

Open-source software for archives: Archivematica and ICA-AtoM

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UBC Open Access Week 2011

Open-source software

- Open-source software (or “free and open-source software”) is software which can be freely used, modified and redistributed through access to its source code.
- A number of different types of licenses govern the use of the software. But the core is that the code can be freely modified and redistributed.

Developing open-source software

- The business model:
 - get paid to develop the software
 - give the software away for free
 - make all documentation freely available
 - sell services around supporting the software
 - consulting
 - data migrations
 - installation, technical support services

Advantages and disadvantages

- Advantages:
 - development is a collaborative effort
 - the community benefits from our efforts
 - we feel good
- Disadvantages:
 - we don't make any money selling software
 - we can be forked
 - some organizations don't want OS software

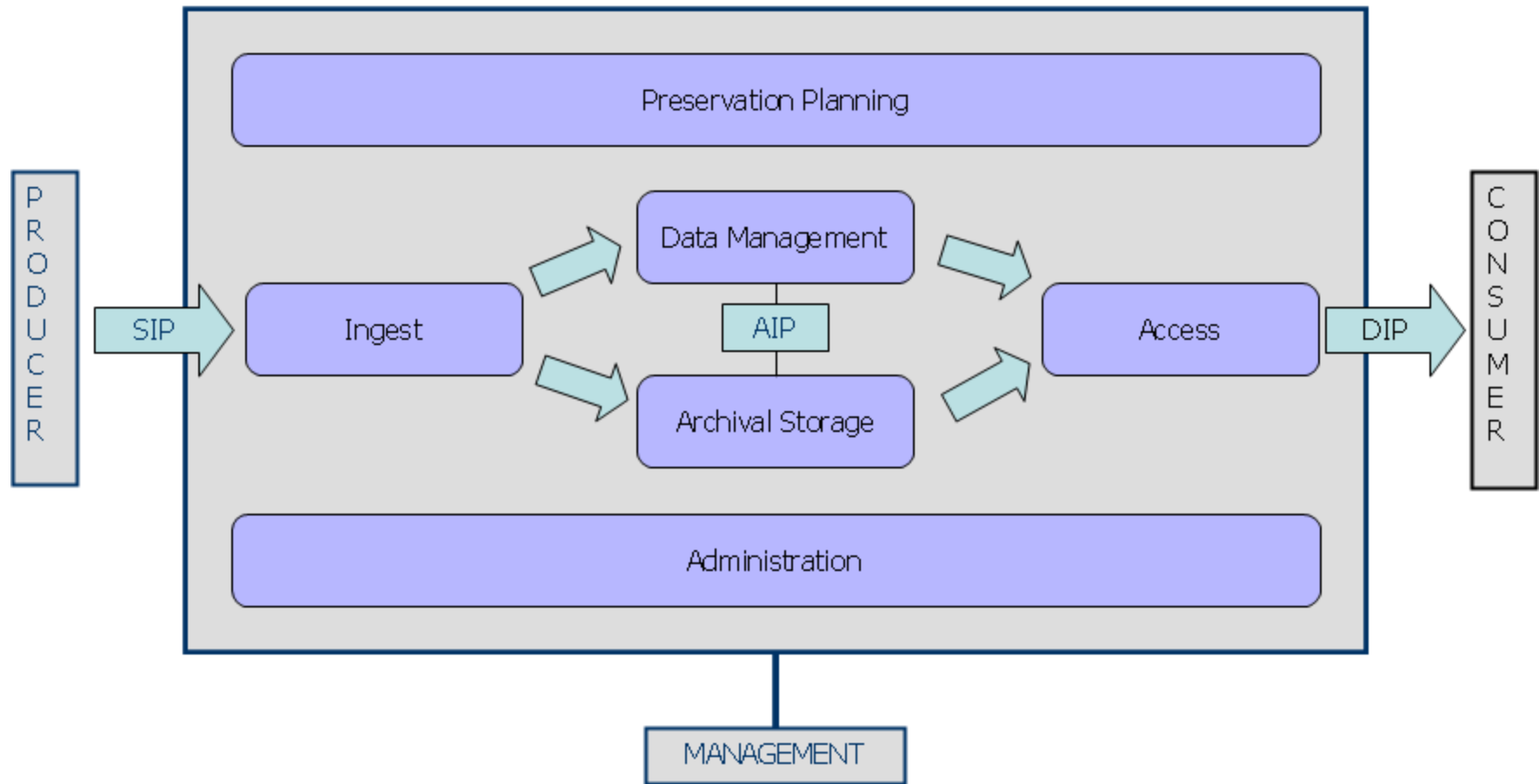
What are we developing?

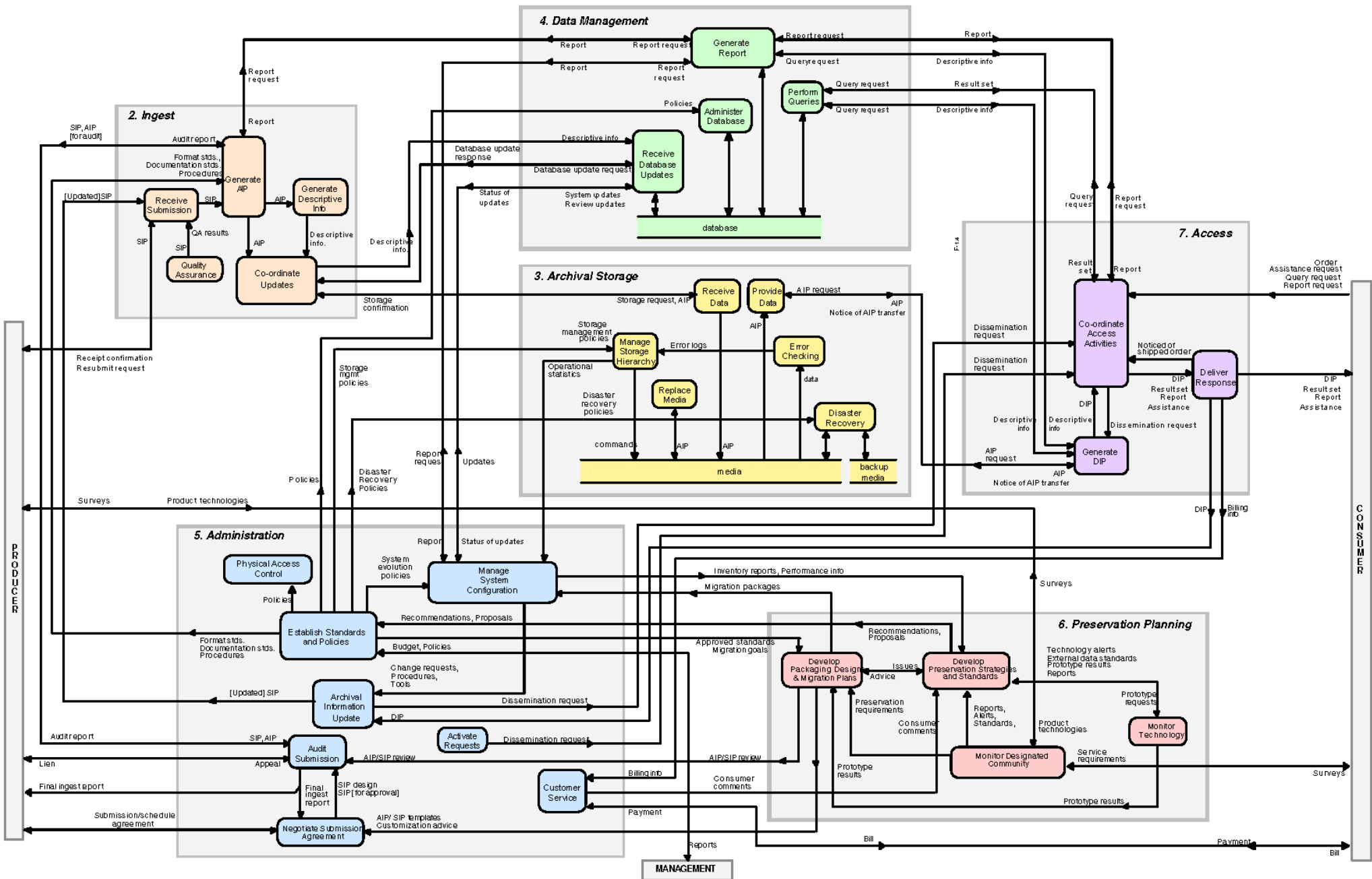
- Digital preservation system: Archivematica
- Web-based archival description and access system:
ICA-AtoM

The digital preservation problem

- The complexity of digital information
- Rapid technological change
- Lack or loss of adequate metadata
- Incompatible, obsolete, obscure or proprietary file formats
- Fragility of digital storage media
- The volume of digital information
- Lack of responsibility and resources

ISO 14721: Open Archival Information System





OAIS definitions

- Submission Information Package (SIP)
 - A body of digital objects and associated metadata transferred from the Producer
- Archival Information Package (AIP)
 - A package derived from the SIP containing the digital objects and associated metadata that is preserved in the digital preservation system
- Dissemination Information Package (DIP)
 - A package derived from the AIP containing digital objects and associated metadata delivered to the consumer

What does OAIS tell us to do?

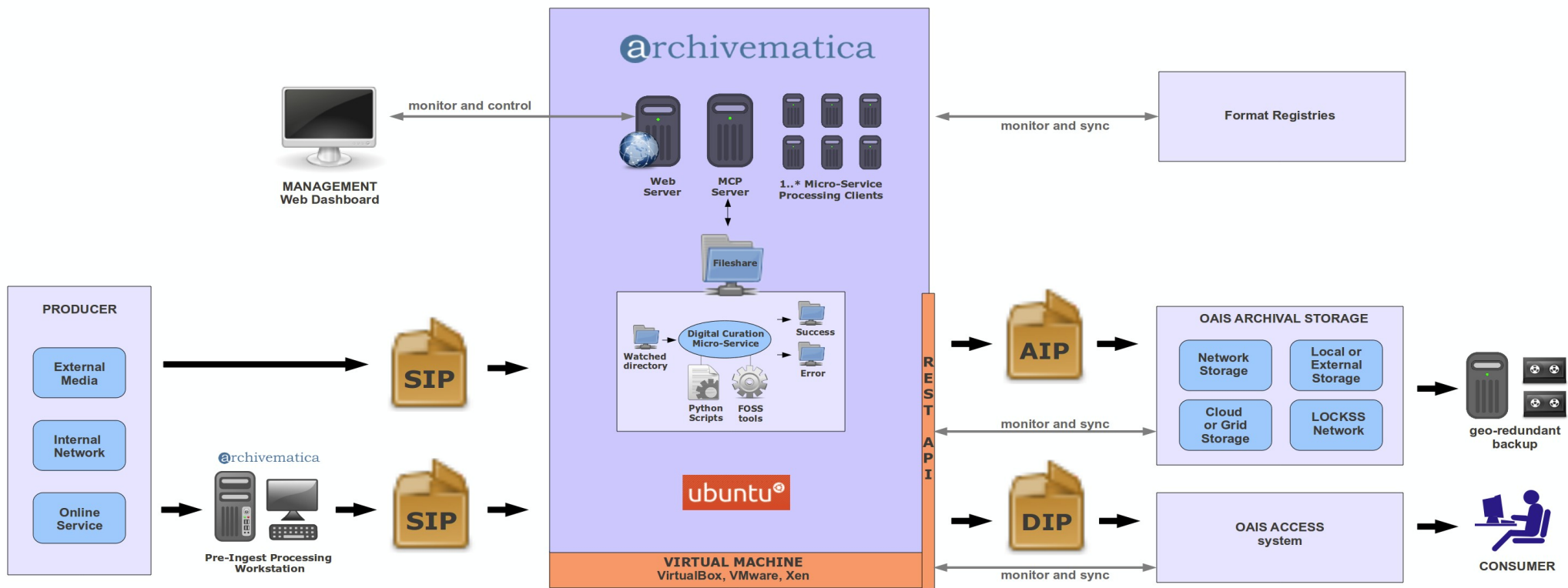
- Ingest a SIP
 - Accept a SIP from a Producer
 - Prepare an AIP
- Preserve the AIP
 - Ensure that the objects are securely stored
 - Ensure the ongoing ability to access and use the objects
- Disseminate the objects

What is Archivematica?

- Archivematica is a comprehensive digital preservation system.
- Archivematica uses a micro-services design pattern to provide an integrated suite of free and open-source tools that allows users to process digital objects from ingest to access in compliance with the ISO-OAIS functional model.
- Archivematica implements media type preservation plans based on an analysis of the significant characteristics of file formats.

Where did Archivemática come from?

- Artefactual Systems
- City of Vancouver Archives
- UNESCO Memory of the World
- International Monetary Fund Archives
- Rockefeller Archive Center
- University of British Columbia Library
- Simon Fraser University Archives
- ?



PODS: Permanent Objects, Disposable Systems

- Pile o' stuff gets accessioned by an archives
- The archivist appraises, organizes, adds descriptive metadata, makes a nice Submission Information Package (SIP)
- The SIP is ingested into Archivematica
- Archivematica creates a package which includes the original objects, any normalized versions, and large quantities of descriptive, technical and preservation metadata: the Archival Information Package (AIP)
- The AIP conforms to international standards, is self-contained and interoperable – a **permanent object** which can be managed in Archivematica or another **disposable system**
- Archivematica creates a Dissemination Information Package (DIP) for upload into the access system

ICA-AtoM

- The DIP gets uploaded to ICA-AtoM
- ICA-AtoM: **I**nternational **C**ouncil on **A**rchives: **A**ccess to **M**emory
- The archivist enhances descriptive metadata as needed
- The digital objects are displayed with their descriptive metadata in the context of a hierarchical archival arrangement

Repository

UBC Rare Books and Special Collections

Creator(s)

- [Pritchett, Harold James](#)

Collection

[-] [Collection - Jane Doe collection](#)

[-] [Series - Photographs](#)

Item JDC-SP-01 - Harold Pritchett and Norman English

[Item JDC-SP-02 - Board of directors of the Inte...](#)

[Item JDC-SP-03 - Mill workers at Thurston-Flave...](#)

[Item JDC-SP-04 - Harold Pritchett watching a ch...](#)

Export

- [Dublin Core 1.1 XML](#)
- [EAD 2002 XML](#)

Browse

- [Information objects](#)
- [Actors](#)
- [Repositories](#)
- [Functions](#)
- [Subjects](#)
- [Places](#)
- [Digital objects](#)

[View archival description](#)

Item JDC-SP-01 - Harold Pritchett and Norman English



Identity area

Reference code	CA UBC JDC-SP-01
Title	Harold Pritchett and Norman English
Date(s)	<ul style="list-style-type: none">• 1949 (Creation)
Level of description	Item
Extent and medium	1 photoprint : b&w ; 21x26 cm

www.archivematica.org

www.ica-atom.org

Attribution

Title: Open-source software for archives: Archivematica and ICA-AtoM
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Date: October 26, 2011



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