



Archivematica Camp York 2017

Hands-on exercises

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Task #1 - Start a Standard Transfer

Description:

In order to get your files into Archivematica for processing, you need to start by creating a Transfer. A Transfer is any set of one or more files that you decide to process as a group. They can come from any storage system that Archivematica has been hooked up to. Not all the files in a Transfer have to be included in AIPs.

Archivematica has a few different transfer types - these are used to describe files that are organized in a particular way in advance. The transfer types supported are:

- Zipped or Unzipped bag - content in the Library of Congress Bag format
- DSpace - DSpace AIPs, exported from DSpace in zip format
- Disk Image - e.g., ISO, AFF and other disk image formats
- Standard Transfer - any other content that is placed in a directory (with or without subdirectories)

We will start by creating a Standard Transfer using the Images folder.

Tasks:

1. Log into your Archivematica vm.
2. Go to the Transfer tab.
3. Make sure 'Standard' is selected from the transfer type box.
4. Type in a name for your transfer (anything you like).
5. Click the 'Browse' button to look through the available content.
6. Find the Images folder (Archivematica-sampled data > SampleTransfers > Images) and select it, then click the 'Add' button. Note: to close the box showing the transfer directories, click the 'Browse' button again.
7. Click 'Start Transfer'.
8. A new Transfer should be created, and it will stop at the first microservice, waiting on user input. In this first step, you are being asked to approve the transfer you just started.
9. Choose 'Approve transfer' from the Actions drop-down list.

Task #2 - Make an AIP

Description:

After having accepted the transfer in task #1, you will see a series of microservices appear in the Transfer tab. The processing will stop occasionally, waiting for user input. Some of the inputs are specified below.

Tasks:

1. When you get to 'Select file format identification command' select either Fido or Siegfried.
2. When you get to the 'Create SIP(s)' question, choose 'Create single SIP and continue processing'.
3. Go to the Ingest tab. You will see more microservices being completed there.
4. When the dashboard shows the 'Normalize' step, choose 'Normalize for preservation'.
5. When the dashboard shows the 'Approve normalization' step, take a look at the normalization report by clicking the report icon next to the Actions drop-down box. Was normalization successful? Why are there red boxes in the 'Already in access format' column?
6. Close the report and select 'Approve' in the Actions drop-down box.
7. When the dashboard shows 'Select file format identification command' select any of the options.
8. Finish processing the SIP and store the AIP. Note that at the 'Store AIP location' your only option is 'Store AIP in standard Archivematica directory'. This is because the Archivematica test

instance you are using hasn't been connected to any external storage options (such as LOCKSS or DuraCloud). Go ahead and select 'Store AIP in standard Archivematica directory'.

Task #3 - Review your first AIP

Description:

The primary function of Archivematica is to produce Archival Information Packages. In this task, we will explore the structure of an Archivematica AIP.

Task:

1. Once your AIP from Task #2 has been stored, go to the Archival Storage Tab. You should see your AIP listed.
2. Click on the name of your AIP to open up the Archival Information Package page.
3. Click the 'View' button for the pointer file and open up the xml file in your web browser. What is the purpose of this file? What does it tell you about the AIP?
4. Download the AIP and extract its contents. You will need to have 7zip installed on your computer or another program capable of opening 7zip files.
5. Once you have the AIP extracted, drill down until you find the METS file.
6. Open the METS file in a web browser or text editor.
 - a. Can you determine from the METS file how many digital objects there are in this AIP? (Hint: look for *mets:fileSec* near the bottom of the file).
 - b. How are the roles and relationships of the AIP objects described?
 - c. Look for the PREMIS metadata for an original ingested file. How do those metadata describe the preservation actions taken on the file? (Hint: look for terms like *ingestion* and *message digest calculation*).

Task #4 - Send Transfer to Backlog

Description:

Now we are going to create another Transfer, but this time, we are not going to complete the process of turning it into an AIP. We will send it to the Transfer Backlog. This is a special storage location, designed to allow partially processed material to be stored for an indefinite period of time. This allows the user to make decisions later about what content to retain, and, if desired, to arrange content into SIPs from multiple Transfers.

Tasks:

1. Go to the Transfer Tab and create another Transfer. This time, select the SampleTransfers -> OfficeDocs folder.
2. When you get to the 'Create SIP(s)' question, choose the 'send to backlog' option.
3. Go to Task #5.

Task #5 - Arrange Backlogged Transfer into Multiple SIPs

Tasks:

1. Go to the Appraisal tab and click the 'Search transfer backlog' button. You should see the Transfer you sent to backlog appear on the left, in the Backlog panel
2. Click on 'Arrangement' then 'Add directory'. Add two or more directories to the Arrangement panel.
3. Open your Transfer by clicking on the folder item to the left of the title, and open the 'objects' directory.
4. Drag and drop folders and files from your Transfer to your directories in the Arrangement panel.
5. Once you have decided on the arrangement of the files you want, click on a directory in the Arrangement panel and then click 'Create SIP'. This will move the content out of the Transfer it came from and add a new SIP ready for processing in the Ingest Tab. Go to Task #6.

Task #6 - Add Descriptive Metadata

1. Go to the Ingest tab and find one of the SIPs created in task #5. Click on the metadata icon (the little report with the pencil).
2. Under 'Metadata', select 'Add'. Fill in some of the fields, then click the 'Create' button at the bottom of the screen.
3. Return to the Ingest tab and at the 'Approve SIP creation' step select 'SIP creation complete'. Continue processing the SIP.
4. When the dashboard shows the 'Normalize' step, choose 'Do not normalize'.
5. At the 'Store AIP' step, click 'review' instead of selecting an option in the Actions drop-down menu.
6. Find your AIP in the Review AIP page and navigate to the METS file. Open the METS file in your browser to view the descriptive metadata. Return to the Ingest tab, finish processing the AIP and place it in archival storage.

Task #7 - Re-ingest an AIP

Description:

Archivematica allows the user to re-ingest stored AIPs in order to update metadata or run new preservation micro-services. In this exercise, you will be re-ingesting an AIP in order to update its descriptive metadata and add rights information.

Tasks:

1. Go to the Archival storage tab and click on the AIP with descriptive metadata created in Task #6.
2. In the AIP view page, under 'Actions' open the Re-ingest tab.
3. Select metadata re-ingest and click on the Re-ingest button.
4. Go to Ingest tab and approve AIP re-ingest.
5. When the dashboard shows the 'Normalize' step, click on the metadata icon.

6. Under the Metadata heading, click 'List'.
7. Edit and save the metadata, then return to the Ingest tab, finish processing (note: do not normalize and skip identifying submission documentation formats) and place the AIP in archival storage.
8. Go to the Archival storage tab, download and open the AIP and view the METS file. How have the metadata updates been captured in the METS file? Have any changes been made to PREMIS Events?
9. Explore more re-ingest options: for instructions, go to <https://www.archivematica.org/en/docs/archivematica-1.6/user-manual/ingest/ingest/#reingest>.

Task #8 - Automate Workflow through Configuration

Description:

Once you have gone through the Archivematica workflow, there are questions that you may want to preconfigure the answers for, so you don't have to answer the same thing each time. This can be done in the Processing Configuration screen.

Task:

1. Go to the Administration tab. You should see a single processing configuration listed, called 'default'. In Archivematica 1.6 you can create multiple configurations and give them each a different name. However, these new configurations can only be selected upon AIP re-ingest. For this task, edit the default configuration.
2. Review the different options, and select as many defaults as you would like. For information about the various options, see <https://www.archivematica.org/en/docs/archivematica-1.6/user-manual/administer/dashboard-admin/#dashboard-processing>.
3. Click the 'Save' button at the bottom of the screen.
4. Try a transfer with the saved settings. Experiment with different settings and transfers.

Task #9 - Examine Microservice Failures

Description:

Sometimes in digital preservation, things go wrong. Archivematica attempts to protect the user from as much of the guts of the digital preservation process as possible, while still providing a way to peer under the hood when required.

In this task we will look at a specific errors during a microservice.

Tasks:

1. In the Transfer tab, browse to TestTransfers and select the fixityCheckShouldFail folder. Add the folder and start the transfer process.
2. The microservice 'Verify transfer checksums' will fail. Click on the failed microservice (it will be highlighted in pink). This will show 'Job: Verify metadata directory checksums'. Click on the gear icon on the right-hand side. What does this tell you?

3. Go to the Administration tab and click on 'Failures' on the left-hand side. Open the report to view a summary of the successfully completed microservices and the failure.
4. Now investigate a different type of failure by processing the SampleTransfers > Multimedia transfer. At the Identify file format microservice, select Siegfried. How is this error different from the fixity check failure?
5. For more information on error reporting and handling, see <https://www.archivematica.org/en/docs/archivematica-1.6/getting-started/troubleshooting/error-handling/>.