artefactual
systems inc.

http://artefactual.com

digital preservation consulting services

open-source sofware for archives and libraries

archivematica®

ICA AtoM

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Jessica Bushey, MAS
Product Manager,
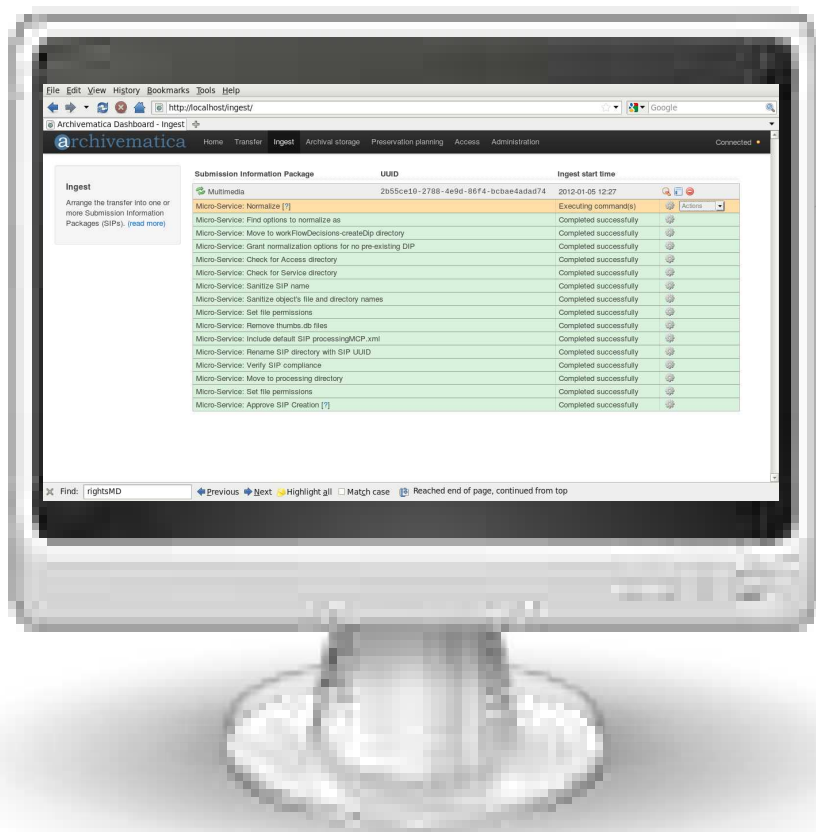ICA-AtoM

Austin Trask
Systems Engineer

Jesús García Crespo
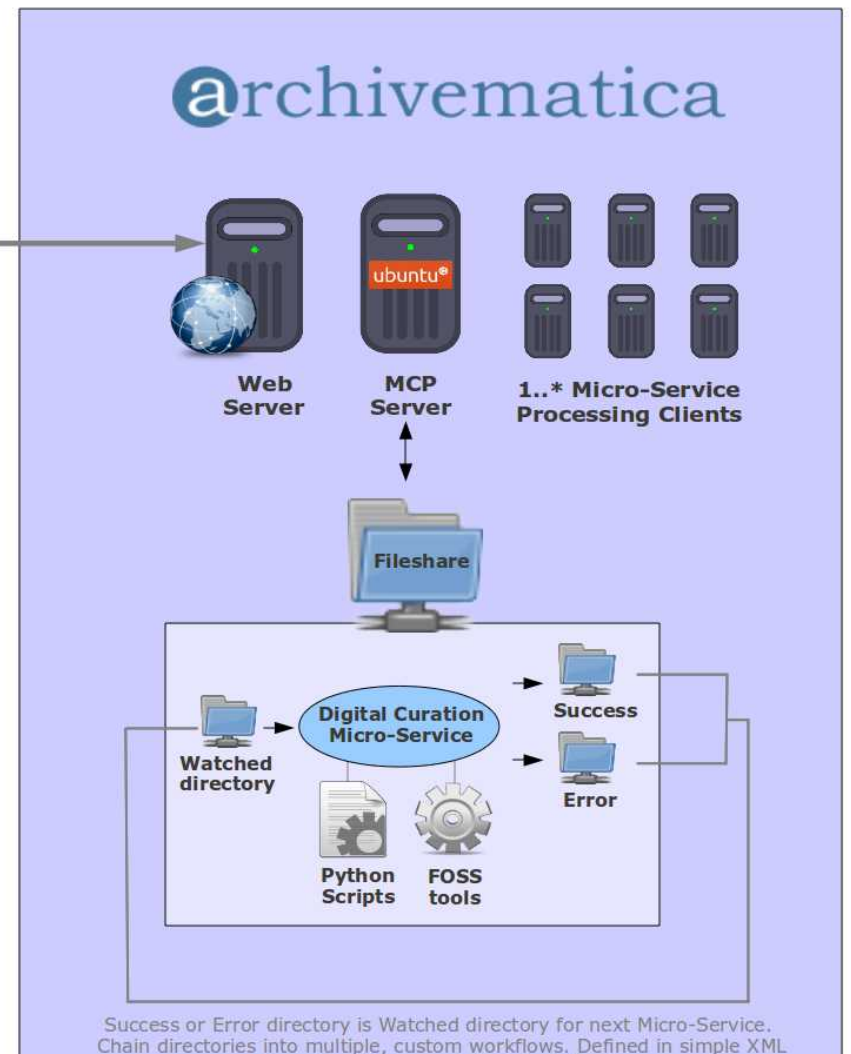Software Engineer

Joseph Perry
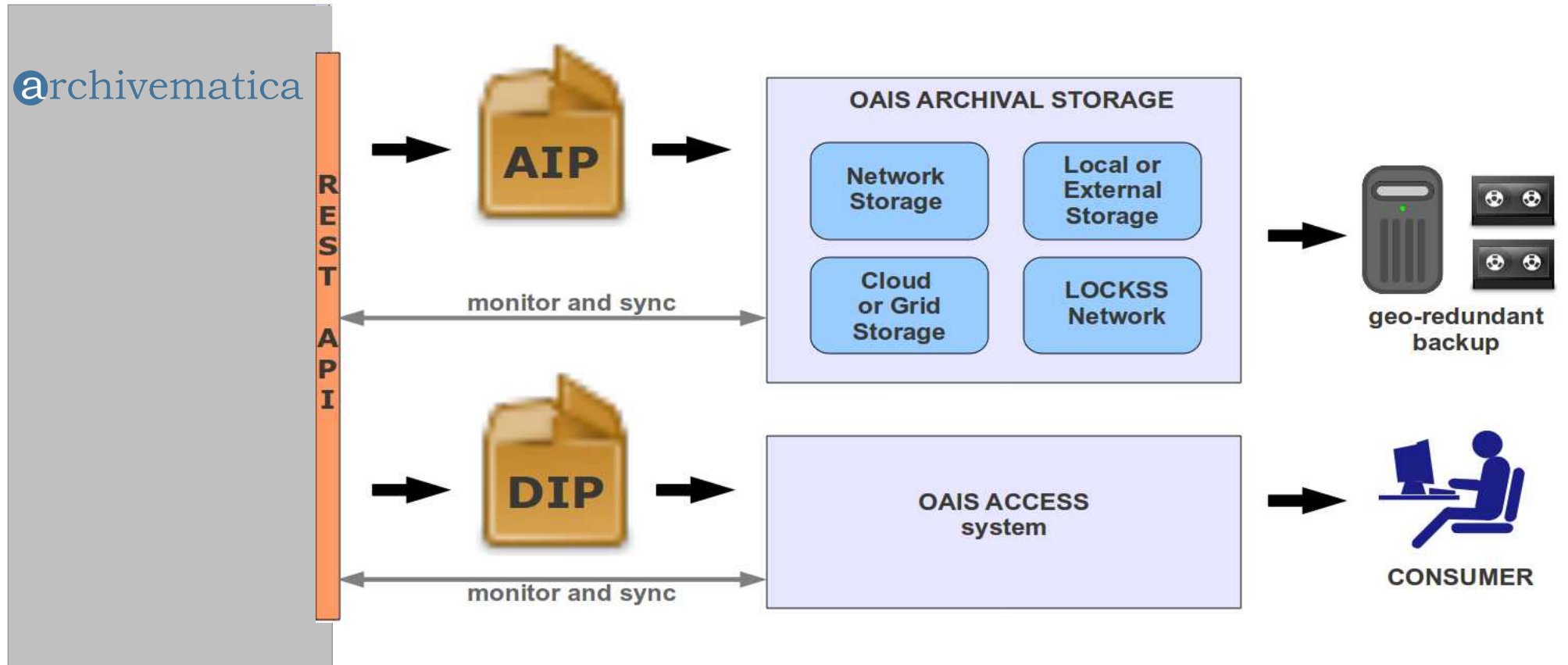Software Engineer

Mike Cantelon
Software Engineer

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MANAGEMENT
Web Dashboard

monitor and control

archivematica

Web Server

MCP Server

1..* Micro-Service Processing Clients

Fileshare

Watched directory

Digital Curation Micro-Service

Success

Error

Python Scripts

FOSS tools

Success or Error directory is Watched directory for next Micro-Service.
Chain directories into multiple, custom workflows. Defined in simple XML

SIP *or* digital files & metadata

archivematica

REST API

AIP

DIP

monitor and sync

monitor and sync

OAIS ARCHIVAL STORAGE

Network Storage

Local or External Storage

Cloud or Grid Storage

LOCKSS Network

geo-redundant backup

OAIS ACCESS system

CONSUMER

archivematica ®

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The Archivematica Archival Information Package (AIP)

- The ingested digital objects

- Preservation versions of the objects

- Submission documentation

- Logs

- The METS file

  - PREMIS metadata

The METS file

<dmdSec> (descriptive metadata)

Dublin Core XML

<amdSec> (administrative metadata)

<techMD>

PREMIS: object

<digiProvMD>

PREMIS: events

PREMIS: agents

<rightsMD>

PREMIS: rights

<fileSec> (a list of the files and their roles and relationships)

<structMap> (a representation of the physical structure of the AIP)

Standard ▾		/home/demo/sampledata-export ▾	Browse	Start transfer
Type	Transfer name			

Transfer	UUID	Transfer start time	
📣 Pictures	ba113e3a-f809-462d-8e4d-34f7fb4f7640	2012-08-15 10:15	📝 ⛔
▸ Micro-service: Approve transfer			
Job: Approve transfer [?]		Awaiting decision	⚙ Actions ▾

✅ Mail dear	4bb41b9e-1c6b-4cb1-9e41-56fe0ba3dd64	2012-08-14 15:44	📝 ⛔
▸ Micro-service: Create SIP from Transfer			
▸ Micro-service: Complete transfer			
▸ Micro-service: Characterize and extract metadata			
▸ Micro-service: Clean up names			
▸ Micro-service: Scan for viruses			
▸ Micro-service: Extract packages			
▸ Micro-service: Generate METS.xml document			
▸ Micro-service: Verify transfer checksums			
▸ Micro-service: Assign file UUIDs and checksums			
▸ Micro-service: Include default Transfer processingMCP.xml			
▸ Micro-service: Rename with transfer UUID			
▸ Micro-service: Approve transfer			

✅ Bad names	747da9a9-46f6-4d77-bf98-caa7d5ee29f8	2012-08-14 14:32	📝 ⛔
▸ Micro-service: Create SIP from Transfer			
▸ Micro-service: Complete transfer			

Submission Information Package	UUID	Ingest start time		
🔔 Pictures	4eac3ade-93ae-4608-9931-bcfe0df42d51	2012-08-15 13:57	📝 ⊖	
▸ Micro-service: Normalize				
Job: Normalize [?]		Awaiting decision	⚙	Actions ▾
Job: Find options to normalize as		Completed successfully	⚙	
Job: Move to workFlowDecisions-createDip directory		Completed successfully	⚙	
Job: Grant normalization options for no pre-existing DIP		Completed successfully	⚙	
Job: Check for Access directory		Completed successfully	⚙	
Job: Check for Service directory		Completed successfully	⚙	
▸ Micro-service: Clean up names				
▸ Micro-service: Remove cache files				
▸ Micro-service: Include default SIP processingMCP.xml				
▸ Micro-service: Rename SIP directory with SIP UUID				
▸ Micro-service: Verify transfer compliance				
▸ Micro-service: Verify SIP compliance				

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PREMIS events

- Ingestion

- Fixity check

- Message digest calculation

- Identifier assignment

- Unpacking

- Virus check

- Name cleanup

- Format identification

- Validation

- Normalization

Archivematica 0.9 / PREMIS 2.2

- Restriction can be "Allow", "Disallow" or "Conditional".

- If Restriction is "Disallow" or "Conditional", rights restricted start and end dates in PREMIS will be in a <termOfRestriction> container.

- If Restriction is "Allow", rights granted start and end dates will be in a <termOfGrant> container.

- All note fields should be a repeatable field.

- Basis remains "Copyright", "Statute", "License", "Policy", and "Donor". However, "Policy" and "Donor" will be expressed as <otherRights> in the PREMIS file.

- All rights now have Documentation identifier sections which allow the user to make intellectual links between rights statements and external documentation, such as institutional policy documents or donor agreements.

- All rights now have start and end dates linked to the rights basis as well as to an act. For example, a policy can have a start date of 1992 but acts it allows (such as dissemination) have separate start and end dates.

- No agents will be linked to rights statements.

- Use "OPEN" for open-ended terms of restriction granted, rights granted, and permission granted. (checkbox in Archivematica)

- A blank end date indicates either end date unknown or the permission statement applies to many objects with different end dates. In this case, endDate is omitted from the metadata

archivematica. Transfer Ingest ¹ Archival storage Preservation planning Access Administration demo ▾

Ingest / Tutorial Office Docs / Rights

Rights
Tutorial Office Docs

Act	Basis	Restriction(s)	Start	End	
Publish	Copyright	Conditional	2011/09/16		Edit Delete
Disseminate	Copyright	Allow			Edit Delete

Add
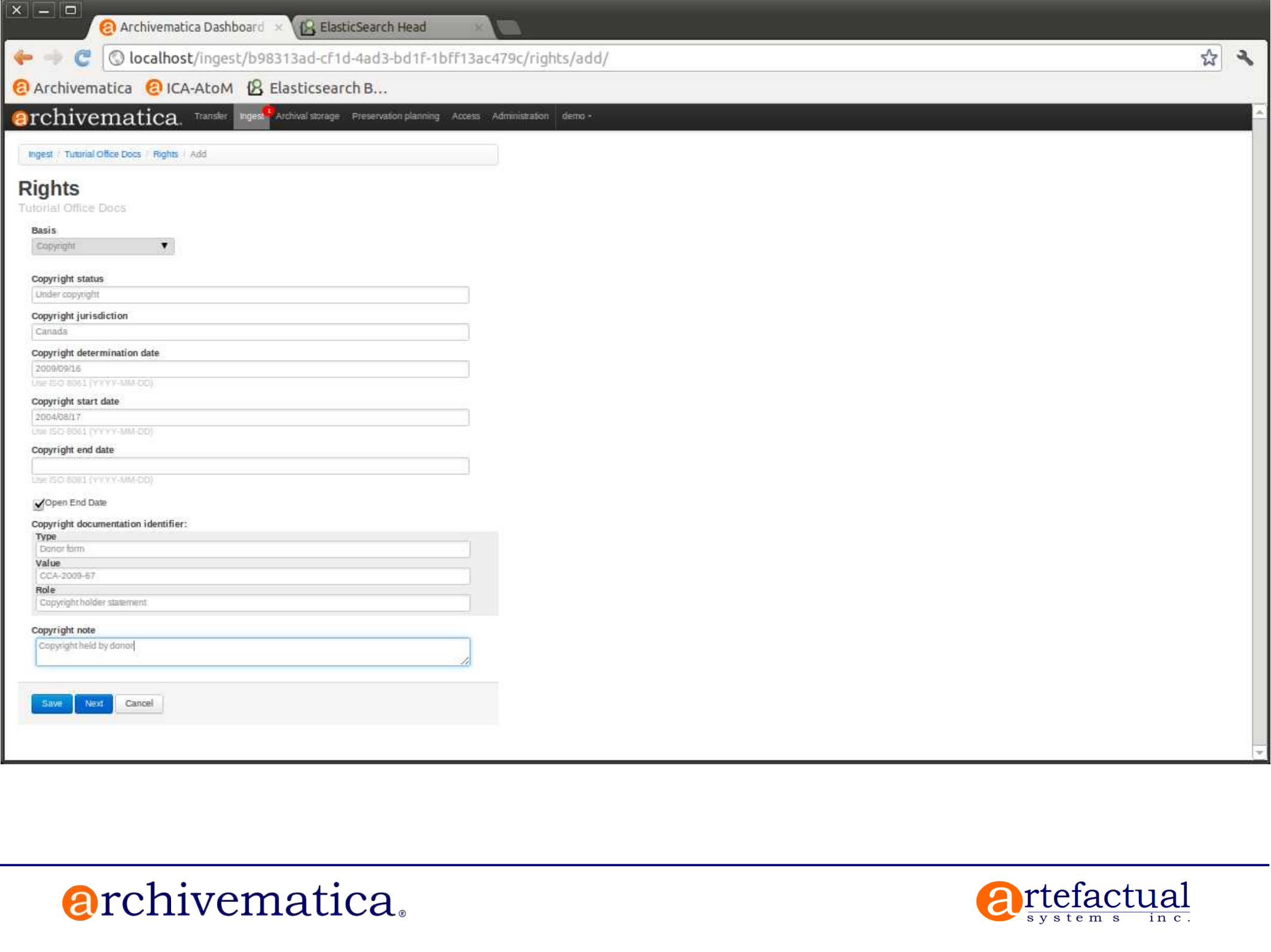
archivematica   Transfer   Ingest¹   Archival storage   Preservation planning   Access   Administration   demo ▾

Ingest / Tutorial Office Docs / Rights / Edit

Rights
Tutorial Office Docs

Act

Publish

Grant/restriction

Conditional   ▼

Start

2011/09/16

Use ISO 8061 (YYYY-MM-DD)

End

Use ISO 8061 (YYYY-MM-DD)

☐ Open End Date

Grant/restriction note

Permission to publish must be obtained from the copyright holder.

Act

Disseminate

Grant/restriction

Allow   ▼

Start

Use ISO 8061 (YYYY-MM-DD)

End

Use ISO 8061 (YYYY-MM-DD)

☐ Open End Date

Grant/restriction note

[Save] [Done] [Cancel]

```xml
-<premis>
  -<rights>
    -<rightsStatement>
      -<rightsStatementIdentifier>
          <rightsStatementIdentiferType>UUID</rightsStatementIdentiferType>
          <rightsStatementIdentifierValue>14cbad80-70nd-4f46-887f-
          k1gv7f9f30h6</rightsStatementIdentifierValue>
        </rightsStatementIdentifier>
        <rightsBasis>Copyright</rightsBasis>
      -<copyrightInformation>
          <copyrightStatus>Under copyright</copyrightStatus>
          <copyrightJurisdiction>ca</copyrightJurisdiction>
          <copyrightStatusDeterminationDate>2009-09-16</copyrightStatusDeterminationDate>
          <copyrightNote>Copyright held by donor</copyrightNote>
        -<copyrightDocumentationIdentifier>
            <copyrightDocumentationIdentifierType>Donor form</copyrightDocumentationIdentifierType>
            <copyrightDocumentationIdentifierValue>CCA-
            2009-67</copyrightDocumentationIdentifierValue>
            <copyrightDocumentationRole>Copyright holder statement</copyrightDocumentationRole>
          </copyrightDocumentationIdentifier>
        -<copyrightApplicableDates>
            <startDate>2004-08-17</startDate>
            <endDate/>
          </copyrightApplicableDates>
        </copyrightInformation>
      -<rightsGranted>
          <act>Publish</act>
          <restriction>Conditional</restriction>
        -<termOfRestriction>
            <startDate>2011-09-16</startDate>
            <endDate>open</endDate>
          </termOfRestriction>
        -<rightsGrantedNote>
            Permission to publish must be obtained from the copyright holder
          </rightsGrantedNote>
        </rightsGranted>
      -<linkingObjectIdentifier>
          <linkingObjectIdentifierType>UUID</linkingObjectIdentifierType>
          <linkingObjectIdentifierValue>52cbad80-70fd-4f46-887f-a1be7f9f30e0</linkingObjectIdentifierValue>
        </linkingObjectIdentifier>
      </rightsStatement>
    </rights>
  </premis>
```

```xml
-<premis>
 -<rights>
  -<rightsStatement>
   -<rightsStatementIdentifier>
      <rightsStatementIdentiferType>UUID</rightsStatementIdentiferType>
      <rightsStatementIdentifierValue>14cbad80-70nd-4f46-887f-
      k1gv7f9f30h6</rightsStatementIdentifierValue>
    </rightsStatementIdentifier>
    <rightsBasis>Statute</rightsBasis>
   -<statuteInformation>
      <statuteJurisdiction>British Columbia, Canada</statuteJurisdiction>
     -<statuteCitation>
        Freedom of Information and Protection of Privacy Act [RSBC 1996] Chapter 165
      </statuteCitation>
      <statuteInformationDeterminationDate>2004-06-06</statuteInformationDeterminationDate>
     -<statuteNote>
        Social insurance numbers, health information covered by personal privacy provisions
      </statuteNote>
     -<statuteDocumentationIdentifier>
        <statuteDocumentationIdentifierType/>
        <statuteDocumentationIdentifierValue/>
        <statuteDocumentationRole/>
      </statuteDocumentationIdentifier>
     -<statuteApplicableDates>
        <startDate>1996-01-01</startDate>
        <endDate>open</endDate>
      </statuteApplicableDates>
    </statuteInformation>
   -<rightsGranted>
      <act>Disseminate</act>
      <restriction>Conditional</restriction>
     -<termOfRestriction>
        <startDate>2011-09-19</startDate>
        <endDate>open</endDate>
      </termOfRestriction>
     -<rightsGrantedNote>
        Researcher must sign form CCA-12.56-1, Personal Data Research Agreement
      </rightsGrantedNote>
     -<rightsGrantedNote>
        Information can be published only in anonymized aggregate form
      </rightsGrantedNote>
    </rightsGranted>
   -<linkingObjectIdentifier>
```

```xml
-<premis>
  -<rights>
    -<rightsStatement>
      -<rightsStatementIdentifier>
         <rightsStatementIdentiferType/>
         <rightsStatementIdentifierValue/>
       </rightsStatementIdentifier>
       <rightsBasis>License</rightsBasis>
      -<licenseInformation>
        -<licenseDocumentationIdentifier>
           <licenseDocumentationIdentifierType>Accession form
             number</licenseDocumentationIdentifierType>
           <licenseDocumentationIdentifierValue>CCA-2011/29</licenseDocumentationIdentifierValue>
           <licenseDocumentationRole>Accession form</licenseDocumentationRole>
         </licenseDocumentationIdentifier>
        -<licenseTerms>
           This file is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license
         </licenseTerms>
         <licenseNote>Creative Commons box checked on accession form</licenseNote>
        -<licenseApplicableDates>
           <startDate>2011-09-19</startDate>
           <endDate>open</endDate>
         </licenseApplicableDates>
       </licenseInformation>
      -<rightsGranted>
         <act>Disseminate</act>
         <restriction>Allow</restriction>
        -<termOfGrant>
           <startDate>2011-09-16</startDate>
           <endDate>open</endDate>
         </termOfGrant>
         <rightsGrantedNote>Attribution required</rightsGrantedNote>
       </rightsGranted>
      -<linkingObjectIdentifier>
         <linkingObjectIdentifierType>UUID</linkingObjectIdentifierType>
         <linkingObjectIdentifierValue>52cbad80-70fd-4f46-887f-a1be7f9f30e0</linkingObjectIdentifierValue>
       </linkingObjectIdentifier>
      -<linkingAgentIdentifier>
         <linkingAgentIdentifierType/>
         <linkingAgentIdentifierValue/>
         <linkingAgentRole/>
       </linkingAgentIdentifier>
     </rightsStatement>
   </rights>
 </rights>
```

OTHER: Policy
Donor agreement

2011–12–01/5

Accession number

2011-12-01/5

Acquisition date *

2009-7-14

Source of acquisition *

Fonds was donated by Emily Wordsworth, former Special Collections Archivist at the University of Crawford, ca. 2009.

Location information *

Archives main storage, aisle 04, shelf B.

▷   Donor/Transferring body area

▷   Administrative area

▷   Rights area

Cancel   Save

Rights ✕

Act

Disseminate ▾

Restriction

Allow ▾

Start

2011-12-12

End

open

Rights holder

Chang, Madeline ○

Rights note(s)

Attribution required

Basis

Copyright ▾

Submit **Cancel**

File 13 – Job no. 580: Vancouver City Hall construction site

Identity area

Reference code	CA CVA Add. MSS. 1399-13-13
Title	Job no. 580: Vancouver City Hall construction site
Date(s)	01/02/36 (Creation)
Level of description	File
Extent and medium	1 photograph : silver gelatin print ; 7 x 12 cm

Context area

Name of creator	Townley, Matheson and Partners
Repository	City of Vancouver Archives

Rights area

Related right	**Act**
	Replicate
	Restriction
	Allow
	Start date
	2011-12-13
	Basis
	Copyright
	Copyright status
	Public domain
	Copyright status date
	2011-12-13
	Copyright jurisdiction
	Canada

Archival institution

City of Vancouver Archives

Creator(s)

Townley, Matheson and Partners

Fonds

Fonds Add. MSS. 1399 - Townley, Matheson and Pa....

Series 13 – Project photographs

File 632 - Famous Cloak and Suit Company, Ltd.

File 13 - Job no. 580: Vancouver City Hall cons....

Export

Dublin Core 1.1 XML

EAD 2002 XML