archivematica
open archival information system

Archivematica 0.7 user instructions

archivematica

| SIPs | AIPs | DIPs |

Submission Information Package	UUID	Ingest start time	
Media relations 2007	089c61f0-dca7-4f6f-a7b9-8d5a0cc3f389	2011-02-11 12:57	Micro-Services Remove
Micro-Service: Characterize and extract metadata		Executing command(s)	Tasks
Micro-Service: Scan for viruses		Completed successfully	Tasks
Micro-Service: Sanitize file and directory names		Completed successfully	Tasks
Micro-Service: Extract package		Completed successfully	Tasks
Micro-Service: Remove from quarantine [?]		Completed successfully	Tasks
Micro-Service: Place in quarantine		Completed successfully	Tasks
Micro-Service: Scan for removed files post appraise SIP for submission		Completed successfully	Tasks
Micro-Service: Appraise SIP for submission [?]		Completed successfully	Tasks
Micro-Service: Prepare For Appraise SIP For Submission		Completed successfully	Tasks
Micro-Service: Create DC		Completed successfully	Tasks
Micro-Service: Verify metadata directory checksums		Completed successfully	Tasks
Micro-Service: Assign file UUIDs and checksums		Completed successfully	Tasks
Micro-Service: Verify SIP compliance		Completed successfully	Tasks
Micro-Service: Create SIP backup		Completed successfully	Tasks
Public relations	eba2cd5d-2ffc-481d-8b26-c3291c3fa0d2	2011-02-11 12:55	
PlanningDept01	cffd05c9-948c-4c25-8fae-5e8b22b0c1f2	2011-02-11 10:26	
MultimediaSIP0208	869a400e-34b9-4d85-825d-16052d11ca52	2011-02-08 11:39	
ImagesSIP0208	0ed21d1d-9f01-44d1-ad71-1261bff19a36	2011-02-08 11:03	
Email-2	983d288c-a870-47d8-8ab0-b0faa98888fa	2011-02-08 10:46	

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1. Using the Archivematica dashboard

The Archivematica dashboard is the primary interface the archivist uses to manage the process of moving a SIP through ingest, packaging it as an AIP, moving the AIP into archival storage and uploading a DIP to the public access system.
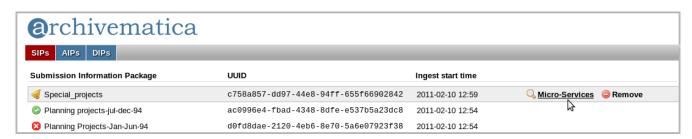
In the virtual machine version of Archivematica, the dashboard is located at http://localhost/sips. When opened, the dashboard looks something like this:
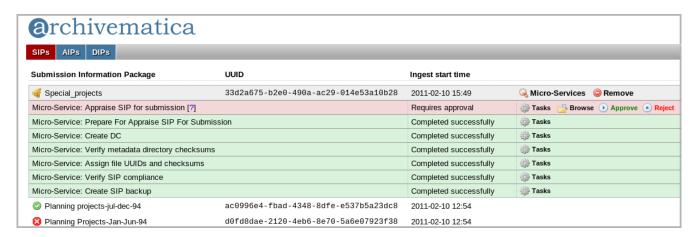

The dashboard lists SIPs in various stages of processing:
- ➢ The SIP with the bell icon (*Special_projects*) is waiting for the archivist to approve a micro-service
- ➢ The SIPs with checkmarks (eg *Planning projects-jul-dec-94*) have been fully processed from ingest to access
- ➢ The SIP with an x next to it (*Planning Projects-Jan-Jun-94*) has had a micro-service fail
- ➢ The SIP with the stop button (*Zoning hearings*) has had its processing terminated by the archivist

To view a SIP in more detail, hover the cursor over it. The SIP will be highlighted and two menus will appear: **Micro-Services** and **Remove**.

- ➢ Clicking **Remove** will remove the SIP from the dashboard (but not from the Archivematica

filesystem or from archival storage).

➢ Clicking **Micro-Services** will open up a list of micro-services completed or awaiting approval, as well as more menu options.

➢ Clicking **Tasks** will open a list of tasks completed as part of the micro-service; if all or part of the micro-service fails the list will include error messages. See Appendix 1, Normalization failures, for an example of when this might be used.

➢ Clicking **Browse** will open up the SIP contents in the browser. The user can view folders and files but cannot edit any content or delete objects or other files.

➢ Clicking **Approve** will move the SIP into the next stage of processing.

➢ Clicking **Reject** will stop processing and move the SIP into the *rejected* folder in the file browser.

➢ Hovering your cursor over the blue question mark next to the micro-service name will open a help text box explaining the current task.

➢ Clicking the **Micro-Services** menu again will close the list of micro-services.

2. Using the file browser

The dashboard is used in conjunction with the file browser. To start processing a SIP, the user moves the SIP into the folder *receiveSIP*; the SIP can be opened, viewed and modified at various processing stages; a micro-service failure will send the SIP to a specified folder (*failed* or *failedNormalization*); and rejecting the SIP in the dashboard will drop the SIP into the *rejected* folder.
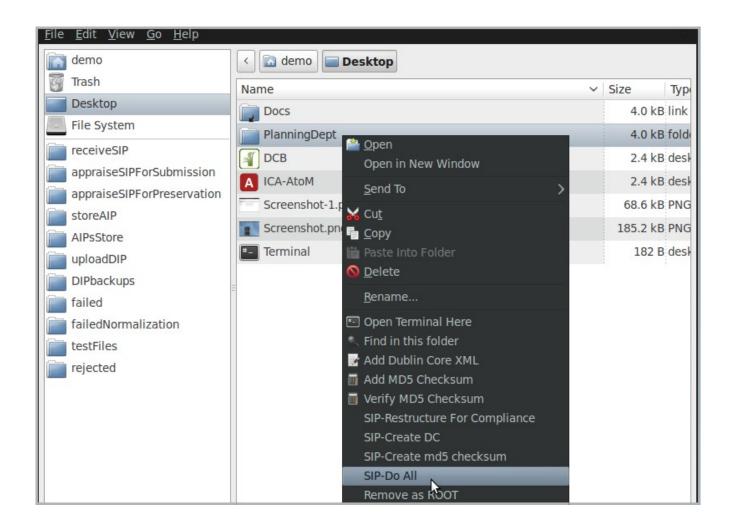
You will find it useful to keep the dashboard and the file browser open at the same time, preferably in side-by-side windows if your screen is wide enough.

3. Prepare SIP for ingest

Now that you have become familiarized with the Archivematica user interface, it is time to ingest a SIP.

3.1 In the file browser, navigate to a folder containing digital objects.
- ➢ The folder can reside anywhere so long as it is accessible via your file browser. If you are using the virtual machine version of Archivematica, you can find test SIPs in your *testFiles* folder.
- ➢ If you are ingesting any of the test SIPs in the *testFiles* folder (*ImagesSIP*, *MultimediaSIP* or *OfficeDocsSIP*), you don't need to complete step 3.2.
- ➢ If you are using the virtual machine version of Archivematica and would like to ingest SIPs from your host computer, see "Import files into virtual appliance (optional)" at http://www.archivematica.org/wiki/index.php?title=Virtual_appliance_instructions.

3.2 Format the folder for ingest by right-clicking on the folder and selecting "SIP - Do All". This will create a folder structure that is required by Archivematica and will add a checksum file and a blank Dublin Core metadata template. Note that only the folder structure is required for ingest into Archivematica; the checksum file and the Dublin Core template are optional.

The folder structure is as follows:
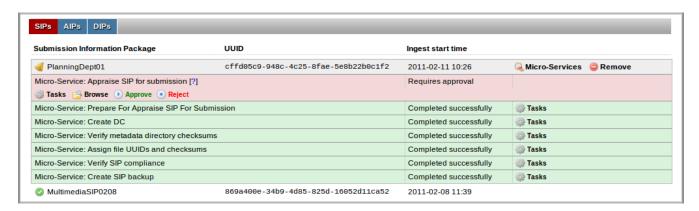
> logs
> logs/fileMeta
> metadata
> objects

➤ The *metadata* folder will contain the checksum file and the Dublin Core template.
➤ The *objects* folder will contain all the contents originally in the folder (i.e. the digital objects to be preserved).
➤ The *logs* folders will be empty until files are placed in them during processing.

4. Ingest the SIP

4.1 Place the SIP in *receiveSIP*. You can do this by cutting and pasting, copying and pasting, dragging and dropping the SIP or any other method of moving folders.

4.2 Rename the SIP (right-click the folder, then select "Rename.") The SIP will disappear from the folder a second or two after it is renamed.

5. Appraise SIP for submission

5.1 Once the SIP has been placed in *receiveSIP* and renamed, it will appear in the dashboard with a bell icon next to it, indicating that the archivist needs to approve further processing.

5.2 Hover your cursor over the SIP and click on **Micro-Services**. You will see that the following micro-services have been completed:

➢ Create SIP backup (creates a complete backup of the SIP and places it in the *SIPbackups* folder)
➢ Verify SIP compliance (checks for the required SIP folder structure described in section 3.2, above)
➢ Assign file UUIDs and checksums (assigns a unique identifier and generates a checksum for each file in the SIP)
➢ Verify metadata directory checksums (checks any checksum.md5 files that were placed in the *metadata* folder of the SIP).
➢ Create DC (creates a dublincore.xml file and places it in the *metadata* folder of the SIP, if there wasn't one there already).
➢ Prepare for Appraise SIP for Submission (changes file permissions on the SIP to allow the archivist to modify the SIP contents)

SIPs	AIPs	DIPs		
Submission Information Package	**UUID**		**Ingest start time**	
📁 PlanningDept01	cffd05c9-948c-4c25-8fae-5e8b22b0c1f2		2011-02-11 10:26	🔍 **Micro-Services** ⊖ **Remove**
Micro-Service: Appraise SIP for submission [?]			Requires approval	
⚙ **Tasks** 📂 **Browse** ▶ **Approve** ⦿ **Reject**				
Micro-Service: Prepare For Appraise SIP For Submission			Completed successfully	⚙ **Tasks**
Micro-Service: Create DC			Completed successfully	⚙ **Tasks**
Micro-Service: Verify metadata directory checksums			Completed successfully	⚙ **Tasks**
Micro-Service: Assign file UUIDs and checksums			Completed successfully	⚙ **Tasks**
Micro-Service: Verify SIP compliance			Completed successfully	⚙ **Tasks**
Micro-Service: Create SIP backup			Completed successfully	⚙ **Tasks**
✅ MultimediaSIP0208	869a400e-34b9-4d85-825d-16052d11ca52		2011-02-08 11:39	

5.3 You may wish to review the SIP at this point, for example to confirm that it conforms to any

submission agreements. In the file browser, open the folder *appraiseSIPForSubmission* and open the SIP. Delete any unwanted files or folders.
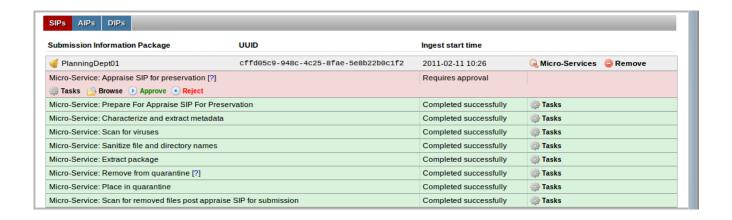
5.4. If desired, add information to the dublincore.xml file in the *metadata* directory of the SIP.

5.5. In the dashboard, click **Approve**.

6. Remove SIP from quarantine

After you have reviewed and approved the SIP for submission, the SIP is moved into quarantine for a pre-set period of time. In the virtual machine, this period is a demonstration period of one minute. You can either wait for the quarantine to expire, in which case the SIP will be moved automatically to the next micro-service, or you can click **Approve** to move it out of quarantine immediately.

7. Appraise SIP for preservation

7.1. After the SIP has been approved for submission and removed from quarantine, it appears again in the dashboard with a bell icon next to it.

7.2. You will see that the following micro-services have been completed since submission was approved:
  - Scan for removed files post appraise SIP for submission (checks to see if any files were deleted and creates a list of them at *logs*/*removedFilesAppraise SIPForSubmission.log*)
  - Place in quarantine
  - Remove from quarantine
  - Extract package (extracts objects from any zipped files or other packages)
  - Sanitize file and directory names (removes prohibited characters from file and folder names)
  - Scan for viruses
  - Characterize and extract metadata (format identification and validation; metadata extraction)
  - Prepare for appraise SIP for preservation (changes file permissions on the SIP to allow the archivist to modify the SIP contents)

SIPs	AIPs	DIPs			
Submission Information Package		**UUID**		**Ingest start time**	
🗁 PlanningDept01		cffd05c9-948c-4c25-8fae-5e8b22b0c1f2		2011-02-11 10:26	🔍 Micro-Services ⊖ Remove
Micro-Service: Appraise SIP for preservation [?]				Requires approval	
⚙ Tasks 📄 Browse ▶ Approve ⊗ Reject					
Micro-Service: Prepare For Appraise SIP For Preservation				Completed successfully	⚙ Tasks
Micro-Service: Characterize and extract metadata				Completed successfully	⚙ Tasks
Micro-Service: Scan for viruses				Completed successfully	⚙ Tasks
Micro-Service: Sanitize file and directory names				Completed successfully	⚙ Tasks
Micro-Service: Extract package				Completed successfully	⚙ Tasks
Micro-Service: Remove from quarantine [?]				Completed successfully	⚙ Tasks
Micro-Service: Place in quarantine				Completed successfully	⚙ Tasks
Micro-Service: Scan for removed files post appraise SIP for submission				Completed successfully	⚙ Tasks

7.3. You may wish to review the SIP again at this point and delete any more files that shouldn't be preserved. In the file directory, navigate to *appraiseSIPForPreservation* and open the SIP. Any zipped or otherwise packaged files should be deleted, because their contents have been extracted and placed in the SIP.

➢ Note that in future, appraisal decisions at this point will be assisted by a summary of technical information about the files (format, validation status, characteristics such as compression etc.).

7.4. In the dashboard, click **Approve**.

8. Store AIP and upload DIP

8.1 After the SIP has been appraised for preservation, it continues to move through micro-services until it reaches two further approval steps: Upload DIP and Store AIP. The SIP will again appear with a bell icon next to it when these micro-services are ready for approval.

8.2. You will see that the following micro-services have been completed:
➢ Scan for removed files post appraise SIP for preservation (checks to see if any files were deleted and creates a list of them at *logs/removedFilesAppraise SIPForPreservation.log*)
➢ Create DIP directory (creates a directory for access copies)
➢ Normalize (creates preservation master copies and access copies of the files)[*]
➢ Compile METS (generates the METS file which contains all the preservation metadata for the AIP)
➢ Add DC to METS (adds the *dublincore.xml* file to the METS file)
➢ Copy METS to DIP Directory
➢ Generate DIP (takes the DIP directory out of the AIP and places it in *uploadDIP*)
➢ Prepare for Appraise DIP for Upload (changes file permissions on the DIP to allow the archivist to modify the DIP contents)
➢ Create AIP checksum

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* If normalization fails, see Appendix 1 for instructions.

➢ Prepare AIP (packages the AIP in accordance with the Library of Congress Bagit specification)

SIPs	AIPs	DIPs			
Submission Information Package		**UUID**		**Ingest start time**	
📧 PlanningDept01		cffd05c9-948c-4c25-8fae-5e8b22b0c1f2		2011-02-11 10:26	🔍 Micro-Services ⊖ Remove
Micro-Service: Store AIP [?]				Requires approval	
⚙ Tasks 📄 Browse ▶ Approve ■ Reject					
Micro-Service: Prepare AIP				Completed successfully	⚙ Tasks
Micro-Service: Upload DIP [?]				Requires approval	
⚙ Tasks 📄 Browse ▶ Approve ■ Reject					
Micro-Service: Create AIP checksum				Completed successfully	⚙ Tasks
Micro-Service: Prepare For Appraise DIP For Upload				Completed successfully	⚙ Tasks
Micro-Service: Generate DIP				Completed successfully	⚙ Tasks
Micro-Service: Copy METS to DIP directory				Completed successfully	⚙ Tasks
Micro-Service: Add DC to METS				Completed successfully	⚙ Tasks
Micro-Service: Compile METS				Completed successfully	⚙ Tasks
Micro-Service: Normalize				Completed successfully	⚙ Tasks
Micro-Service: Create DIP directory				Completed successfully	⚙ Tasks
Micro-Service: Scan for removed files post appraise SIP for preservation				Completed successfully	⚙ Tasks

8.3. You can review the AIP's contents at this time but you can't make any changes. To review the AIP, click **Browse** in the dashboard or open the AIP in the file browser (*storeAIP*).

8.4. In Store AIP in the dashboard, click **Approve** to move the AIP into archival storage. The AIP will be moved into the folder *AIPsStore* in the file browser. Depending on how you have set up your Archivematica installation, *AIPsStore* can connect to your institution's network drive and your storage systems.

8.5. You can review the DIP and delete any files you don't wish to upload into your access system. In the file directory, go to *uploadDIP* and open the DIP. Delete files as desired.

8.6. In Upload DIP in the dashboard, click **Approve**. This uploads the DIP to the access system. A backup copy of the DIP, including the deleted files, will appear in *DIPbackups*, and will include a list of the files that were uploaded.

9. View access copies in ICA-AtoM

9.1. Open http://localhost/ica-atom.

9.2. Log in using the email demo@example.com and the password demo.

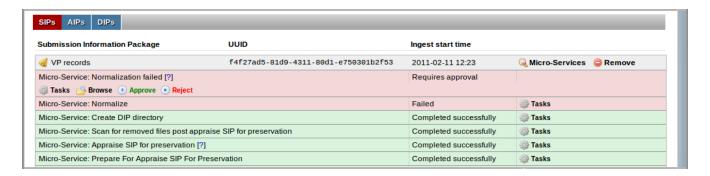9.3. Click on archival descriptions (under the search box) and click on the top description in the list.

For more information on how to use ICA-Atom, see the ICA-AtoM user manual at http://ica-atom.org/doc/User_manual.

10. Exit Archivematica

10.1. Methods for closing Archivematica will vary according to how you have installed the system. If you are using the virtual machine version, see http://www.archivematica.org/wiki/index.php?title=Virtual_appliance_instructions for instructions on shutting down the virtual machine.
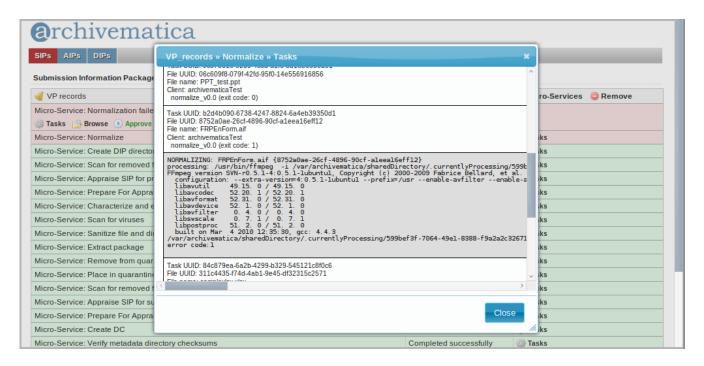
Appendix 1: Normalization failures

Archivematica attempts to create preservation and access copies of all ingested digital objects. If normalization fails, the SIP will appear in the dashboard with a bell icon next to it and "Failed" next to the Normalize micro-service. Note that Archivematica does not attempt to normalize any objects for which there is no default normalization path.

You can click on the **Tasks** menu in the Normalize micro-service to find out which file(s) failed normalization. Be sure to click **Tasks** in Micro-Service: Normalize, not Micro-Service: Normalization failed.

The error message in grey appears right below the file that failed.

At this point you can either reject the SIP or approve it. If you reject it, the SIP will be placed in the

rejected folder and all processing of the SIP is stopped. If you approve it, it will continue processing despite the fact that no preservation and/or access copies have been generated for the failed file(s).

Note that future versions of Archivematica will allow for more options to deal with normalization failures, such as deleting the files, attempting normalization with different tools, or segregating the failed files within the SIP.