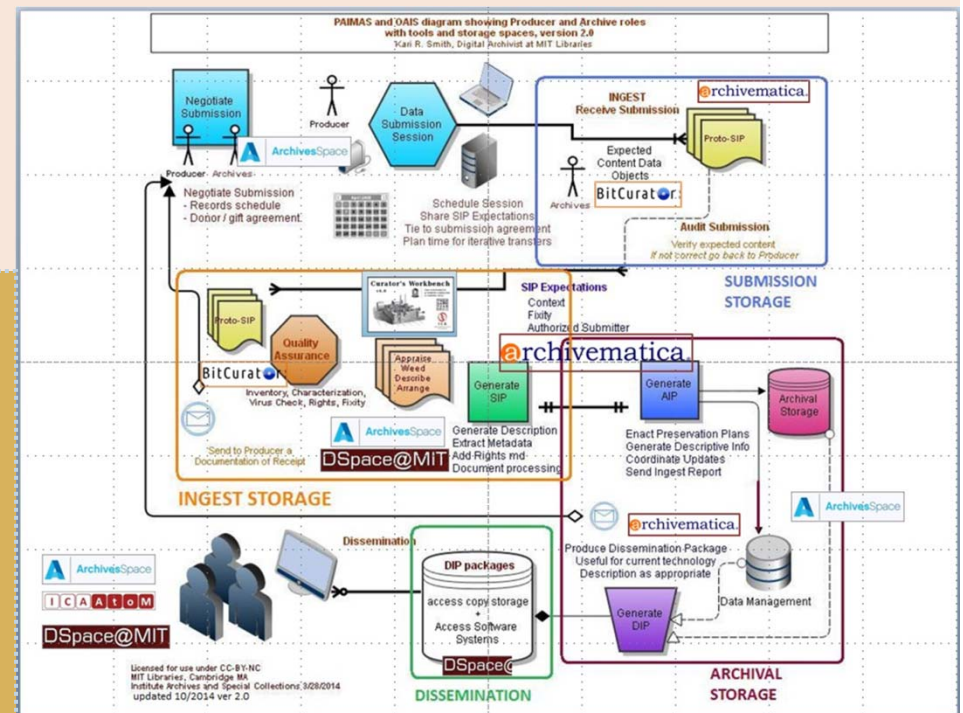
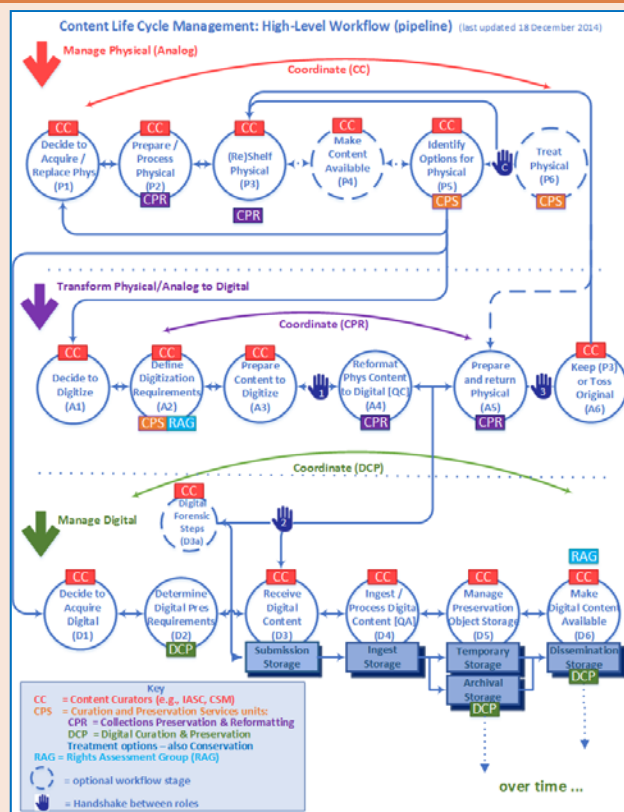


Placing the Ecosystem in Context

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Content Lifecycle Management

Manage Digital = IASC Ecosystem



Primary function of Archivematica

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- 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

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- 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]

Manual: <https://www.archivematica.org/en/docs/archivematica-1.4/>

THANK YOU FOR YOUR ATTENTION!

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

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