Upload DIPs to AtoM

Last updated: August 12, 2025

In the standard Archivematica workflow, you create and store preservation copies (AIPs) and access copies (DIPs). When Archivematica sends the DIPs to AtoM, it creates a new AtoM description record for each digital object, registering it as an item to an existing parent description (e.g. file, series, fonds).

There are two main examples where this process does not work well:

1. **Digitization** of previously described analog materials that have existing AtoM descriptions and digital copies are ready for upload to AtoM.

2. **Access / copyright review** of materials previously ingested to Archivematica and described in AtoM and now cleared for online dissemination (no access or copyright restrictions).

In these cases, the standard Archivematica workflow would create an unnecessary "sub-item" to an existing item; whereas we want to just upload the DIP directly to the existing description itself.

To handle these cases, there are four main steps to the workflow:

1. Download the stored DIP.
2. Create / edit a csv file to map DIP objects to AtoM descriptions.
3. Copy DIP objects + csv mapping file to the AtoM server.
4. Run the upload command on the AtoM server.

There is no Archivematica / AtoM interface to support the process; it must be run via command line using AtoM's Digital object load task.

- The workflow described here replaces (as of May 2025) the Archives' previous reliance on a set of customized scripts.
- See the DIP-munger scripts page for documentation of those scripts and the rationale for their retirement.
- For Artefactual documentation, see the Digital object load task section of the AtoM User Manual > Import and export from the command line.

1. Download the stored DIP

This step assumes that an archivist previously ingested the materials into Archivematica and created and stored both AIP and DIP versions.

Use the AIS Accession record to find the AIP's UUID; copy it to your clipboard.

- In some cases, the UUID may be included in the AtoM description (e.g. in the *Availability of other formats* note field).

Use Archivematica's Storage Service to retrieve the DIP.

- Log on to Storage Service ([redacted]); you will need your SFU MFA credentials to access the site.
- On the **Packages** tab, paste the AIP UUID in the **Search** box and hit enter.
- Click the **Download** link for the DIP copy (NOT the AIP).
- Storage Service will save the DIP to your local **Downloads** folder.

2. Create / edit csv mapping file

On your desktop, create a project folder for the DIP objects + csv file.

- You can call this folder whatever you like and store it anywhere on your computer.
- In the examples that follow, this folder will be called **dip-upload** and stored on your desktop.

Go to the DIP you downloaded in step 1 above.

- It contains a folder called **objects**.
- Move this folder to your project folder.
- If you do not want to upload all the DIP objects, delete any you do not want to include.

Create a csv file in project folder.

- The csv file must have 2 columns in this order: **slug**, **filename**.
- You can call this file whatever you like; in the examples that follow, it will be called **mapping.csv**.

In the Mac Finder, select and copy (⌘ + c) all the files in the **objects** folder (copies file names to your clipboard).

- Paste (⌘ + v) the file names into the **filename** column.
- Enter the AtoM URL slugs in the **slug** column.

The slug is the last part of an URL in AtoM that uniquely identifies the resource.

- In SFU AtoM, the slug is typically the reference code (with a small f).
- E.g. the url for the Greg Evans fonds is [redacted]/f-316; the slug is **f-316**.
- You may be able to tell or extract the reference code from the file name.
- See the page on OpenRefine for tips on using this app to extract reference codes from file names.

If you used Excel to create the csv file, you will need to change the default settings for character encoding and end-of-line character.

- Open the csv file with BBEdit.

- In the bottom ribbon, set character encoding to “UTF-8 (Unicode)” and the end-of-line to “Unix (LF)” and save the document.

3. Copy DIP objects + csv file to the AtoM server

You need to copy the project folder (DIP objects + csv file) to the Archives' AtoM production server (**cottonwood**).

- The destination folder on cottonwood is: [redacted]
- As of June 2025, there is an NFS mount on the Archives' bastion host ([redacted]) to the deposit folder at [redacted].

Copy the project folder to the bastion host using the following command in Terminal:

```
scp -P 3222 -r -p /path/to/the/project/folder/ <account>@[redacted]/.
```

- You will be prompted for your SFU credentials and MFA code.

Explanations:

- scp = secure copy.
- -P = port 3222.
- -r = recursive, i.e. get contents of any sub-folders.
- -p = preserve timestamps.
- /path/to/the/project/folder/ = full file path; you can get this by dragging the project folder into Terminal after typing -p .
- <account> = your SFU computing account name.

4. Run the upload command on the AtoM server

Log on to the AtoM production server (cottonwood) via the bastion host:

```
ssh <account>@w[redacted] -p 3222
ssh <account>@[redacted]
```

You will be prompted for your SFU credentials (but no MFA code).

On cottonwood, switch to the “superuser” account:

```
sudo -i
```

- You will be prompted for your SFU credentials.

On cottonwood, navigate to the AtoM root directory:

```
cd [redacted]
```

Run the symfony command to upload the DIP objects to AtoM:

```
php symfony digitalobject:load --path="[redacted]<<dip-folder-name>>/objects/"
[redacted]/mapping.csv
```

Explanations:

- **php symfony** = php is a scripting language; symfony is a php framework or set of php packages.
- **digitalobject:load** = the command that will be executed.
- --**path** = the path to the DIP objects in your project folder on [redacted] = "[redacted]/<<dip-folder-name>>/objects/" – allows the script to parse the full file path of the digital objects you are uploading based on values in the **filename** column in the csv file.
- [redacted]**<<dip-folder-name>>/mapping.csv** = the path to your csv file in the project folder.

Hit enter to run the command.

- AtoM will use the **mapping.csv** file to map and upload your digital objects (via **filename**) to their AtoM descriptions (via **slug**).

On completion:

- DIP objects should appear in AtoM at their descriptions.
- You should re-index the fonds; for instructions, see the Re-index AtoM page.
- Make sure you exit out of superuser (sudo) mode, cottonwood and the bastion host.

5. Re-index parent series

On completion, you need to re-index the description.

- Best to re-index entire immediate parent series (or sub- or sub-sub-series).

Staying within the same directory ([redacted]), run the following command:

```
php symfony search:populate --slug="f-x"
```

For full instruction on re-indexing AtoM, see: Re-index AtoM.

6. Clear directory

Delete the uploaded DIP from the temporary location on the cottonwood server.

```
cd [redacted]
```

Run the list command to confirm you are in the right location

```
lst
```

The command should return the name of the DIP folder you uploaded in Step 3 above.

Run the remove command.

```
rm <folder-name> -r -f
```

Flags:

- -rm = remove command
- -r = recursive flag: include all sub-folders and files.
- -f = force: so you do not have to confirm each deletion by entering y ("yes") repeatedly.

Exit out of superuser (sudo) mode, then out of cottonwood and the bastion host.