

1. Quick Guide to Publishing a Digital Collection

This document provides an overview of the University of Illinois at Urbana-Champaign Library's process for proposing and executing projects to digitize locally held special collections materials and publish them in the [Digital Collections](#).

1. **PLANNING** (2-3 weeks)
 - a. **Curator** proposes digitization project using [online form](#). **Digital Collections Project Manager** receives form and assesses feasibility of project with **Curator** and staff in **Conservation** and **Metadata Services**. Once approved, stakeholders schedule when their staff will be available to do the work necessary to complete the project.
2. **METADATA** (varies based on number of items, at least 1-4 weeks)
 - a. **Curator** selects or develops a Metadata Profile for collection with **Metadata Specialist**.
 - b. **Curator** authors collection-level metadata in Medusa digital preservation repository.
 - c. **Curator** prepares spreadsheet of object-level metadata for items to be digitized.
3. **CONSERVATION** (varies based on Conservation lab commitments and condition of materials)
 - a. Depending on the condition of materials, conservation work may be necessary to prepare them for digitization.
4. **DIGITIZATION** (varies based on Digitization lab commitments and number of items, typically weeks to months)
 - a. **Curator** provides inventory spreadsheet and items to be digitized to **Digitization Services**.
 - b. **Digitization Services** completes digitization, packages files, and deposits them in Medusa. **Metadata Specialist** ingests descriptive metadata into the Digital Library System.
5. **REVIEW** (varies based on number of items and quality of metadata, typically 1-3 weeks)
 - a. **Metadata Specialist** and **Curator** review collection and correct errors in metadata and display as needed.
6. **PUBLISH** (1 day)
 - a. **Metadata Specialist** makes collection public in the [University of Illinois Library Digital Collections](#).

For an expanded view of this document, with a deep dive into the technical side of getting things done in the digital library, see the full *Managing Digital Collections: A Guide to Local Practice* manual.

Managing Digital Collections: A Guide to Local Practice

edited by Kyle Rimkus with contributions from Bethany Anderson, Jesus Espinosa, Bridgette Hammond, Tom Habing, Bill Ingram, Patricia Lampron, Elizabeth Lippoldt, Joshua Lynch, Tracy Popp, Christopher Prom, Kyle Rimkus, Madison Sullivan, Angela Waarala, Kristina Williams, Sarah Yarrito, and Christine Willson

last edited: November 11, 2021

| | |
|---|-----------|
| 1. Quick Guide to Publishing a Digital Collection | 1 |
| 2. Digital Collections Management Staff and Services | 4 |
| 3. Overview of Services | 5 |
| 3.1. Medusa | 5 |
| 3.2. Digital Collections | 5 |
| 3.3. Technical Architecture | 6 |
| 4. Medusa FAQ | 8 |
| 5. Using Medusa | 11 |
| 5.1. Access Permissions | 11 |
| 5.2. Accessing Files in Medusa | 11 |
| 5.3. Add a New Collection | 14 |
| 5.4. Deposit Content to a Collection | 18 |
| 5.4.1. Create a File Group | 19 |
| 5.5. Considerations for Archival Units | 21 |
| 5.5.1. Relate a Medusa Collection Record to an Archon Collection Record | 21 |
| 5.5.2. University Archives File Package for Electronic Records | 21 |
| 6. Using the Digital Library | 23 |
| 6.1. Structured, Free-form, and External collections | 23 |
| 6.1.1. Packaging for Structured Collections | 23 |
| 6.1.1.1. Single-item Object | 23 |
| 6.1.1.2. Compound Object | 24 |
| 6.1.1.3. Mixed Media | 26 |
| 6.1.2. Packaging for Free-form Collections | 26 |
| 6.1.3. Medusa Metadata versus Digital Library System Metadata | 27 |
| 6.1.4. Index Medusa Collections Metadata in the Digital Library System | 27 |
| 6.2. Common Problems and their Solutions | 28 |
| 6.2.1. Change the Package Profile of a Collection | 28 |

| | |
|--|-----------|
| 7. The Recommended Project Workflow | 30 |
| 7.1. Planning | 31 |
| 7.2. Metadata | 31 |
| 7.2.1. Select or Create Metadata Profile | 31 |
| 7.2.2. Edit Collection-level Metadata | 33 |
| 7.2.3. Create Object-level Metadata | 33 |
| 7.3. Conservation | 36 |
| 7.4. Digitization | 36 |
| 7.5. Review | 36 |
| 7.5.1. Import Digitized Items into Digital Library | 36 |
| 7.5.2. Edit Existing Metadata | 41 |
| 7.5.2.1. Edit Metadata in Web Interface | 41 |
| 7.5.2.2. Edit Metadata in a Spreadsheet | 44 |
| 7.6. Publish | 46 |
| 8. Medusa Back-end Management | 49 |
| 8.1. Ingest Files into Medusa | 49 |
| 8.2. Ingest Request Management Overview | 49 |
| 8.2.1. University Archives | 49 |
| 8.2.2. DS (Digitization Services) | 50 |
| 8.2.3. Conservation | 50 |
| 8.2.4. Media Preservation Services | 50 |
| 8.2.5. Sousa Archives and Center For American Music | 50 |
| 8.2.6. Newspapers | 51 |
| 8.2.7. Rare Book and Manuscript Library | 51 |
| 8.2.8. Other | 51 |
| 8.3. Ingest Content | 51 |
| 8.4. Add Events | 53 |
| 8.5. Approve Ingests | 54 |
| 8.5.1. Medusa Notification Emails | 55 |
| 8.6. Add items to Digitization Queue as a Medusa Project | 56 |
| 8.7. Delete Content from Medusa | 61 |
| 8.8. Delete Individual Files or Folders from a File Group | 62 |
| 8.9. Restructure Content in Medusa Storage | 62 |
| 8.9.1. To edit content on Medusa Production\Primary Storage: | 62 |
| 8.9.2. Once the content has been corrected: | 63 |
| 8.9.3. Once you delete the files/folders: | 63 |
| 8.10. Notes on Deleting or Moving/rename/restructuring Files and Folders | 64 |
| 8.11. Useful Tools | 64 |

2. Digital Collections Management Staff and Services

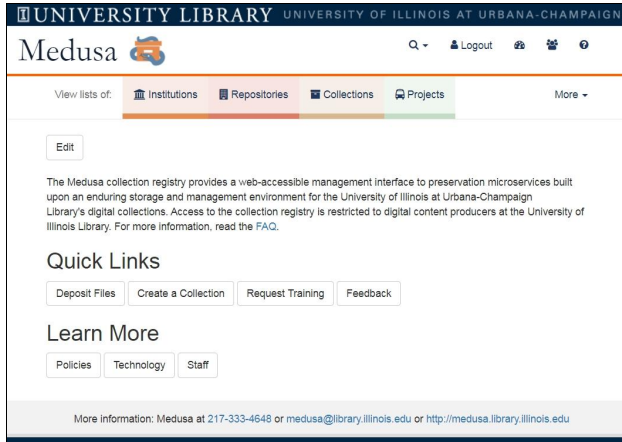
Responsibility for digital collections services, understood in this document to comprise activities related to the [Medusa](#) preservation repository and the [Digital Collections](#) access service for locally managed digital content, is distributed across a number of departmental units and committees in the library. Chief among these are:

- Content Access Policy and Technology [committee](#) and its Digital Production work group; Repositories, Preservation, and Access work group; and Cataloging and Metadata work group.
- Preservation Services [unit](#), where the library has consolidated oversight for the majority of its digital reformatting and digital preservation efforts.
- Acquisition and Cataloging Services [unit](#), which manages descriptive metadata on digital projects.
- A variety of people contribute work on digital projects, but the staff roles most frequently referenced in this manual are:
 - **Digital Collections Project Manager**, who plans and manages digitization projects.
 - **Metadata Librarian**, who coordinates metadata effort on digital projects.
 - **Digital Preservation Coordinator**, who manages Medusa digital preservation repository services.
 - **Digital Library Technical Coordinator**, who supports workflows to ensure files are properly packaged for deposit into their target preservation and access systems.
 - **Curator**: In this document, the word curator is used as a generic term to designate a collection manager, for example an archivist or special collections librarian, who serves as the primary point of contact for a collecting unit. We recommend that each special collections unit or departmental library with interest in digitization and digital preservation designate a curator to serve as a liaison to the digital projects team.
 - **User Council**. Software development priorities are guided in part by the **Medusa/Digital Library User Council**, consisting of stakeholders from the special collections.

If you have questions, problems, or suggestions about our digital collections services, send an email to digitalcollections@lists.illinois.edu and someone will contact you. Messages to this email address are monitored by all staff who work in the provision of digital collections services.

3. Overview of Services

This document makes frequent reference to Medusa and its Digital Collections service.



3.1. Medusa

Medusa is the library's digital preservation repository and collection registry. Access to the collection registry is restricted to digital content producers at the University of Illinois Library. The library manages Medusa storage in Amazon Web Services.

- Live production site: <https://medusa.library.illinois.edu/>
- Test site (accessible only to library staff): <https://demo.medusa.library.illinois.edu/>

3.2. Digital Collections

The digital collections of the University of Illinois at Urbana-Champaign Library provide web access to many of the Library's signature holdings for students, scholars, and the general public. They include digitized books, photographs, newspapers, maps, and other research materials.

The digital collections site features collections powered by a Digital Library System built on top of Medusa services, as well as links out to collections that live in external systems. This clearinghouse of our locally managed digital collections is available at <https://digital.library.illinois.edu/collections>.



- Live production site: <https://digital.library.illinois.edu/>
- Test site (accessible only to library staff): <https://demo.digital.library.illinois.edu/>

3.3. Metadata Gateway

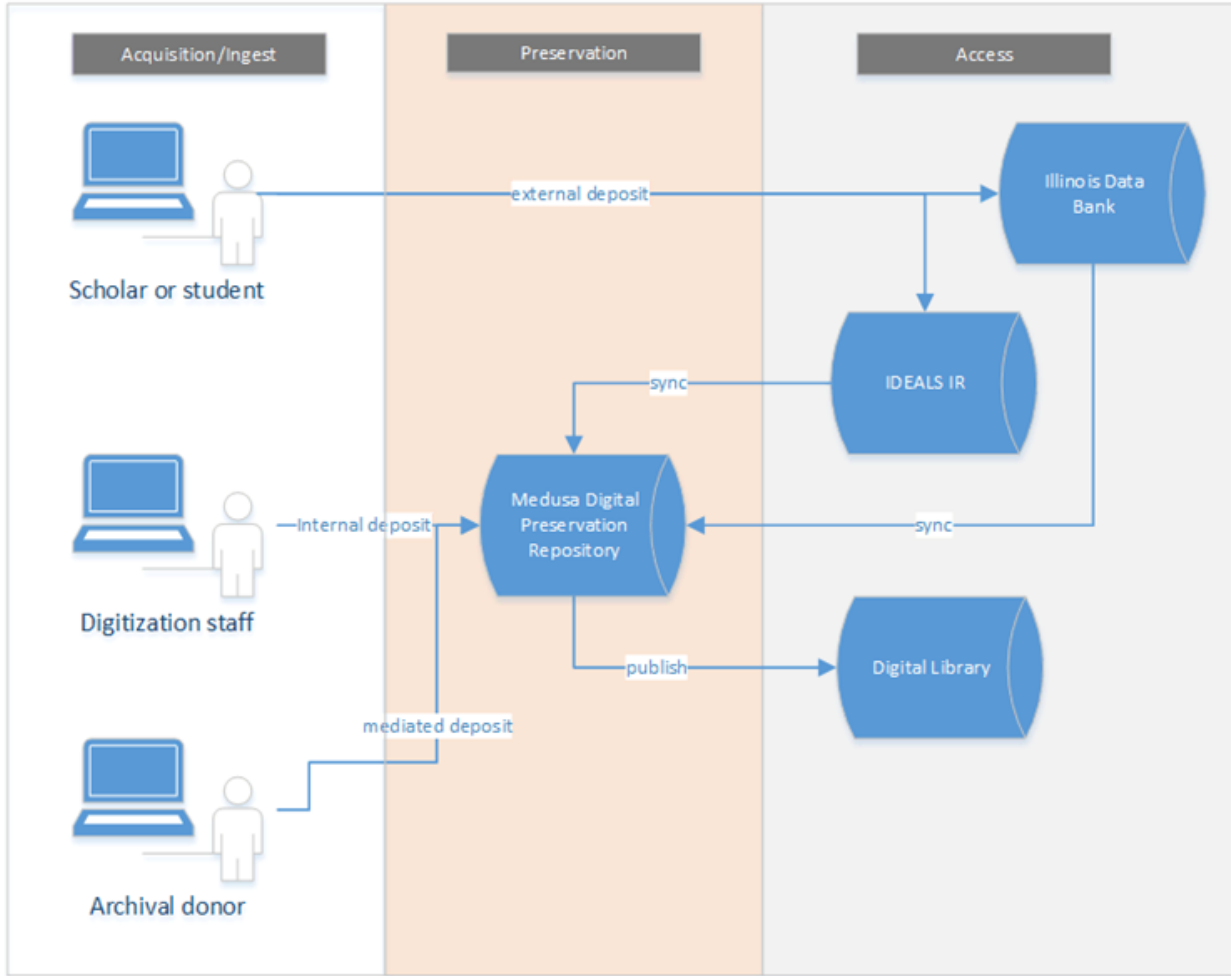
The home page for our Digital Collections is powered by a Metadata Gateway that locally indexes and searches across our Digital Special Collections, IDEALS institutional repository, Digitized Books, Illinois Data Bank, and Illinois Digital Newspaper Collections.

3.4. Technical Architecture

The Digital Collections site is built on top of Medusa storage. We build and deploy the majority of our locally managed digital collections services using the web programming framework in Ruby-on-Rails, using a number of other freely available open source protocols and software packages.

Medusa sits at the heart of the library's digital curation efforts as a stable collection registry, as well as a collection management and file storage service. It accommodates two primary types of workflows:

1. Those where internal library users in Digitization Services and Special Collections units deposit content into Medusa and then push this content out for public access using the Digital Library System and its public [Digital Collections](#) site.
2. Those where external users deposit content into the [Illinois Data Bank](#) or [IDEALS](#) institutional repository, and this content is synced to Medusa for safekeeping.



Current paths for preservation and access (simplified view).

4. Medusa FAQ

What is Medusa?

The Medusa digital preservation repository provides an enduring storage and management environment for the University of Illinois at Urbana-Champaign Library's digital collections. At present, Medusa's collecting focus is on digitized and "born digital" books, manuscripts, photographs, audiovisual materials, scholarly publications, and research data from the library's special collections, general collections, and institutional repository. All master files created by the library's digitization units, for example, are by default deposited into Medusa.

Where is Medusa?

Medusa has a web-accessible collection registry, but it only displays information about collections to authenticated, approved users.

- Live production site: <https://medusa.library.illinois.edu/>
- Test site (accessible only to library staff in the building or logged into campus VPN): <https://demo.medusa.library.illinois.edu/>

What Does Medusa Do?

The Medusa collection registry provides collection curators with a simple, web-accessible service for managing preservation actions over time. It features:

- Forms for editing descriptive, administrative, and rights metadata associated with collections
- Download of files or batches of files to local file servers
- Tracking of preservation events, file provenance, and file statistics
- On-demand verification of file fixity (md5 checksum values) for files or batches of files, and ongoing checksum verification of all files every 90 days
- On-demand extraction of technical metadata (using the File Information Tool Set) for files or batches of files
- A Digital Content Format [registry](#) with tools for elaborating file format policies and normalization paths

Who has access to Medusa?

Medusa collections are not publicly accessible: Medusa is a back-end system for library collection managers, specifically:

- Local Repository units, defined as any organization that is responsible for general curatorial decisions related to the preservation of, access to, and rights status of collections of digital content in Medusa (for example, an archives, institutional repository, or departmental library). These units may designate trusted staff members to gain access to Medusa.
- Local content Producers, defined as any group that creates digital files to be stored in Medusa on behalf of a repository (for example, digital production units within the Library)

such as Digitization Services, as well as programs like Media Preservation that manage digital files created by vendors). These groups should also identify trusted staff members to be trained in using Medusa.

Where are files in Medusa stored?

The University Library manages Medusa storage using Amazon S3. The main Medusa bucket is in Amazon's us-east-2 region (Ohio), and the current backup is also in an Amazon S3 bucket, but in the us-west-2 region (Oregon). We use a tool supplied by Amazon called "Cross Region Replication" (CRR) to manage the backup process. CRR makes sure that each file (called object in S3) is versioned on the main bucket, and all the versions (including the most) current are also on the backup bucket.

Moving forward we are looking to have another "non-AWS" backup, but that is a project that is in progress.

How are collections organized in Medusa?

The design of Medusa's interface is modeled as a simple hierarchy of conceptual units.

- Repository -- organization responsible for collections, such as the Rare Book and Manuscript Library (<https://medusatest.library.illinois.edu/repositories/23>)
 - Collection -- a collection of related materials, such as the Collins Collection of Irish Political Cartoons (<https://medusa.library.illinois.edu/collections/53>)
 - File Group -- a batch of objects or files arranged together

How do I find collections in Medusa?

You have two options:

- Browse to your Repository (<https://medusa.library.illinois.edu/repositories>) to view a list of its associated collections; type within the "Narrow" box a collection title or external ID (for University Archives this is the record series expanded to seven digits without slashes) to view specific collections of files.
- Search all of Medusa for a specific file name in the search box, using the wildcard operator (asterisk) to increase chances of hits. Medusa search queries and triages results by file name, folder name, project items, file group descriptive metadata, collection descriptive metadata, and UUID.

How do I get files out of Medusa?

Access to files in Medusa is limited to Repository staff and digital content Producers. Once you have navigated to a File Group, folder, or individual file, use the available download options. After clicking either of the download buttons, Medusa will bundle the files, place them on a webserver for download, and send you an e-mail with the file path location. Keep in mind that the length of time it takes for the e-mail to send depends on the size and number of files.

How do I deposit files into Medusa?

Most ingest of content is managed through the Preservation Services unit. When files are ready for ingest, contact the **Digital Preservation Coordinator** or the **Graduate Assistant in Digital Preservation**.

5. Using Medusa

5.1. Access Permissions

- **Curators** should contact the **Digital Preservation Coordinator** for login access. The **Digital Preservation Coordinator** also offers hands-on training to curatorial staff wishing to learn how to use Medusa.
- **Curators** in Medusa are assigned to Repositories representing curatorial units (The Rare Book and Manuscript Library, the Map Library, etc.). **Curators** assigned to one Repository in Medusa cannot edit Medusa records for another Repository.

5.2. Accessing Files in Medusa

Access to files in Medusa is limited to Repository staff (content owners) and digital content Producers. Repository staff may navigate to files by drilling into bit-level “File Groups” and reaching a “download” link. Downloads of especially large batches of files (several hundred gigabytes or over a terabyte) are best achieved at present by request to the **Digital Preservation Coordinator**.

To search for collections and files in Medusa,

1. Go to medusa.library.illinois.edu and log into Medusa using your credentials.
2. Click on “Repositories.”

The screenshot displays the Medusa web application interface. At the top, the header includes the University of Illinois logo and the text "UNIVERSITY LIBRARY UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN". Below this, the word "Medusa" is prominently displayed. A navigation menu contains links for "Institutions", "Repositories", "Collections", and "Projects", with a red arrow pointing to "Repositories". To the right of the navigation menu, there are links for "Login" and "More". Below the navigation menu, a paragraph of text describes the Medusa collection registry. Underneath, there are two sections: "Quick Links" with buttons for "Create a Collection" and "Feedback", and "Learn More" with buttons for "Policies", "Technology", and "Staff". At the bottom of the page, a footer provides contact information: "More information: Medusa at 217-333-4648 or medusa@library.illinois.edu or <http://medusa.library.illinois.edu>". The footer also features the University of Illinois logo and the text "© 2021 University of Illinois Board of Trustees".

3. Scroll down or use the “Filter results” search box to find your Repository.

Repository

[Edit Repository Admins](#) [Export](#)

Any organization that is responsible for general curatorial decisions related to the preservation of, access to, and rights status of collections of digital content in Medusa. This can be an archives, institutional repository, or departmental library, or any other such entity that stewards collections at the University of Illinois Library.

Show 25 entries Filter results: archived

| Title | Contact | URL | Total Size (GB) |
|--|-------------------------|---|-----------------|
| American Library Association Archives | prom@illinois.edu | http://archives.library.illinois.edu/ala/ | 2,547.39 |
| Champaign County Historical Archives (Urbana Free Library) | archives@urbanafree.org | http://urbanafree.org/archives/ | 22.64 |
| Sousa Archives and Center for American Music | schwrtzs@illinois.edu | http://www.library.illinois.edu/sousa/ | 12,603.45 |
| University of Illinois Archives | prom@illinois.edu | http://archives.library.illinois.edu | 47,080.55 |

Showing 1 to 4 of 4 entries (filtered from 32 total entries)

First < 1 > Last

4. The Repository page shows all of the collections in the selected repository. From this page you can also see any running processes, current accruals, and file statistics.

Repository: University of Illinois Archives

[Overview](#) [Running Processes](#) [File Statistics](#) [Red Flags](#) [Accruals](#) [Export](#) [Metadata](#)

Storage

| state | size(GB) | files |
|-----------|-----------|-----------|
| Bit Level | 47,080.55 | 2,475,901 |

Collections

Show 25 entries Filter results:

| External ID | Title | Contact | Size (GB) |
|-------------|--|-----------------------|-----------|
| 1306017 | "Against the Wind" Production and Publicity Material (Digital Surrogates) | srhari@illinois.edu | 1,753.71 |
| 1606803 | "Expanding Horizons", the History of Division of Rehabilitation-Education Services at the University of Illinois (Digital Surrogate) | prom@illinois.edu | 1.90 |
| 0803016 | "Price of Bounty" Production File (Audiovisual Digital Surrogates) | | 104.38 |
| 3501810 | "Staff Bulletin" (Digital Surrogates), 1949-1952, 1970-1978 | prom@illinois.edu | 0.22 |
| 2640102 | 1878 Class History (Digital Surrogates) | srhari@illinois.edu | 0.01 |
| 0002002 | 1987 Campus Inventory of Significant Historic Buildings (Digital Surrogates) | prom@illinois.edu | 38.93 |
| 3905005 | A Home of Their Own (Born Digital Records) | ballard9@illinois.edu | 5.82 |

5. To view a Collection, double-click its name. The Collection page displays descriptive metadata about the collection, as well as its constituent File Groups.

University of Illinois Archives > Jack Sherman Baker Papers (Digital Surrogates and Born Digital Records)

Collection: Jack Sherman Baker Papers (Digital Surrogates and Born Digital Records)

[Export](#) [Add Project](#) [Metadata](#)

File Groups

[Add File Group](#)
Show Storage Level: All | External | Bit Level

Show 25 entries Filter results:

| Id | Name | Storage Level | Created | Producer | Total files | Total file size (GB) | Related File Groups |
|------|---------------------------------------|-----------------|------------|---------------------|-------------|----------------------|---|
| 4892 | Content View files | bit-level store | 2021-03-12 | University Archives | 10 | 7.69 | Ingested from: File groups 4891,5062 Action |
| 5062 | July 2021 Accrual | external | 2021-07-22 | University Archives | 6 | 5.78 | Ingested to: File group 4892 Action |
| 4891 | March 2021 Ingest | external | 2021-03-12 | University Archives | 4 | 1.91 | Ingested to: File group 4892 Action |

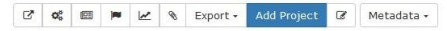
Showing 1 to 3 of 3 entries

First < 1 > Last

- To files and folders as they are structured on Medusa storage, navigate to a File Group and click “View files.”

University of Illinois Archives > Jack Sherman Baker Papers (Digital Surrogates and Born Digital Records)

Collection: Jack Sherman Baker Papers (Digital Surrogates and Born Digital Records)



File Groups

[Add File Group](#)
 Show Storage Level: All | External | Bit Level

Show 25 entries Filter results:

| Id | Name | Storage Level | Created | Producer | Total files | Total file size (GB) | Related File Groups | |
|------|---------------------------------------|-----------------|------------|---------------------|-------------|----------------------|--------------------------------------|--------|
| 4892 | Content View files | bit-level store | 2021-03-12 | University Archives | 10 | 7.69 | Ingested from: File groups 4891,5062 | Action |
| 5062 | July 2021 Accrual | external | 2021-07-22 | University Archives | 6 | 5.78 | Ingested to: File group 4892 | Action |
| 4891 | March 2021 Ingest | external | 2021-03-12 | University Archives | 4 | 1.91 | Ingested to: File group 4892 | Action |

Showing 1 to 3 of 3 entries First < 1 > Last

- To download all the folders/files in the folder to which you have navigated, click the download box and select “Download Files and Subdirectories.” If you want to download just the files located in this folder and exclude subfolders, click “Download Files.” Clicking either option will generate a message letting you know that the export is being prepared, and that you will receive an email with a download link.

University of Illinois Archives > Jack Sherman Baker Papers (Digital Surrogates and Born Digital Records) > Content > 1723/4892 > 1202038

Directory: 1202038

UUID: cfeb490-6595-0139-776b-02d0d7bfd6e4-e

Folders Files

Show 25 entries Search:

| Name |
|--------------|
| access |
| pdi |
| preservation |

Showing 1 to 3 of 3 entries Previous 1 Next

Download Files - Omit Subfolders
 Download Files - Include Subfolders
 JSON
 TSV
 JSON Tree

8. Alternately, by clicking on a single file, you will access an interactive viewer with an option for direct download.


University of Illinois Archives > Jack Sherman Baker Papers (Digital Surrogates and Born Digital Records) > Content > 1723/4892 > 1202038 > access > online > 1202038_Series4_Box5_Item38_acc.mp4

File: 1202038_Series4_Box5_Item38_acc.mp4

Download JSON

File information

Storage level: bit-level
MDS: d01a42d4b8ef09a54108c08e2fd2185b
Last fixity check: 2021-07-22 19:57:40 UTC
Fixity check status: ok
UUID: dbc24740-6595-0139-776b-02d0d7bfd6e4-4
FITS:
Belongs to: Content
File size: 373 MB
Mimetype: video/mp4



0:00 / 23:04


Fixity Check History

| Date | Status |
|------|--------|
| | |

5.3. Add a New Collection

Note: Prior to adding a new collection verify that it is not already in Medusa. Search for the record series and/or title in Medusa before creating any new collection.

1. Go to the Medusa collection registry site:
 1. Practice site: <https://demo.medusa.library.illinois.edu/>
 2. Production site: <https://medusa.library.illinois.edu/>
2. Click “Collections” on the menu bar. Login with University NetID and password if prompted



UNIVERSITY LIBRARY UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Medusa

View lists of: [Institutions](#) [Repositories](#) [Collections](#) [Projects](#) [More](#)

The Medusa collection registry provides a web-accessible management interface to preservation microservices built upon an enduring storage and management environment for the University of Illinois at Urbana-Champaign Library's digital collections. Access to the collection registry is restricted to digital content producers at the University of Illinois Library. For more information, read the [FAQ](#).

Quick Links

[Deposit Files](#) [Create a Collection](#) [Request Training](#) [Feedback](#)

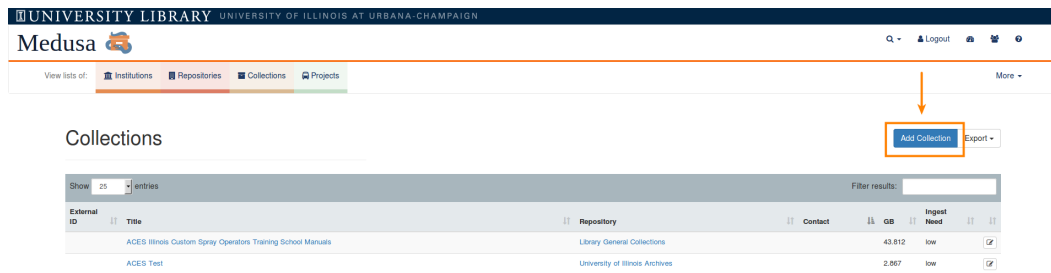
Learn More

[Policies](#) [Technology](#) [Staff](#)

More information: Medusa at 217-333-6648 or medusa@library.illinois.edu or <http://medusa.library.illinois.edu>

ILLINOIS
© 2011 University of Illinois Board of Trustees

3. On the “Collections” page, click “Add Collection” in the top right.



UNIVERSITY LIBRARY UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Medusa

View lists of: [Institutions](#) [Repositories](#) [Collections](#) [Projects](#) [More](#)

Collections

[Add Collection](#) [Export](#)

Show 25 entries Filter results:

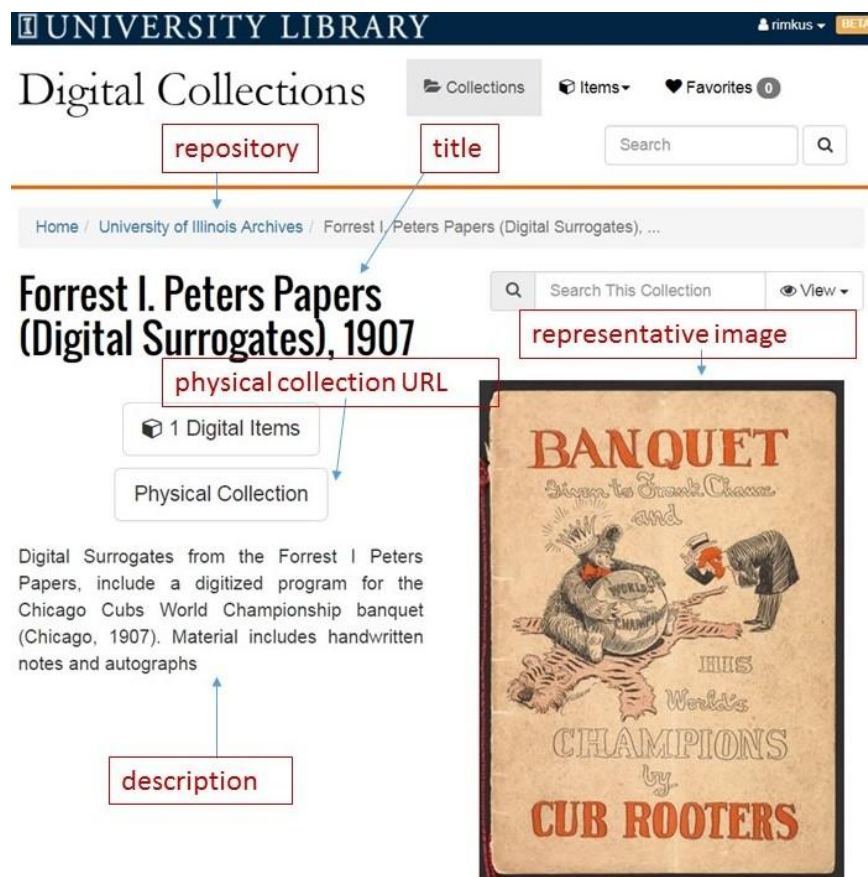
| External ID | Title | Repository | Contact | GB | Ingest Need | |
|-------------|--|---------------------------------|---------|--------|-------------|-------------------------------------|
| | ACES Illinois Custom Spray Operators Training School Manuals | Library General Collections | | 43,812 | low | <input checked="" type="checkbox"/> |
| | ACES Text | University of Illinois Archives | | 2,867 | low | <input checked="" type="checkbox"/> |

4. You will then input metadata for the new collection using this page’s tabs. Fill in as many fields as you wish, keeping in mind that it is not necessary to edit them all (only the fields in **red** below are required). If you aren't sure how to fill in a certain data entry point, you can refer to previously ingested collections and see how they were completed.

1. “Descriptive Metadata” tab

NOTE: Metadata in the “Descriptive Metadata” tab will be made public in the digital library's list of collections (<https://digital.library.illinois.edu/collections>) if set to "open".

- i. **“Open collection metadata to public list of collections.”** Check this box if you’d like information about this collection to be made public in the digital library. Typically, a **Curator** will leave the box unchecked until the collection is ready for publication. To best understand how Medusa descriptive metadata will appear to the public on the Collection listing page cited above, view a public collection record in the Digital Collections site (for example, <https://digital.library.illinois.edu/collections/6ff64b00-072d-0130-c5bb-0019b9e633c5-2>):



- ii. **Title (required).** Provide the public title that will be used to identify the collection, usually taken from the resource itself (e.g. Portrait of Actors).

- iii. **Repository (required)**. Select the name of the library or curatorial unit that will own the collection (e.g. University Archives), not the producer of the content.
- iv. **Description**. Provide an official summary of the collection. If the collection is described in Archon, copy the description field from the Archon record, giving priority to the Digital Object subrecord (DO), if one is present. If the "Open collection metadata" checkbox above is checked, this description will be made publicly available as a collection "abstract."
- v. **Access link**. If collection files are publicly accessible in an external system (ie, the Digital Library, MediaSpace, Archon, etc), provide the access URL for its landing page. If files are accessible primarily from the Archon DO, then link to that record here, otherwise give priority to the Digital Library or other access system links.
- vi. **Physical collection link**. If you have an archival finding aid or other form of collection record, provide a link to it here. For University Archives, this should be the main Archon record for the collection as a whole, *not* the DO. Current practice is to provide a link the DO record within the Notes field under the Administrative Metadata tab below.
- vii. **External ID**. If you have an identifier for this collection used within your collecting unit, for example an archival record series ID, add it here.
- viii. **Representative Image**. If the collection has already been ingested into Medusa, navigate to it and copy the UUID into this field for the image you would like to represent the collection on its landing page.
- ix. **Representative item**. This is an enhanced version of *representative image* for collections of compound objects. Provide the UUID for an object folder for the representative image to display an object title and link to the object itself.
- x. **Resource types**. Choose from the list of format types to best indicate what is in the collection. More than one box can be checked.
 1. **Cartographic**: Includes maps, atlases, globes, digital maps, and other cartographic items.
 2. **Software, multimedia**: Appropriate for any electronic resource without a significant aspect that indicates one of the other "Type of Resource" categories. It includes: software, numeric data, computer-oriented multimedia, and online systems and services.
 3. **Mixed material**: Indicates that there are significant materials in two or more forms that are usually related by virtue of their having been accumulated by or about a person or body. Mixed material includes archival fonds and manuscript collections of mixed forms of materials, such as text, photographs, and sound recordings.
 4. **Notated music**: Graphic, non-realized representations of musical works, both in printed and digitized manifestations that represent the four components of musical sound: pitch, duration, timbre, and loudness.

5. **Three dimensional object:** Includes man-made objects such as models, sculptures, clothing, and toys, as well as naturally occurring objects such as specimens mounted for viewing.
 6. **Sound recording-nonmusical:** used when the sound recording is non-musical in nature.
 7. **Sound recording:** Used when a mixture of musical and non-musical sound recordings occurs in a resource or when a user does not want to or cannot make a distinction between musical and non-musical.
 8. **Moving image:** Includes motion pictures and video recordings, as well as television programs, digital video, and animated computer graphics, but not slides and transparencies. It does not include moving images that are primarily computer programs, such as computer games or computer-oriented multimedia; these are included in "software, multimedia."
 9. **Text:** Resources that are textual in nature.
 10. **Still image:** Includes two-dimensional images and slides and transparencies.
 11. **Sound recording-musical:** Used when a resource is predominantly a musical sound recording.
- xi. **Access systems.** If your content lives in an external system like HathiTrust, the Illinois Digital Newspaper Collections, or something else, indicate it here. (This list is not exhaustive, and for Archives content selecting Archon is usually sufficient.)
2. "Administrative Metadata" tab

NOTE: These fields will never be made publicly available.

 - i. **Internal collection description.** Record information about the resource for use only by the digital content managers at the University of Illinois Library. This field will never be publicly displayed.
 - ii. **Contact person email.** Enter the email address of the content owner, or other person most closely responsible for this collection should questions about it arise.
 - iii. **Notes.** If desired, enter information related to a resource not applicable to the other available fields.
 3. "Rights Metadata" tab

NOTE: For each of these items, options should be available to accurately duplicate the collection's Archon information. Please contact Digital Preservation if additional options are needed.

 - i. **Rights basis:** Information about restrictions imposed on access to a resource (e.g. copyright, statute, or license).
 - ii. **Copyright jurisdiction:** The source country of the resource where it is protected by copyright.
 - iii. **Copyright statement:** Governs how the materials will be used after access has been provided.

- iv. **Access restrictions:** A statement that indicates rights related to access and use of the digital resource.
 - v. **Custom copyright statement.** If applicable, enter a free-form custom copyright statement.
4. "Subcollections" tab
 - i. If you would like your collection to display as a "parent" collection which comprises several others as subcollections, select your subcollections from the menu here. This feature has been used extensively by the History, Philosophy, and Newspaper Library, which prefers to display newspaper titles under thematic groupings such as "American Popular Entertainment," e.g.
<https://digital.library.illinois.edu/collections/f411bc00-fc51-012f-c5ba-0019b9e633c5-f>.
 5. When you are finished creating metadata, click the "create" button on the left to save and create the new collection. You may navigate to your collection in Medusa and edit its metadata at any time by clicking on the edit button.

5.4. Deposit Content to a Collection

NOTE: This section is most relevant to digital preservation technical staff.

5.4.1. Create a File Group

Medusa keeps track of batches of files related to collections. These are referred to in the system as external file groups. Currently external file groups are used to keep track of specific ingests/accruals as a way of visualizing their provenance. A new external file group should be created for each new ingest/accrual before files can be added to a bit-level file group (the type of file group that actually has data files in it). The file groups editing interface allows for extensive information about files to be provided, but most users will only need to indicate the basic information below:

1. In a collection record, select "Add File Group" under the "File Manager" tab.

The screenshot shows the Medusa web interface. At the top, there's a navigation bar with 'Institutions', 'Repositories', 'Collections', and 'Projects'. Below that, the breadcrumb path is 'Rare Book & Manuscript Library > Amos Kennedy Collection'. The main heading is 'Collection: Amos Kennedy Collection'. There are buttons for 'Assessments', 'Export', and 'Add Project'. Below this is the 'File Groups' section, which has a sub-heading 'Add File Group' with a red arrow pointing to it. Underneath, there's a table with columns: 'Id', 'Name', 'Storage Level', 'Profile', 'Producer', 'Total Files', 'Total file size (GB)', and 'Related File Groups'. The table contains two rows of data.

| Id | Name | Storage Level | Profile | Producer | Total Files | Total file size (GB) | Related File Groups |
|-----|-----------------------|-----------------|-------------|--------------------------|-------------|----------------------|------------------------------|
| 281 | 2014 bit-level ingest | bit-level store | Still Image | Digital Content Creation | 822 | 24.78 | Ingested from: File group 51 |
| 51 | File group 51 | external | Still Image | Digital Content Creation | 1,142 | 28.30 | Ingested to: File group 281 |

Showing 1 to 2 of 2 entries

2. Descriptive Metadata tab
 1. **Title:** Provide a descriptive name as a reference for this batch of files. This will display beneath the collections bit-level file groups, so we recommend something simple and descriptive. Some library departments have elected to develop a standard title for file groups. Other suggestions include:
 1. October 2016 Accrual
 2. 2012 TIFF batch
 3. 2009 preservation batch
 2. **Description:** Rarely necessary.
 3. **Access link:** If known, otherwise leave blank.
2. "Administrative Metadata" tab
 1. **Producer:** Choose the production unit from the drop-down list. If your unit is not represented in this list, please contact the **Digital Preservation Coordinator**.
 2. **Provenance note:** Leave blank unless needed. Enter information related to the origin of the resource and the method by which the resource achieved digital form.
 3. **Acquisition method:** Specify if known, otherwise leave blank.
 4. **Storage level:** Defaults to "external", which is what you want in this case.
 5. **External file location:** This field is effectively obsolete. Ignore it.
 6. **Staged file location:** Give the path to the staging area location of the files being ingested, for provenance tracking purposes. This address should be for one of the designated staging areas, and should refer to its network location, not its mapped location on your workstation. For example:
`\\lib-archives-fs\UniversityArchives\MedusaStaging\#####`
 7. **Total file size (GB):** In your workstation file explorer, look up the properties of the entire folder you will be ingesting, and convert the reported total size to gigabytes.
 8. **Total files:** Enter the number of contained files from same properties dialog box as above.
3. When all the information has been entered, select "Create" to save your changes in Medusa.

5.5. Considerations for Archival Units

5.5.1. Relate a Medusa Collection Record to an Archon Collection Record

Specific details on collection management ought to be worked out between repositories and Preservation staff, but in a nutshell:

- In Archon, create a Digital Object record linked to a Collection record for Collection X.
- In Medusa, create a Collection record for the digital content related to Collection X.
- In the Medusa Collection record, paste the Archon series ID (omitting slashes and adding padded zeroes) into the "external ID" field.
- In the Archon Digital Object record's "ID" field, add the Medusa collection's "UUID"

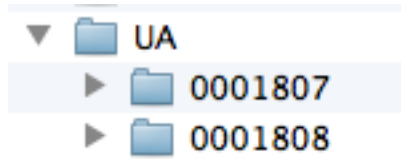
5.5.2. University Archives File Package for Electronic Records

Bullets below represent folder names.

- rgsgrss
 - preservation
 - access
 - online
 - nearline
 - pdi
 - manifests
 - docs

Definitions

- rgsgrss. Nine-digit (numeric) collection identifier from Archon e.g. 1519030 for 15/19/30. Ties collection level descriptive metadata to the archival packet. Supplement with “a” for ALA e.g. 4503044a. For example:



- preservation. Contains preservation master files. In the case of born digital records, holds disk image or whatever was turned over to the archives. In case of disk image WILL NOT include any original files extracted from the image.
- access. Access folders hold copies of any files put into access system, after they have been weeded and arranged. If derivatives, migrated copies have been generated, derivatives will be given the suffix “~d3riv” before extension and stored in the same folder as the original. Example: Filename_asdf.tif -> Filename_asdf~d3riv.jpg All migrations will be documented in a processing note on the archon digital object record, at the most specificity possible.
 - online. copies of any files put into an access system available via the open web.
 - nearline. files available only upon request. Provided to users via zip packet and or on media.
- pdi. 'preservation description information' holds technical, structural, and administrative metadata or documents that cannot be accommodated in the digital object fields of archon, or that are specific to individual files
 - manifests. contains manifests for files in preservation and access folders, such as those generated by Karen's Directory Printer
 - docs. holds any information pertinent to understanding the records such as accession emails, deed of gift, processing plans, etc.

6. Using the Digital Library

6.1. Structured, Free-form, and External collections

The Digital Library System offers three presentation modes for its digital collections:

1. **Structured.** Collections of materials of a similar type, with comprehensive item-level metadata. For example, a collection of digitized photographs of Abraham Lincoln (<https://digital.library.illinois.edu/collections/6ff23a90-95b4-0131-1105-0050569601ca-f>) or a set of digitized bound volumes of Sanborn Fire Insurance Maps (<https://digital.library.illinois.edu/collections/6ff64b00-072d-0130-c5bb-0019b9e633c5-2>). These collections are most often produced via digitization in the Library's Digitization Services group.
2. **Free-form.** Collections of born digital electronic records, often of varied content, frequently with little item-level description, presented via a folder/file browse interface rather than an object list. For example, born digital electronic records that the University Archives acquired from the prominent scientist Carl Woese (<https://digital.library.illinois.edu/collections/cd535a80-4852-0133-a7fd-0050569601ca-3/tree>).
3. **External.** Digital collections of library content that live in other access platforms. These are displayed alongside digital collections managed in the digital library system on our digital collections page (<https://digital.library.illinois.edu/collections>). Examples include collections of digitized newspapers from our Illinois Digital Newspaper Collections (<https://digital.library.illinois.edu/collections/d83bd4b0-b7bb-0133-1d02-0050569601ca-4>) and digitized monographs in the HathiTrust Digital Library (<https://digital.library.illinois.edu/collections/c49d3ab0-01b9-0130-c5bb-0019b9e633c5-d>). Items in external collections are currently not searchable in the Digital Collections platform, but we are exploring this as a possibility.

6.1.1. Packaging for Structured Collections

Structured collections most often result from digitization work done by **Digitization Services**, and are packaged by staff in that group with the assistance of the **Digital Library Technical Coordinator**.

6.1.1.1. Single-item Object

Digital image collections where every item is a discrete image (that is, no multi-page items) utilize the **single-item object** profile. A representative collection is the Collins Collection of Irish Political Cartoons.

- In the Digital Collections: <https://digital.library.illinois.edu/collections/810c6d90-e3fb-012f-c5b6-0019b9e633c5-e>
- In Medusa: https://medusa.library.illinois.edu/bit_level_file_groups/2466

The single-item package is structured with two folders named “access” and “preservation”. The “preservation” folder contains master files in TIFF format. The “access” folder contains derivatives in JPEG2000 format optimized for quick display, including pan and zoom, and the ability to quickly deliver images in other formats like JPEG and PDF in the Digital Library System. All “preservation” and “access” files must be named exactly the same, except for their “tiff” and “jp2” extensions.



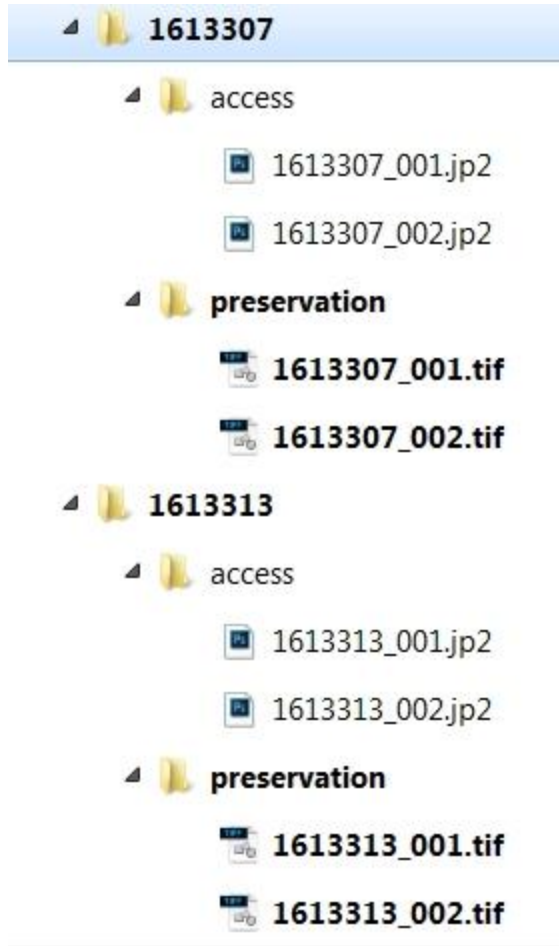
NOTE: file names in “preservation” and “access” folders, with the exception of extensions, must match.

6.1.1.2. Compound Object

Digital image collections where some or all items are composed of multiple images, for example a digitized bound volume with many pages, utilize the **compound object** profile. A representative collection is the Mapping History at the University of Illinois collection.

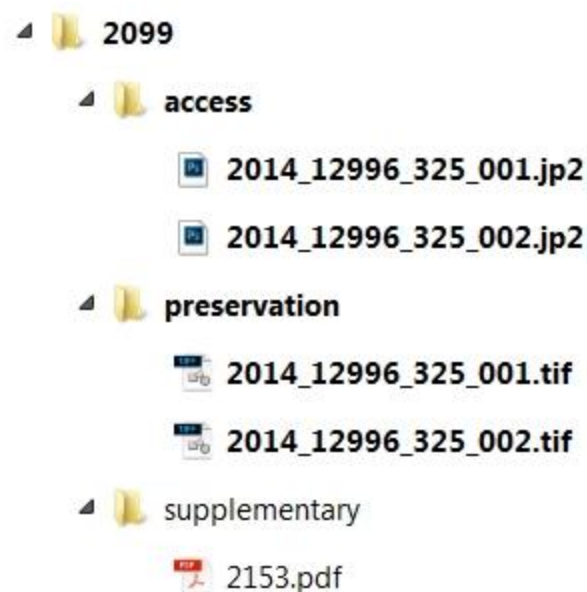
- In the Digital Collections: <https://digital.library.illinois.edu/collections/2a99ff50-a613-0134-2339-0050569601ca-4>
- In Medusa: https://medusa.library.illinois.edu/bit_level_file_groups/2732

The compound-object package is structured with one folder for each object (each folder must have a unique name), which contains folders named “access” and “preservation”. The “preservation” folder contains master files in TIFF format. The “access” folder contains derivatives in JPEG2000 format. All “preservation” and “access” files must be named exactly the same, except for their “tiff” and “jp2” extensions. File naming conventions will be decided by project planning groups, but in most cases we do not require files to follow a specific naming pattern.



NOTE: Folder titles must be unique to the collection; in addition, file names in “preservation” and “access” folders, with the exception of extensions, must match.

In addition to preservation and access folders, compound objects may feature folders to contain a supplementary PDF. This has been utilized in the James Edward Myers Sheet Music Collection (<https://digital.library.illinois.edu/collections/692ae4c0-c09b-0134-2371-0050569601ca-6>) of digitized sheet music, many of whose pages are complemented by supplementary PDF lyric sheets. In this case, the compound object folder looks the same as above, but there is an additional “supplementary” folder for the PDF. The PDF is not required to have the same name as the other files.



6.1.1.3. Mixed Media

While the Digital Library System is optimized for structured collections in the single item or compound item package, it can accommodate collections of mixed media. The **mixed media** profile and its usage in the system are not encouraged. It has however been used for the Sousa Archives Music Instrument Digital Image and 3D model collection (<https://digital.library.illinois.edu/collections/fe824900-6c8d-0134-1e34-0050569601ca-b>).

Due to the complexity and experimental nature of this package format, we are omitting documentation on it at this point. An overview of the package structure is however available in our wiki: <https://wiki.illinois.edu/wiki/display/LibraryDigitalPreservation/Mixed-Media+Object+package>.

6.1.2. Packaging for Free-form Collections

The **free-form** profile offers archivists the ability to provide users with an online experience akin to browsing boxes and folders of content. As such, these collections feature nested folders holding multiple different file types. All the **curator** needs to do is point the digital library to a folder of free-form content in Medusa, and it can be made available for perusal.

A representative collection is the Carl Woese Papers.

- In the Digital Collections: <https://digital.library.illinois.edu/collections/cd535a80-4852-0133-a7fd-0050569601ca-3>, specifically its “tree browse” view at <https://digital.library.illinois.edu/collections/cd535a80-4852-0133-a7fd-0050569601ca-3/tree>

The screenshot shows the University of Illinois Digital Collections interface. At the top, the header reads "UNIVERSITY LIBRARY UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN". Below this, the "Digital Collections" section includes navigation links for "Collections", "Items", and "Favorites". A breadcrumb trail indicates the current location: "Home / University of Illinois Archives / Carl Woese Papers (Born Digital Records and Dig... / Items".

The main heading is "Carl Woese Papers (Born Digital Records and Digital Surrogates)". On the left, a file tree shows various folders and files, including "Photos_from_Ken_Luehrs", "Digital Surrogates", and "OriginalFiles". The "OriginalFiles" folder is expanded to show "CARL_WOESE", "WOESE_ON_WO", "A One Page Scien", and "Crafoord Prize 2003".

The main content area displays the selected PDF document, "Crafoord Prize 2003.pdf", with a viewer interface. The document title is "The Crafoord Prize 2003". The text on the page reads: "The Royal Swedish Academy of Sciences has decided to award the Crafoord Prize in Biosciences 2003 to Professor CARL R. WOESE, University of Illinois, Urbana, Illinois, USA: 'for his discovery of a third domain of life'". Below this, it states "From Carl Linneaus to Carl R. Woese" and "This prize stream of biological thought was united in the work of Carl R. Woese. One".

- In Medusa: https://medusa.library.illinois.edu/bit_level_file_groups/2105

Detailed instructions on setting up a free-form collection will be found below.

6.1.3. Medusa Metadata versus Digital Library System Metadata

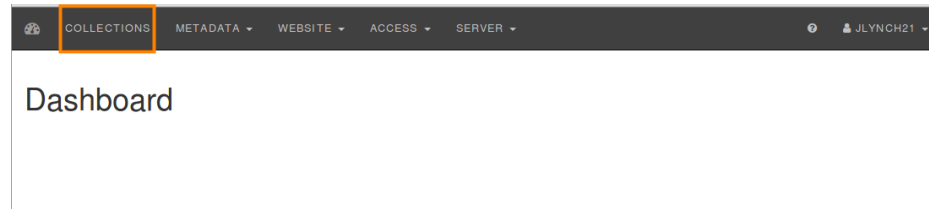
Medusa houses collection-level metadata; the Digital Library System houses object- and item-level metadata.

6.1.4. Index Medusa Collections Metadata in the Digital Library System

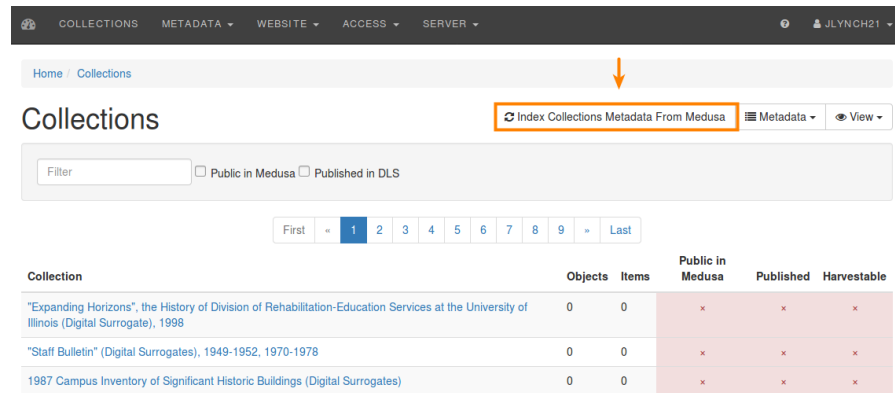
If you edit collection-level metadata in Medusa and want to see the changes reflected in the Digital Library, follow the steps below.

1. Login to Medusa (medusa.library.illinois.edu), navigate to the Collection record, and edit information in the "Descriptive Metadata" tab (for a field-by-field overview, see [5.3. Add a New Collection](#) in this manual).
2. Login to the Digital Library (<http://digital.library.illinois.edu/admin>). Keep the Medusa Collection record series open.

- a. Click on “Collections” at the top left



- b. Next, you may index metadata from Medusa by clicking “Index Collections Metadata from Medusa” at the top right. To check progress of the index, go to Server > Tasks. After a few minutes, you should be able to filter your search to find the newly added collection.



6.1.5. Running Optical Character Recognition on Items to Enable Full-text Search

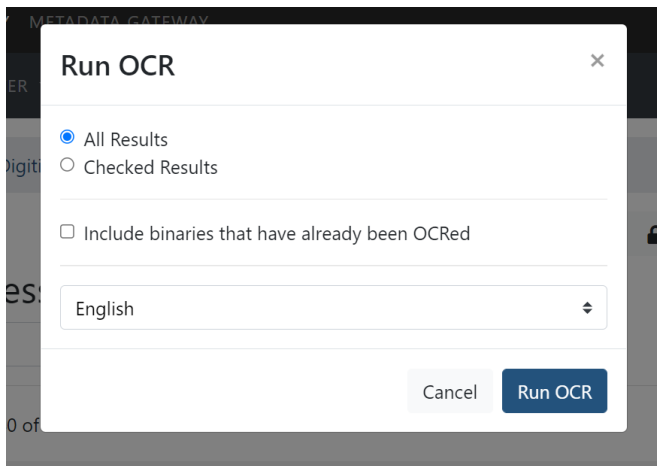
6.1.5.1. Collection-level OCR

Optical character recognition (OCR) full-text indexing and search is available for collections with the simple or compound object package (it is not available at present for free-form collections). It can be run on collection or item-level, or on selected items. It can also be disabled for selected items.

To run OCR on an entire collection, navigate to the “Objects” page for the collection. In the menu bar you will see a “Full text” set of options. Click on it and select “Run OCR” to run OCR on the entire collection. If you have already run OCR on the collection but have added additional items, the “Run OCR” button will run OCR against the newly added items but not against those that have already been scanned.

The screenshot shows the top navigation bar with 'COLLECTIONS', 'METADATA', and 'SERVER' menus. The breadcrumb trail is 'Home / Collections / Restricted Access Digitization (Summer 2021 #1) / Items'. The main toolbar includes 'Import', 'Metadata', 'Full Text', 'Sets', 'Access', 'Purge', and 'Public View'. The 'Full Text' dropdown menu is open, showing options: 'Run OCR...', 'Enable Full Text Search for All Results', 'Disable Full Text Search for All Results', 'Enable Full Text Search for Checked Results', and 'Disable Full Text Search for Checked Results'. Below the menu, there is a filter input, a 'Showing 1-40 of 98 items' indicator, and a pagination control with 'First', '1', '2', '3', and 'Last' buttons.

When you click “Run OCR,” you will specify whether to run it on all results or only checked results. The “include binaries that have already been OCRred” option gives you the ability to rerun OCR on items that have already been OCR-scanned. The default language option is English, but we have pre-loaded our OCR engine with several other common language options.



In the “Full text” tab, there are several other options available for enabling or disabling OCR for all or for specific checked results. These give the curator control over suppressing or enabling OCR in public results. They are useful in situations when, for example, you have run OCR on an entire collection but need to suppress OCR for handwritten items.

As with other tasks in the Digital Library system, you can view the status of OCR jobs in the “Tasks” panel (<https://digital.library.illinois.edu/admin/tasks>).

Home / Tasks

Tasks

Filter Queue Status

First « 1 2 3 4 5 6 7 8 9 » Last

| Task | Status | Progress | Started | ETA |
|--|----------------|----------|----------------|---------------|
| Running OCR on 5861 binaries in Restricted Access Digitization (Summer 2021 #1) using 50 threads | RUNNING | 0.2% | 19 seconds ago | about 3 hours |

6.1.5.2. Item-level OCR

If you do not want to run OCR on an entire collection, you can also navigate to an item in the administrative interface and run OCR on it individually. Click the “OCR” button to initiate the same OCR options as listed above. Once OCR has been run, you can view the result by navigating to the page-level, clicking the “Binaries” tab, and navigating down to the “OCR” full-text tab.

Home / Collections / Restricted Access Digitization (Summer 2021 #1) / Items / Making Jews modern : the Yiddish and Ladino pre...

Making Jews modern : the Yiddish and Ladino press in the Russian and Ottoman Empires

[Edit](#) [OCR](#) [Go](#)

 [Technical Info](#) [Access](#) [Descriptive Metadata](#) [Binaries 0](#) [schema.org](#)

6.1.6. Restricting Access to Collections

Curators have several options for restricting access to collections. By default, collections will appear available to everyone with access to the web. For cases where access ought to be restricted, the system offers three options at present:

1. **Restricting by IP Range.** In this solution, we restrict collection availability by IP range to mimic a “campus-use” or “room-use” only model.
2. **Restricting by user account.** In this solution, we restrict collection availability to a single verified UIUC user at a time.
3. **Metadata-only.** In this solution, we make metadata about items available but restrict access to the items themselves.

We will explore these options in more detail below.

6.1.6.1. Restricting by IP Range

6.1.6.2. In the Digital Library’s administrative interface, there is a page called “Host Groups” (https://digital.library.illinois.edu/admin/host_groups) where we can predefine IP ranges for restricted access. Presently, there is a “UIUC Campus” and a “UIUC Library” group. New groups can be created on an as-needed basis.

To assign one or more of these restrictions to a collection, navigate to it in the administrative interface, click “Edit,” and check the boxes under “Allowed Host Groups” and save the record.

Allowed Host Groups

- Brenda Brown
- UIUC Campus
- UIUC Library

Denied Host Groups

- Brenda Brown
- UIUC Campus
- UIUC Library

Save Changes

6.1.6.3. Restricting by User Account

6.1.6.4. During the COVID19 pandemic, we created a “Restricted” mode for collections which we used to make in-copyright materials available to individual authenticated patrons for a limited twenty-one day loan period, in a viewer that restricts download of page images. To date we have only used this feature for such content. As such the feature set is specific to the Restricted Access need (for an in-depth summary of this, view this article: <https://journal.code4lib.org/articles/15915>)

To set a collection to “Restricted,” edit its collection record in the administrative interface and check the “Restricted” box.

Edit Restricted Access Digitization (Fall 2021 #2)

Save Changes

- Published
- Publicize Binaries
- Harvestable (in general)
- Harvestable by IDHH
- Harvestable by Primo
- Restricted

Metadata for items in this collection will not be indexed in any of the publicly accessible metadata stores, and this collection will not appear to public view. However, you can grant temporary restricted access to individual items to patrons with valid UIUC netids. To do this, navigate to an object and click the “Access” tab. Click “Edit,” and in the “Allowed netids” field, type your patron’s netid without the @illinois.edu suffix, and click “Save.”

Edit Civilized tent camping

Technical Info

Access

Metadata

Save Changes

Allowed Host Groups

- Brenda Brown
- UIUC Campus
- UIUC Library

Denied Host Groups

- Brenda Brown
- UIUC Campus
- UIUC Library

Allowed NetIDs



i An email will automatically be sent to any new NetIDs

entered above.

Save Changes

The patron whose email you enter here will receive an automatically generated email reading:

The University of Illinois at Urbana-Champaign Library has digitized an item you requested, [Title]. It is now available in our Digital Collections. Because the work is protected by copyright, we are making it available exclusively to you in a restricted view that prohibits download or redistribution. You may log in using your university credentials to view the item at the URL below:

[URL]

This link is restricted to your use and may not be shared. It will be available to you for the next 21 days.

If you have any questions, please reply to this email.

Digital Collections

University of Illinois at Urbana-Champaign Library

digitalcollections@lists.illinois.edu

6.1.6.5. Metadata-Only (Documentation Coming Soon)

6.2. Common Problems and their Solutions (Documentation Coming Soon)

6.2.1. Change the Package Profile of a Collection

If you chose the wrong package profile for a collection in the Digital Library System and the collection has zero items imported, you can edit the profile in the collection record without a problem. However, if you have already imported files and need to point at a different folder with files packaged according to a different profile, things are a little more complicated. Follow the steps below to solve this problem.

1. Navigate to your collection from <https://digital.library.illinois.edu/admin/collections>
2. Open your collection in the Digital Library System's administrative interface, and in Medusa. For example:
 - a. <https://digital.library.illinois.edu/admin/collections/8d420900-c5b7-0134-237b-0050569601ca-2>
 - b. <https://medusa.library.illinois.edu/collections/1172>
3. If descriptive metadata has been added to your objects, discuss this with the **Metadata Specialist** before proceeding and be sure, from your objects page (for example, <https://digital.library.illinois.edu/admin/collections/8d420900-c5b7-0134-237b-0050569601ca-2/items>) to export a metadata backup by clicking "Metadata" > "Export as TSV."
NOTE: This situation is to be avoided at all costs; please do not add descriptive metadata to something if you know the package profile is wrong.
4. If the collection is public, notify the collection curator that this collection will be temporarily down for maintenance.
5. In the Medusa record (for example, <https://medusa.library.illinois.edu/collections/1172>), uncheck the box for "Open collection metadata to public list of collections." (If this box was not checked, disregard this step).

6. Re-index Medusa collection metadata in the Digital Library system by navigating to <https://digital.library.illinois.edu/admin/collections> and clicking “Index Collections Metadata from Medusa.” Once this is complete, the collection will not be available in the public interface.
7. Purge your Digital Library objects by navigating to the objects page (for example, <https://digital.library.illinois.edu/admin/collections/8d420900-c5b7-0134-237b-0050569601ca-2/items>) and clicking “Purge items.” Accept the warning that all items will be removed from the Digital Library System. Keep in mind that the files will not be deleted from Medusa; records of them will simply be purged from the Digital Library System.
8. Return to your collection page (for example, <https://digital.library.illinois.edu/admin/collections/8d420900-c5b7-0134-237b-0050569601ca-2>) and correct the following fields with their new values:
 - a. Package profile
 - b. Medusa File Group
 - c. Medusa CFS Directory
 - d. Representative item
 - e. Representative image
9. Click on “Objects.” The page should show zero objects.
10. Click “Import.” Use the default option for an initial import. For most structured collections, do not check the box “extract creation date from embedded file metadata.” The import step will initiate an object import based on the Medusa folder and package profile referenced in the collection record. View progress of the import at “Server” > “Tasks” (<https://digital.library.illinois.edu/admin/tasks>).
11. Before making public, make sure the **Metadata Specialist** approves of whatever state the descriptive metadata is in.
12. When ready to make the collection public, go to the Medusa record (for example, <https://medusa.library.illinois.edu/collections/1172>), and check the box for “Open collection metadata to public list of collections.”
13. Re-index Medusa collection metadata in the Digital Library system by navigating to <https://digital.library.illinois.edu/admin/collections> and clicking “Index Collections Metadata from Medusa.” Once this is complete, the collection will become available again in the public interface.

7. The Metadata Gateway (Documentation Coming Soon)

7.1. Harvesting and Indexing Metadata from our Repository Systems (Documentation Coming Soon)

7.2. Relevancy “Boosts” (Documentation Coming Soon)

8. The Recommended Project Workflow

Poorly structured projects, or worse, projects whose teams change the order of key steps mid-stream, tend to foment angst and confusion for stakeholders. In our experience, the steps below have proven best when it comes to managing simple, successful digitization efforts across multiple units.

1. **PLANNING** (2-3 weeks)
 - a. **Curator** proposes digitization project using [online form](#). **Digital Collections Project Manager** receives form and assesses feasibility of project with **Curator** and staff in **Conservation** and **Metadata Services**. Once approved, stakeholders will schedule when their staff will be available to do the work necessary to complete the project.
2. **METADATA** (varies based on number of items, at least 1-4 weeks)
 - a. **Curator** selects or develops a Metadata Profile for collection with **Metadata Specialist**.
 - b. **Curator** authors collection-level metadata in Medusa digital preservation repository.
 - c. **Curator** prepares spreadsheet of object-level metadata for items to be digitized.
3. **CONSERVATION** (varies based on Conservation lab commitments and condition of materials)
 - a. Depending on the condition of materials, conservation work may be necessary to prepare them for digitization.
4. **DIGITIZATION** (varies based on Digitization lab commitments and number of items, typically weeks to months)
 - a. **Curator** provides inventory spreadsheet and items to be digitized to **Digitization Services**.
 - b. **Digitization Services** completes digitization, packages files, and deposits them in Medusa. **Metadata Specialist** ingests descriptive metadata into the Digital Library System.
5. **REVIEW** (varies based on number of items and quality of metadata, typically 1-3 weeks)

- a. **Metadata Specialist** and **Curator** review collection and correct errors in metadata and display as needed.
6. **PUBLISH** (1 day)
 - a. **Metadata Specialist** makes collection public in the [University of Illinois Library Digital Collections](#).

The most common variant on the workflow above is using step 2b to create item records in order to hasten getting them into the digitization queue. Typically, the curator intends to go back and enrich their descriptive metadata after digitization. This is perfectly acceptable, but can become chaotic if the curator attempts to enhance metadata while step 4, digitization, is occurring.

In cases of variation from the workflow described above, be sure to communicate with the **Digital Collections Project Manager** to make sure all people involved in group effort from curatorial units, Preservation, Conservation, and Metadata are aware of potential deviations from the plan.

8.1. Planning

Digitization projects require coordination across multiple library units. For this reason, planning is key. The planning process begins when a **Curator** proposes digitization project using [online form](#). The **Digital Collections Project Manager** receives the form and assesses project feasibility with the **Curator** and staff in **Conservation** and **Metadata Services**. Once approved, stakeholders will schedule when their staff will be available to do the work necessary to complete the project.

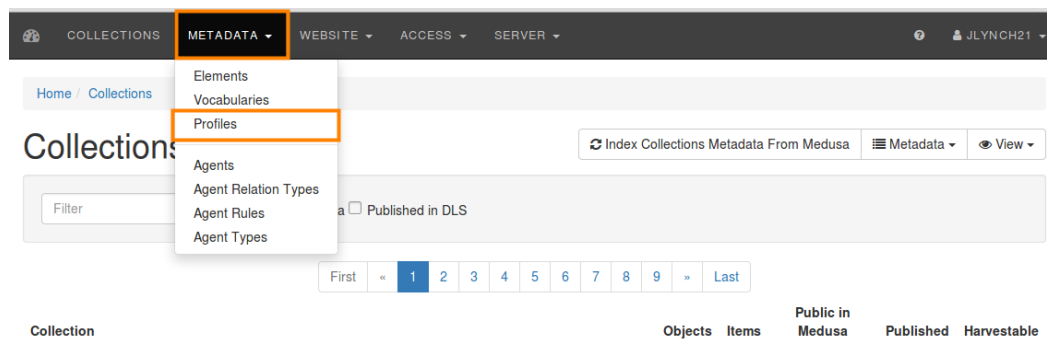
8.2. Metadata

The steps below are primarily for collections of archival materials selected for digitization. Metadata considerations for monographic items with records in Voyager are slightly different. (More information to come; for the time-being, please refer questions to the **Digital Collections Project Manager**).

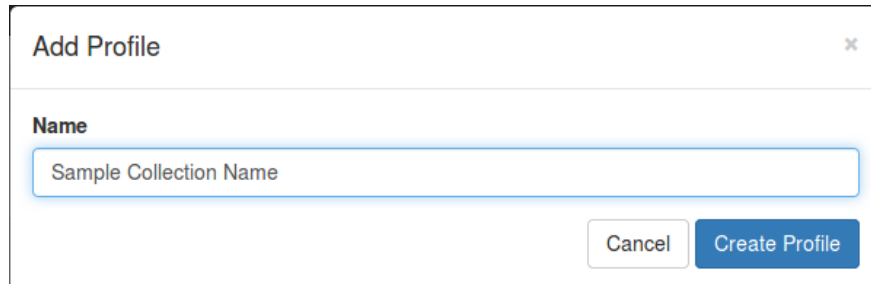
8.2.1. Select or Create Metadata Profile

When planning a project, a **Curator** will, with the assistance of a **Metadata Specialist**, choose or develop a Metadata Profile for the collection to be digitized. The profile determines available fields for metadata description, and you may think of it as a template for descriptive metadata for each item in your collection.

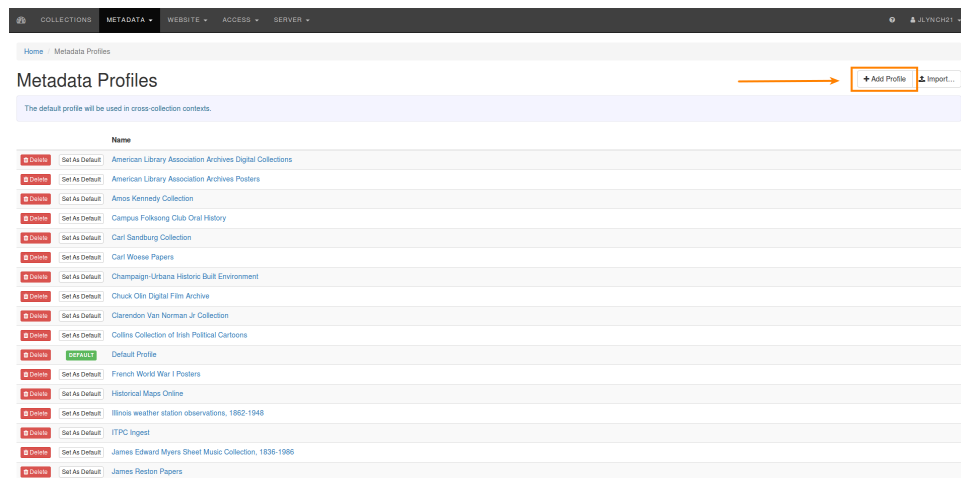
1. To view existing Metadata Profiles or create new ones, go to the DLS Metadata Profiles page at <https://digital.library.illinois.edu/admin/metadata-profiles>. Login with University NetID and password if prompted.



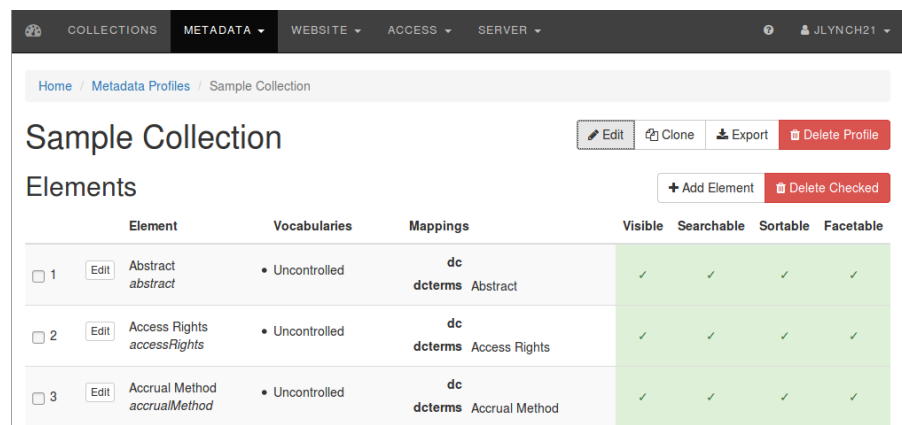
2. Optional: To create a new profile:
 - a. Click “Add Profile”
 - i. In the resulting dialog box, type the name of the Metadata Profile. Standard practice is to name the profile after the collection. Then click “Create Profile.”



- ii. You may now find your newly created metadata profile in the list of alphabetically-arranged Metadata Profiles.



- b. Optional: After creating a new profile, you will need to customize it; otherwise, it will simply contain default elements.
 - i. First, select the name of your collection in the alphabetically-arranged list on the metadata profiles page
 (<https://digital.library.illinois.edu/admin/metadata-profiles>)
 - ii. Use the interface pictured below in order to choose the fields for your profile. The fields you choose will be available for every item in your



collection once you are ready to enter item level metadata later.

Explanation of Metadata Profile editing interface:

1. Edit: allows you to change the name of the profile and choose the default element the collection will sort on.
2. Clone: copies profile
3. Delete: deletes profile
4. Add Element: brings up a dialog that allows you to add a new metadata element to the profile
5. Delete Checked: allows for the deletion of any selected element(s) in the profile. To select an element, use the check box in the far left of the row.
6. You may also edit elements in the profile by clicking the “Edit” button to the left of the element’s name. This will bring up a similar dialog as “Add Element.”

8.2.2. Edit Collection-level Metadata

Collection-level metadata is housed in the Medusa collection registry; object- or item-level metadata is managed in the Digital Library system. Edit collection-level metadata using the instructions earlier in this document on editing collection records in Medusa ([6.3. Add a new collection](#)).

After editing your collection-level metadata, make sure to index this metadata in the Digital Library System ([7.1.4. Indexing Medusa Collections Metadata in the...](#)) so it appears there.

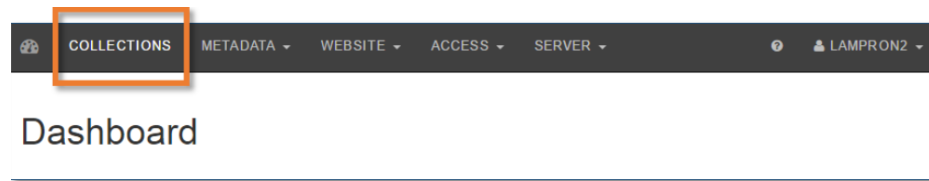
8.2.3. Create Object-level Metadata

Prior to digitization, the **Curator** provides a spreadsheet of metadata describing the items that constitute the digital collection. This serves two functions:

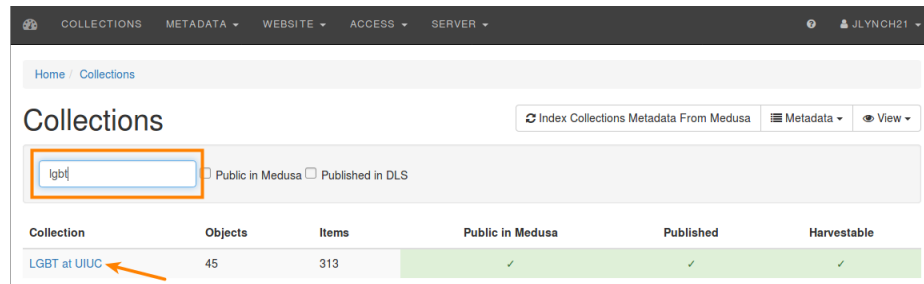
1. It provides staff in **Digitization Services** with identifying information for items to be digitized, ensuring the proper organization of files during and after digitization.
2. It provides a solid basis of descriptive metadata for ingest into the Digital Library System.

To create this spreadsheet, the **Curator** goes to the collection in DLS under “Metadata” and exports a blank tab-separated-values (TSV) file.

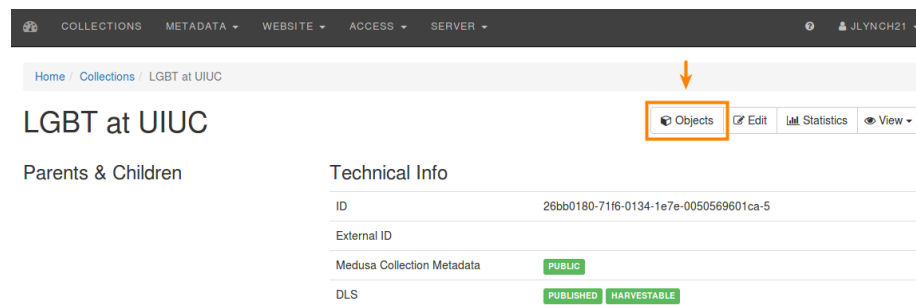
1. Log in with your NetID and AD password at <https://digital.library.illinois.edu/admin>
 - a. Click “COLLECTIONS” in the dashboard.



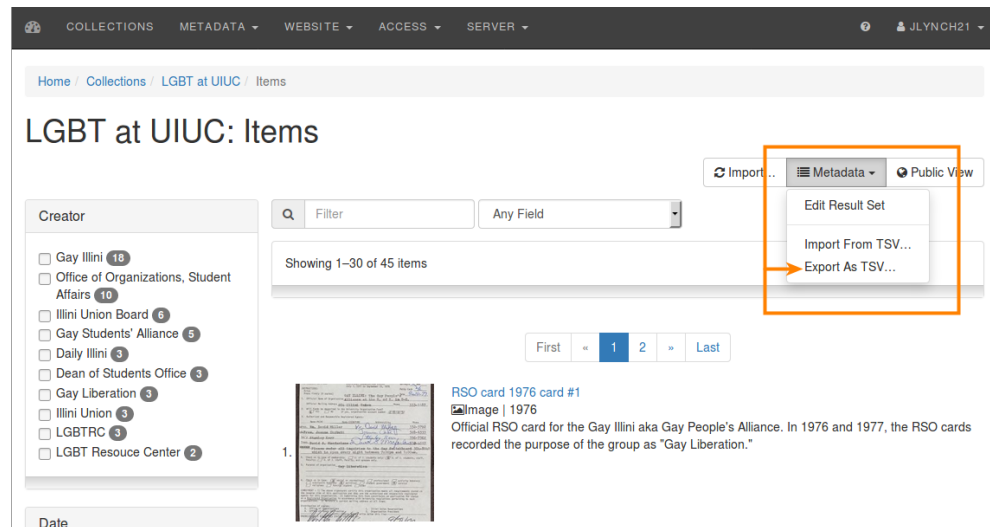
- b. In the “Filter” box, type the name of your collection. When your collection appears, click it.



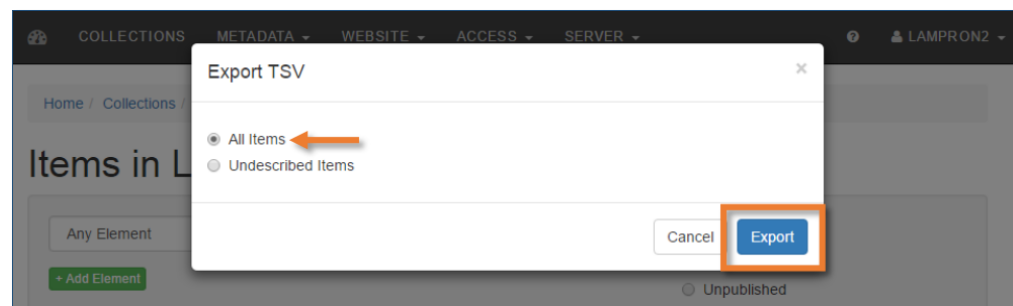
- c. Click “Objects” in the top right corner



- d. Click the “Metadata” button. From the drop down menu, click “Export as TSV”



- e. Choose “All Items”, then Click “Export”



- f. You now have an empty spreadsheet file containing descriptive metadata values for your collection. This can be edited in Excel, but we recommend editing it in Google Sheets instead, especially if the collection features special characters or diacritics (for example é, ü, ñ), as Excel does not manage these properly.
- g. In your spreadsheet, you will notice a number of additional column names for administrative metadata (“uuid”, “parentId”, etc.). Many of these can be disregarded at this step. At this stage, you can even delete unnecessary columns to unclutter your view of metadata to be edited.
- h. Add the column headings “Unique Identifier” and “Notes”. These will be provided to staff in **Digitization Services** who digitize the items.
- i. Use “Notes” to provide care and handling instructions to the person who will digitize the item.
 - ii. **Important:** Use “Unique identifier” to provide a unique folder name in which the images will be stored. Creating this now will help technical staff join descriptive metadata to digitized items later in the process. For this step, most **curators** provide a pre-existing identifier for the item. Consult the **Digital Collections Project Manager** for guidance.
- i. Fill out your metadata in consultation with the project’s **Metadata Specialist**.

- j. When complete, the **Curator** provides the metadata spreadsheet to **Digitization Services**.

***NOTE:** For the digitization of items that have barcodes and Voyager records, much of this metadata can be scanned in an automated fashion rather than rekeyed. Consult the **Digital Collections Project Manager** for more details.*

8.3. Conservation

In many cases, conservation actions must be taken on items to stabilize them prior to digitization. For this reason, it is recommended to include a conservator for project planning meetings in order to assess the condition of materials prior to digitization, and to adequately schedule time for conservation actions in concert with other project stakeholders. The Conservation Lab, like the Digitization Services studio, provides services to many units in the library, and both have multiple commitments and workloads to balance. For this reason, please understand that projects generally need to be scheduled in advance to be successful.

8.4. Digitization

The **Curator** or curatorial unit staff drop off physical items at DS. Physical objects must have the following:

1. Identifying record series, item titles, boxes, folders, item numbers written on them
2. Barcodes at the object level

Next, **DS Staff** digitize items, keeping files matched to the correct metadata rows as provided, following the steps below.

1. Items are digitized
2. Files are processed for correct formatting
3. Quality control is performed on files
4. Inventory spreadsheet is updated by DS staff as necessary
5. Files are prepared for ingest into preservation and access repositories
6. Original items are picked up by **Curator**

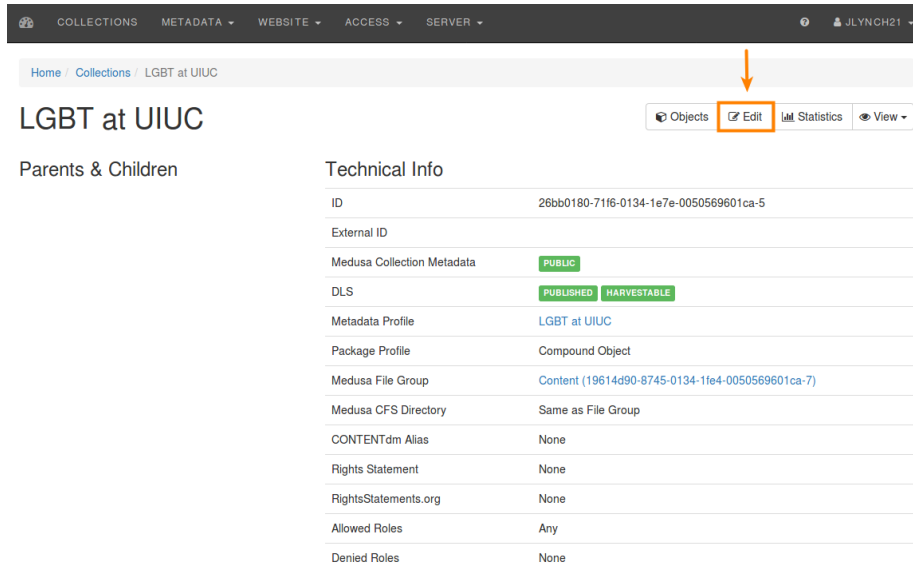
8.5. Review

At this stage, metadata has been created for items in a spreadsheet, and the items have been digitized. Now it is time to import image files and descriptive metadata into the digital library, review the results, and make improvements.

8.5.1. Import Digitized Items into Digital Library

The initial import of metadata and image content will be performed by technical staff, usually the **Metadata Specialist**. The steps are outlined below.

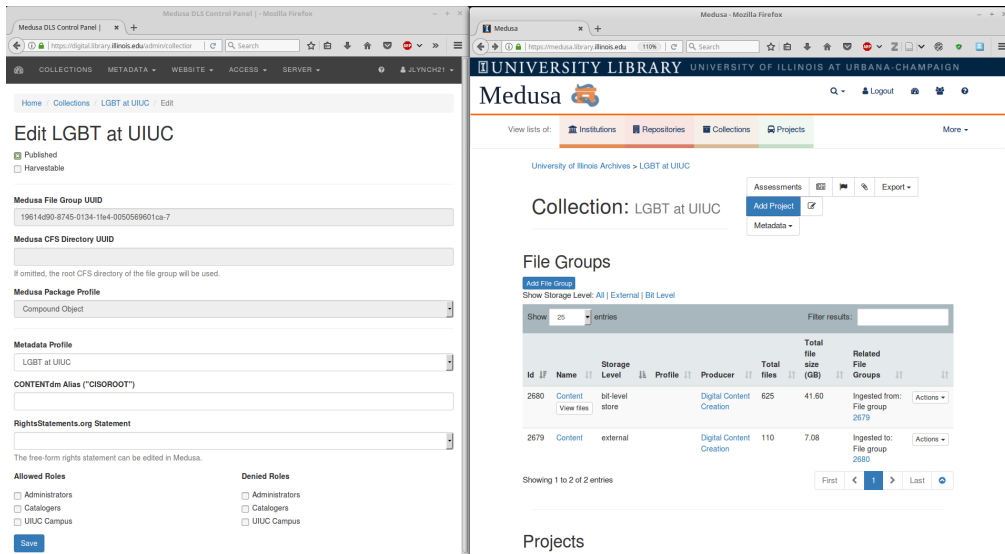
1. Before import of Medusa images occurs, we need to let the Digital Library System know where in Medusa the files are located. To do this, you (in most cases, the project's **Metadata Specialist**) navigate to the administrative Collections page, locate the collection to be published, and click the "Edit" button.



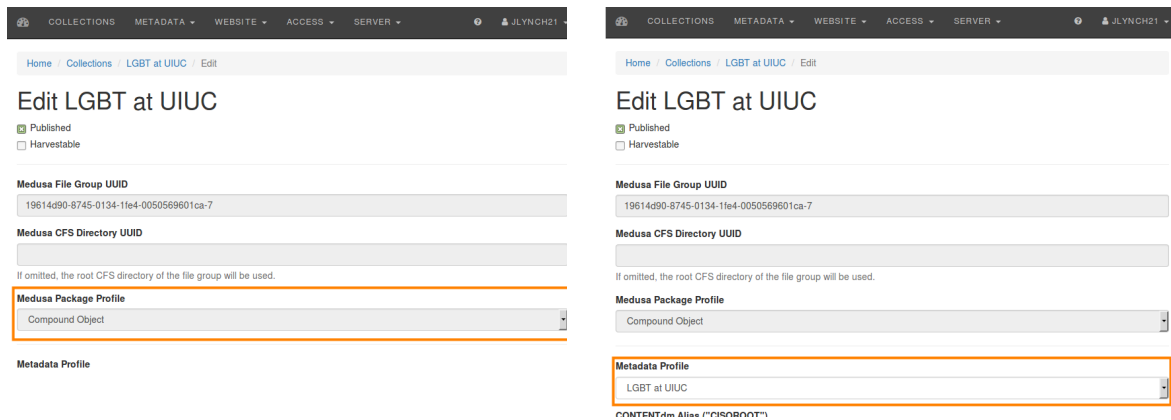
The screenshot shows the administrative interface for the 'LGBT at UIUC' collection. The top navigation bar includes 'COLLECTIONS', 'METADATA', 'WEBSITE', 'ACCESS', and 'SERVER'. The breadcrumb trail is 'Home / Collections / LGBT at UIUC'. The page title is 'LGBT at UIUC'. Below the title, there are buttons for 'Objects', 'Edit', 'Statistics', and 'View'. The 'Edit' button is highlighted with an orange box and an arrow pointing to it. The main content area is divided into two sections: 'Parents & Children' and 'Technical Info'. The 'Technical Info' section contains a table with the following data:

| | |
|----------------------------|--|
| ID | 26bb0180-71f6-0134-1e7e-0050569601ca-5 |
| External ID | |
| Medusa Collection Metadata | PUBLIC |
| DLS | PUBLISHED HARVESTABLE |
| Metadata Profile | LGBT at UIUC |
| Package Profile | Compound Object |
| Medusa File Group | Content (19614d90-8745-0134-1fe4-0050569601ca-7) |
| Medusa CFS Directory | Same as File Group |
| CONTENTdm Alias | None |
| Rights Statement | None |
| RightsStatements.org | None |
| Allowed Roles | Any |
| Denied Roles | None |

2. You'll also want to have the Medusa collection record open in another tab (this is most easily accessed by going to View > Medusa). Consider keeping 1) the Digital Library collection record and 2) the Medusa collection record open in separate windows, stacked or side-by-side.

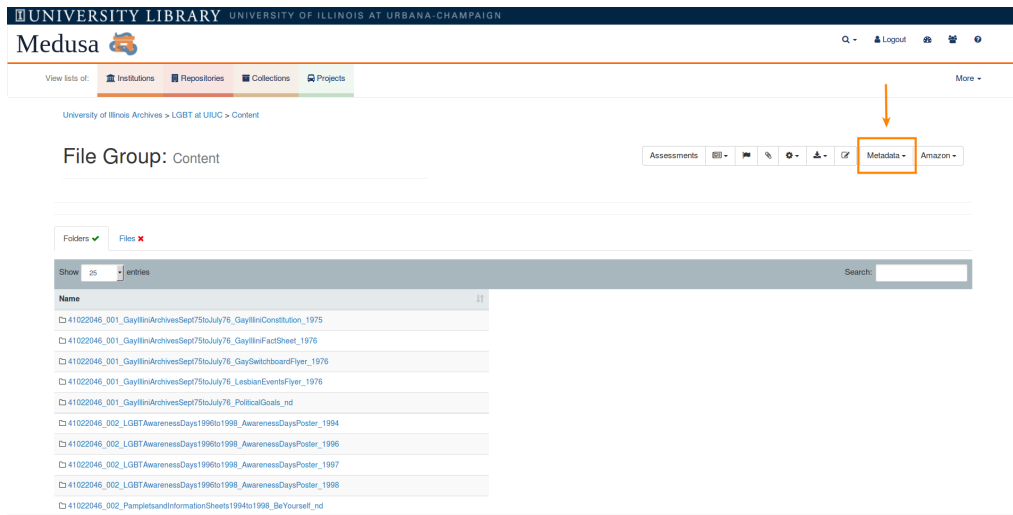


3. Make sure that the appropriate Metadata Profile and Medusa Package Profile are selected

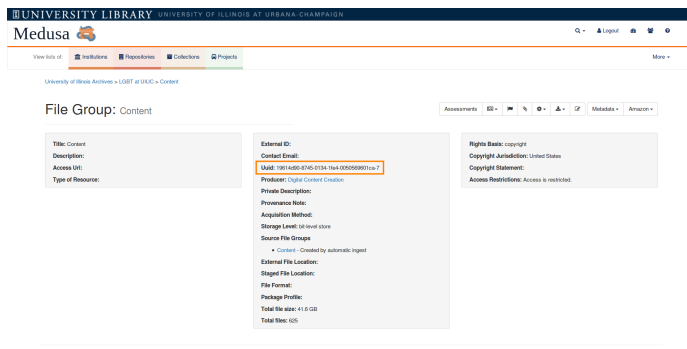


for the collection's files.

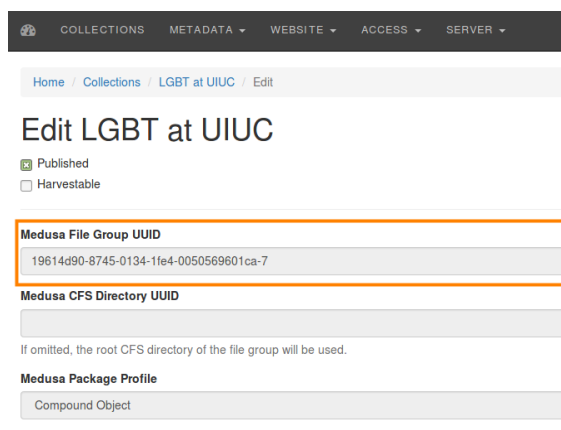
4. In the Medusa record, navigate to File Group that contains the content to be imported. Click on the "Metadata" button.



5. Copy the UUID number from the Administrative Metadata section (e.g., 26bb0180-71f6-0134-1e7e-0050569601ca-5).



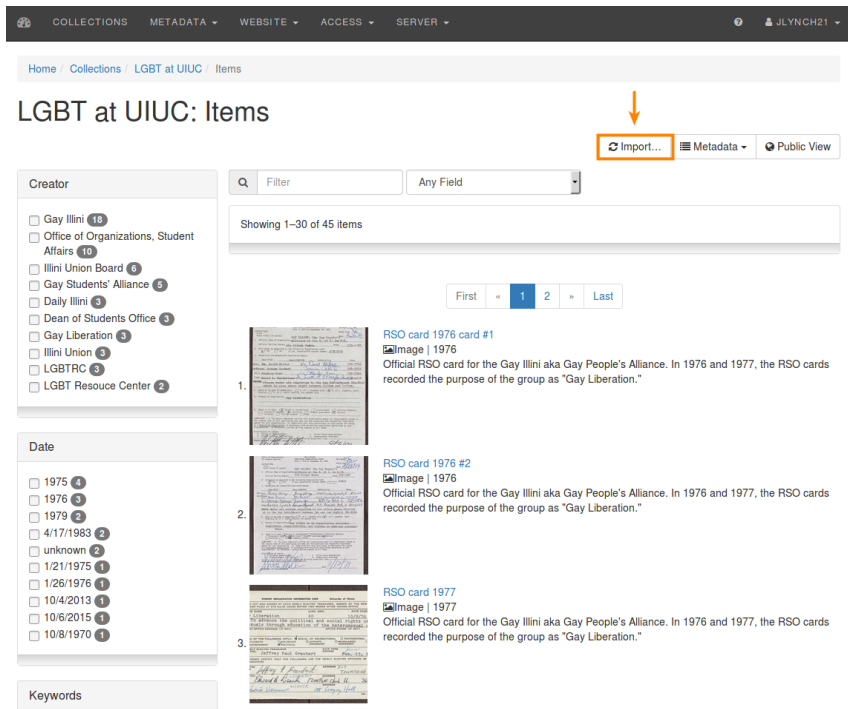
6. Paste the UUID number in the “Medusa File Group UUID” field in the Digital Library record.



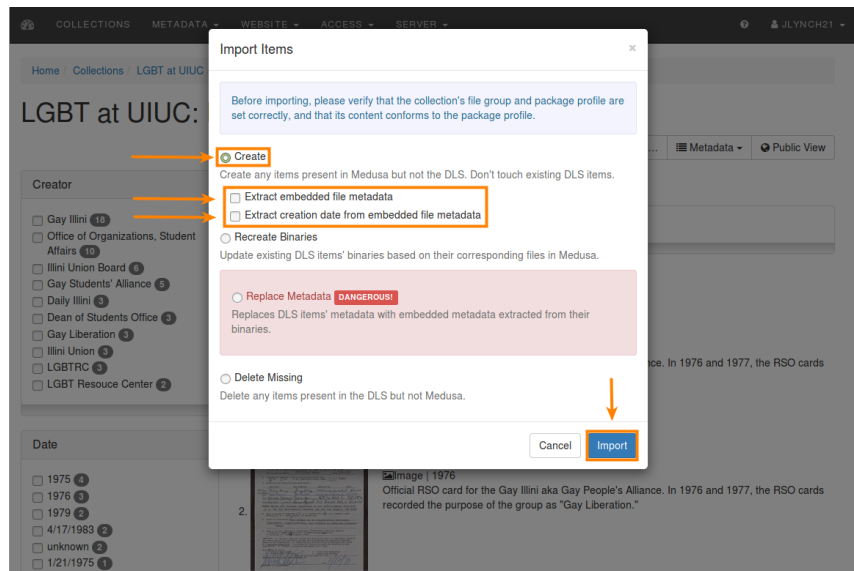
7. If you are using the free-form profile, you may wish to point to a File Group folder below the root level. This occurs most frequently with the University Archives, who often point to a

folder at the level of “[root]>access>online.” Using the steps outlined above, paste the Medusa UUID for the intended access folder into the Digital Library System field “Medusa CFS Directory UUID.”

8. To import files from Medusa, click on the “Objects” at the top right. Then click on “Import” at the top right of the following page.



- b. In the pop-up box, make sure “Create” is selected. In most cases, you will want to leave the two boxes below unselected (extract embedded file metadata into DLS metadata; extract creation data from embedded file metadata), as these are used primarily for free-form collections using a profile meant to extract embedded metadata from files (more information to come).



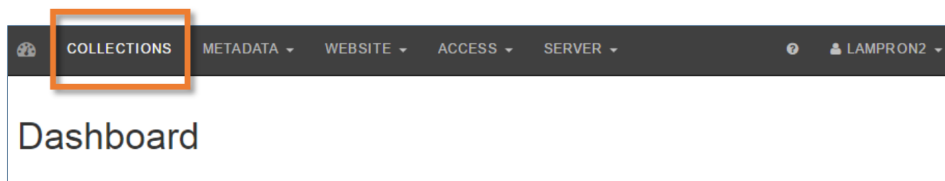
- Importing files from Medusa to the DLS now begins. In the DLS, CURATOR may now check Ingest progress at <https://digital.library.illinois.edu/admin/tasks>
- Once ingest into the DLS is complete, collection objects will show up on Digital Library collections page:
<https://digital.library.illinois.edu/admin/collections/26bb0180-71f6-0134-1e7e-0050569601ca-5/items>
- Prior to proceeding with editing metadata, the **Metadata Specialist** combines administrative metadata from the initial import with descriptive metadata created earlier in the process. (This process is undocumented in the manual at present).

8.5.2. Edit Existing Metadata

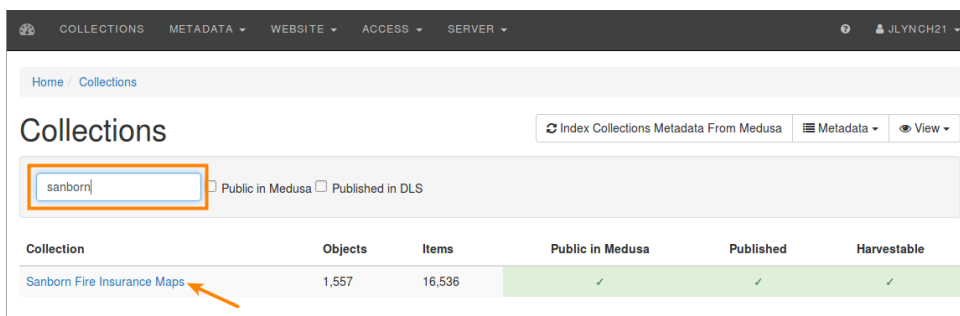
In the collection in DLS under “metadata,” a **Curator** may edit descriptive metadata for collection items in one of three ways: using the native web-based metadata tabular editor, using the item editing interface (not yet documented), or exporting the metadata into a spreadsheet for editing and reingest.

8.5.2.1. Edit Metadata in Web Interface

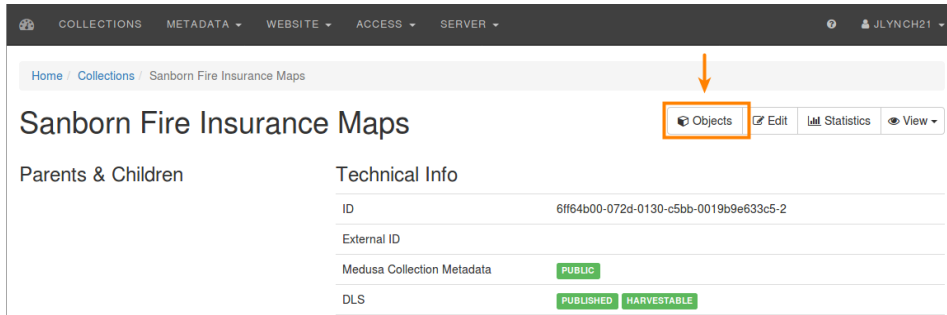
- Log in with your NetID and password at <http://digital.library.illinois.edu/admin>
- Click “COLLECTIONS” in the dashboard



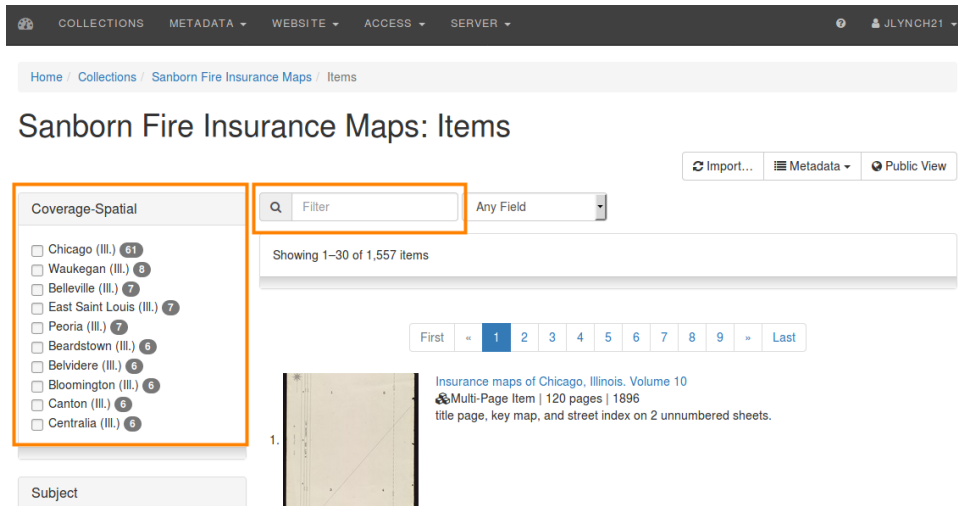
- In the “Filter” box, type the name of the collection to be edited. When the collection appears, click the collection title



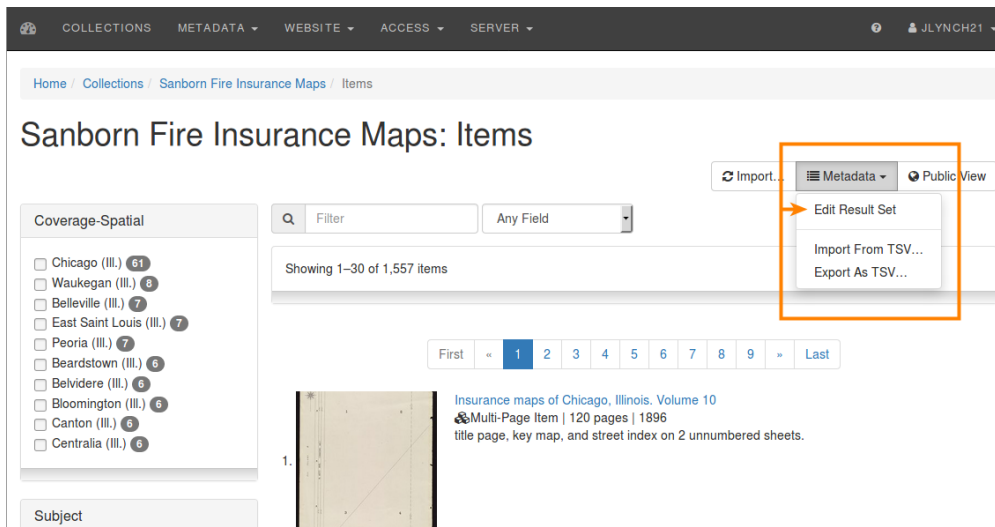
3. Click “Objects” in the top right corner



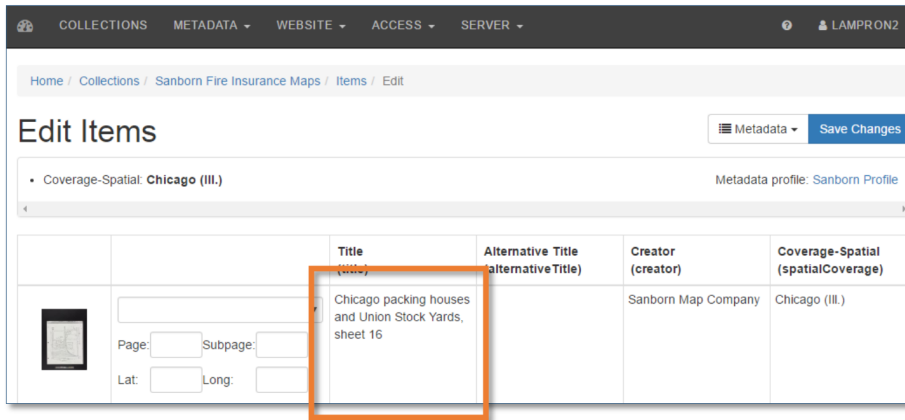
4. (Optional) To edit a specific item or set of items, search for them using the facets to the left, or using the ‘filter’ box



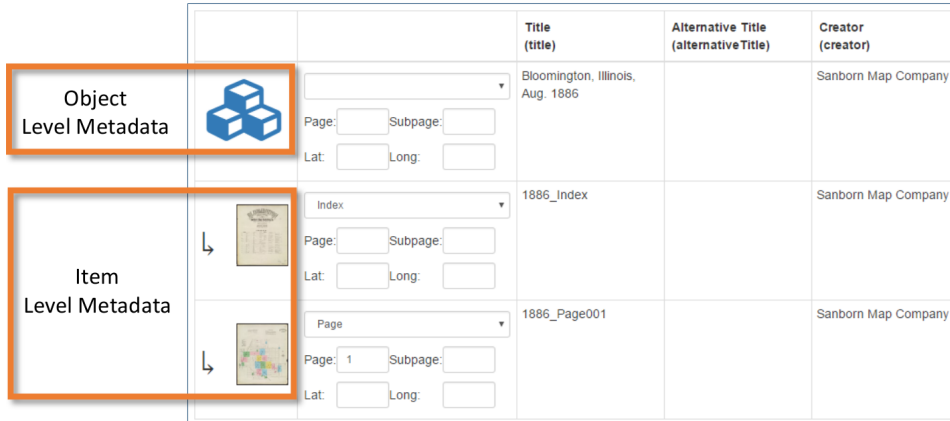
5. Once the items have been filtered (or to edit all items in the collection if no filters were chosen), Click the Metadata tab and select “Edit Result Set” in the drop down menu



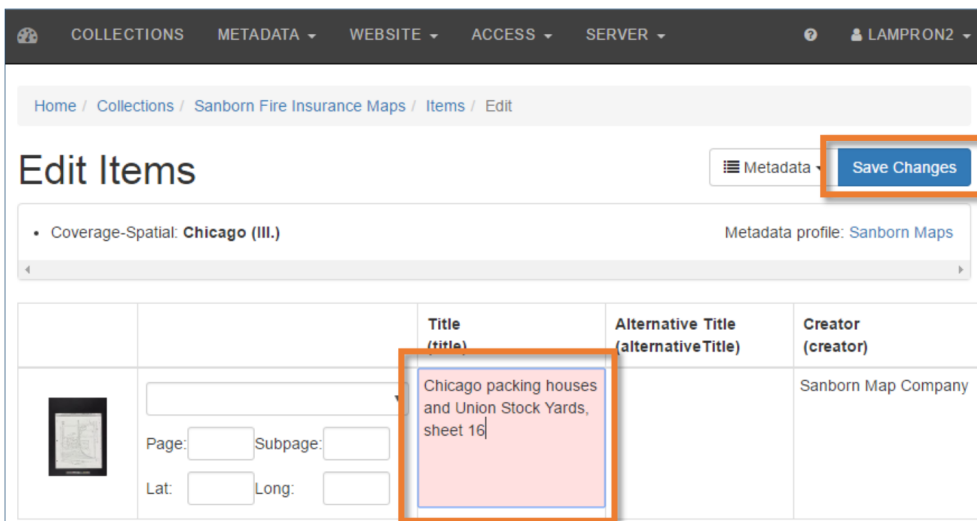
- To create or edit metadata, click the desired cell, then start typing.



Note on Multi-item Objects: Multi-item objects contain object level and item level metadata, The object level is represented with an icon or the designated representative thumbnail, and the item level is represented by a thumbnail next to an arrow, as seen below:



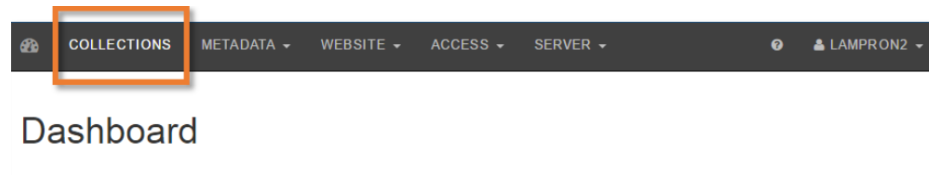
- When metadata has been edited, the box will turn red. Once all edits have been made, click "Save Changes"



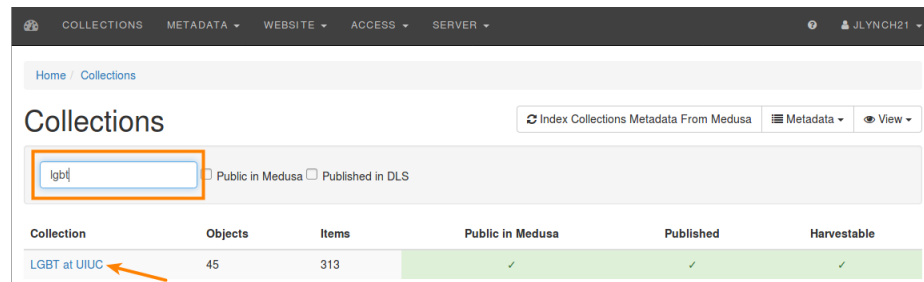
8. Once “Save Changes” has been clicked, the metadata will be available for viewing in the digital library (<https://digital.library.illinois.edu>)

8.5.2.2. Edit Metadata in a Spreadsheet

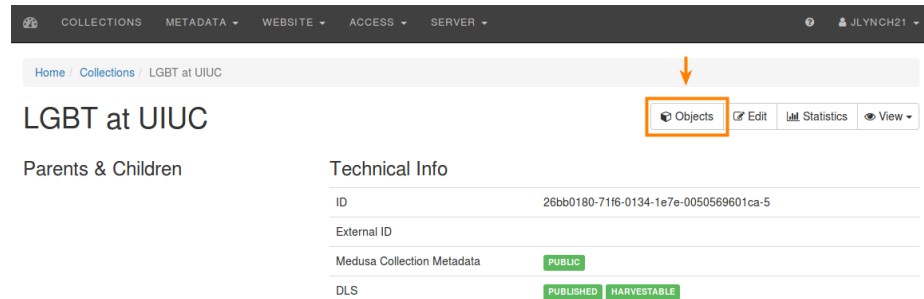
1. Log in with your NetID and AD password at <https://digital.library.illinois.edu/admin>
 - a. Click “COLLECTIONS” in the dashboard



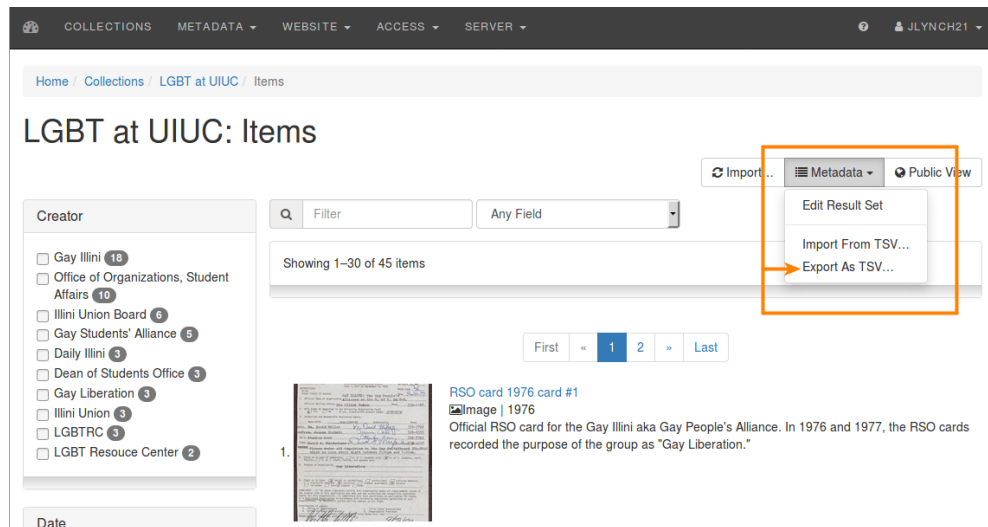
- b. In the “Filter” box, type the name of your collection. When your collection appears, click it



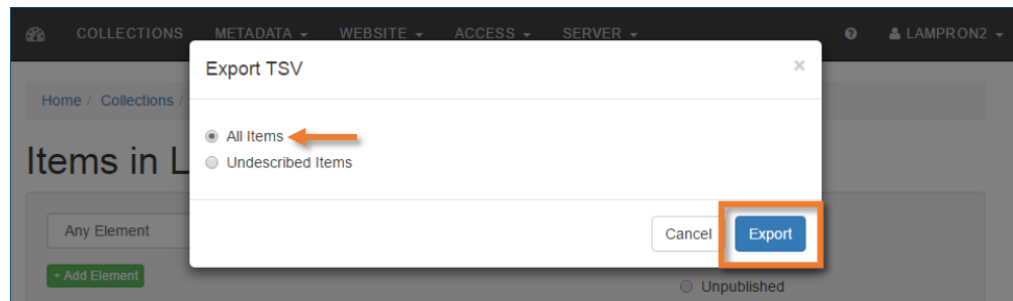
- c. Click “Objects” in the top right corner



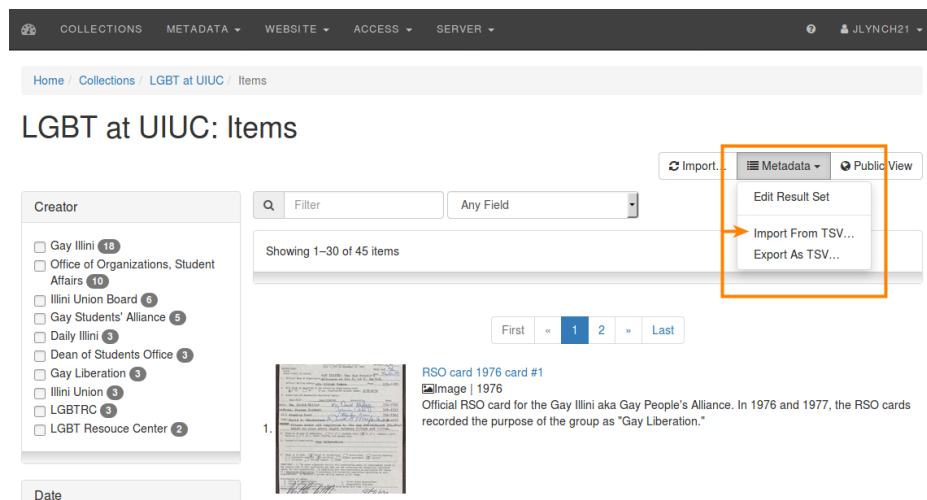
- d. Click the “Metadata” button. From the drop down menu, click “Export as TSV...”

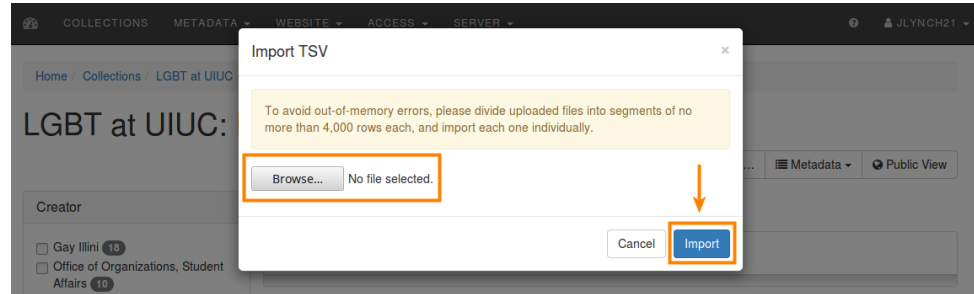


- e. Choose “All Items”, then Click “Export”



- f. Edit the metadata in a spreadsheet editor, preferably Google Sheets, as this is better at preserving diacritics than Excel.
 g. Upload the edited TSV using the same “Metadata” button dialogue used to export the TSV above





8.6. Publish

When a collection is ready to be made public in the Digital Collections, take the following steps:

1. Navigate to the collection record in the Digital Library System's administrative interface and click "Edit".
2. Select the appropriate rights statement.
3. Under "Allowed Roles" at the bottom of the form, check boxes to restrict access as needed for the collection
 - a. For open access collections, do not check anything

- b. For collections restricted to campus-only use, check "UIUC Campus". This will provide access to users within the UIUC campus IP range.

- c. Once you are ready to make the files public, check the “Published” box at the top left and save the form.

The screenshot shows the 'Edit LGBT at UIUC' form in the Medusa interface. At the top left, there is a 'Published' checkbox which is checked and highlighted with an orange box and an arrow pointing to it. Below it is an unchecked 'Harvestable' checkbox. The form contains several input fields and dropdown menus: 'Medusa File Group UUID' (19614d90-8745-0134-1fe4-0050569601ca-7), 'Medusa CFS Directory UUID' (empty), 'Medusa Package Profile' (Compound Object), 'Metadata Profile' (LGBT at UIUC), 'CONTENTdm Alias ("CISOROOT")' (empty), and 'RightsStatements.org Statement' (empty). At the bottom, there are two columns of checkboxes for 'Allowed Roles' and 'Denied Roles'. The 'Save' button is highlighted with an orange box and an arrow pointing to it.

4. In another browser window or tab, go to Medusa, navigate to the collection record, click Edit, check the box “Open metadata to public list of collections.”

The screenshot shows the Medusa administrative interface. At the top, there is a navigation bar with the Medusa logo and a search icon. Below the navigation bar, there is a breadcrumb trail: "Research Data Service > Illinois Data Bank". The main heading is "Edit Collection: Illinois Data Bank". To the right of the heading, there are several icons: "Assessments", "Add Project", and "Export". Below the heading, there are three tabs: "Descriptive Metadata", "Administrative Metadata", and "Rights Metadata". The "Descriptive Metadata" tab is active. Underneath, there is a section for "Subcollections" and a note: "Metadata below will be made public in the digital library's list of collections (https://digital.library.illinois.edu/collections) if set to 'open'." There is a checkbox labeled "Open collection metadata to public list of collections" which is checked. Below this, there are two input fields: "Title" with the value "Illinois Data Bank" and "Repository" with the value "Research Data Service".

5. Return to the Digital Library System’s administrative interface, go to the “Collections” page, and click “Index Collections Metadata from Medusa.” This may take several minutes. If you would like to follow its progress, do so under Server > Tasks in the upper menu.
6. Verify that the collection is accessible in the public interface.

9. Medusa Back-end Management

The instructions below are intended primarily for staff in the Digital Preservation lab. Most curators will not need to do the tasks below, but may find reading the section useful in order to understand the work of the **Digital Preservation Graduate Assistant (DP GA)**.

9.1. Ingest Files into Medusa

Once a file group is created the digital content can be transferred to, or ingested, into Medusa. Most ingest processes are handled through the Preservation Unit unless a particular Producer or curatorial unit has been given permission to ingest content. When files are ready for ingest, the **Digital Preservation Coordinator** or the **DP GA** will initiate deposit.

Each Repository has a somewhat different workflow for ingesting materials into Medusa. It's up to the **DP GA** to maintain good communication with the various departments about how they would like their Medusa collections to look during and after the ingest process. Each Medusa ingest will have a repository, collection and file group associated with it. The **DP GA** will need to utilize the search feature in Medusa to best understand which file groups will go with which collections and repositories. Most file groups will already have collections and repositories in place to be ingested. Overall, the basic workflow structure is:

Stage --> Ingest --> Simple Assessment.

The University Archives, Sousa Archives, and Digitization Services (DS) are the departments that most heavily use Medusa's ingest features, although others are always welcome to learn and benefit from them.

9.2. Ingest Request Management Overview

Below is a brief guide for managing ingest requests from various library units. Presently, each unit has a different way of notifying the **Digital Preservation GA (DP GA)** that there is content to ingest and how they manage tasks.

9.2.1. University Archives

\\lib-archives-fs\UniversityArchives\MedusaStaging

Contact: Grace Moran (gmoran6@illinois.edu) and/or Sarah Harris (srharri@illinois.edu) or whomever they hire as their full-time supervisor.

Note: Archives maintains a workflow spreadsheet:

<https://docs.google.com/spreadsheets/d/1j-ivFQIA57Vh61e3evfhCGk9lgbORiQZN5czVFo9zgM/edit?usp=sharing> Ask to be added as an editor (you may have to use a Google account for this) All UA ingests are located and tracked here. There are tabs for three types of tasks: "Staging" has new

content for which you must make a new collection in Medusa, “Accruals to Medusa” has content being ingested into already existing collections and “Replacements” is for content which you are deleting in Medusa and replacing. Each task also has a “Notes” field with specific instructions for that ingest. You should have a meeting to go over the spreadsheet in more detail.

9.2.2. DS (Digitization Services)

\\digitize.library.illinois.edu\digitize\MedusaStaging

Contact: Angela Waarala (waarala2@illinois.edu)

Note: DS manages their own ingests. Any ingests assigned to the **DP GA** will be assigned as JIRA tasks (see the DS Digitization Backlog here:

<https://bugs.library.illinois.edu/secure/RapidBoard.jspa?rapidView=20029&projectKey=DCC&view=planning.nodetail>). The JIRA tasks will contain specific instructions for each ingest. Occasionally

the **DP GA** may be contacted more informally, via email or chat for priority content that needs to be ingested within the day. For more on DS’s workflow see:

<https://uofi.app.box.com/file/35887488634>

9.2.3. Conservation

\\digitize.library.illinois.edu\ConsUnit\MedusaStaging

Contact: Jody Waitzman (jwaitzma@illinois.edu)

Note: Due to the large amount of content, Conservation staff are moving finished files into the staging area and arranging it by month. There will be a folder for each collection and within that folder will be folders with month and year. What works best is to ingest the previous month’s folders at the beginning of each month. For example, in the first few days in September, ingest all August folders.

9.2.4. Media Preservation Services

\\lib-avpres.library.illinois.edu\AVPres\MedusaStaging

Contact: Cristina Kuhn (ckuhn5@illinois.edu)

Note: Currently, AVPres content is ingested in large batches. The **DP GA** will get an email or a JIRA ticket detailing specific instructions for the content being ingested. The **DP GA** may also meet informally to go over any questions or issues. We have found these to be helpful especially with collections that have multiple file groups for different media formats.

9.2.5. Sousa Archives and Center For American Music

\\lib-scproc\SousaArchives\MedusaStaging

Contact: Scott Schwartz (schwartzs@illinois.edu)

Note: As of Summer 2017 talks have started on formalizing the Sousa ingest process. Talks will continue with the **Digital Preservation Coordinator** and **DP GA** regarding how notification will be sent when there is content ready for Medusa, as well as continuing discussions on processing prior

to ingest. Note that **Media Preservation Services** ingests content into Medusa on behalf of Sousa for collections they digitize.

9.2.6. Illinois Digital Newspaper Project

\\lib-newsproc\IDNP\MedusaStaging

Contact: Will Schlaack (schlaac2@illinois.edu)

Note: Requests will be made through JIRA, and they will delete their own staged files afterwards. Collections tend to be very large, but requests are infrequent.

9.2.7. Rare Book and Manuscript Library

\\lib-scproc\RBML\MedusaStaging

Contact: Ana Rodriguez (anarodz@illinois.edu)

Note: Most Rare Book and Manuscript Library ingests are managed in an automated fashion through Digitization Services. The file share above is utilized for ingests of materials that fall outside of these automated workflows.

9.2.8. Other

The **DP GA** may be contacted directly about ingesting contents from our purchased data program or for other units/projects such as the digital libraries. These will most likely be assigned via JIRA with meetings or emails as needed for longer term projects.

Quick guide to communication on ingest requests:

- *UA – Google Spreadsheet & email*
- *DCC – Jira Tasks and email occasionally*
- *Conservation – check staging area each month*
- *AVPres - Primarily email with meetings as needed*
- *Sousa – Primarily email*
- *Other – most likely Jira or email*

9.3. Ingest Content

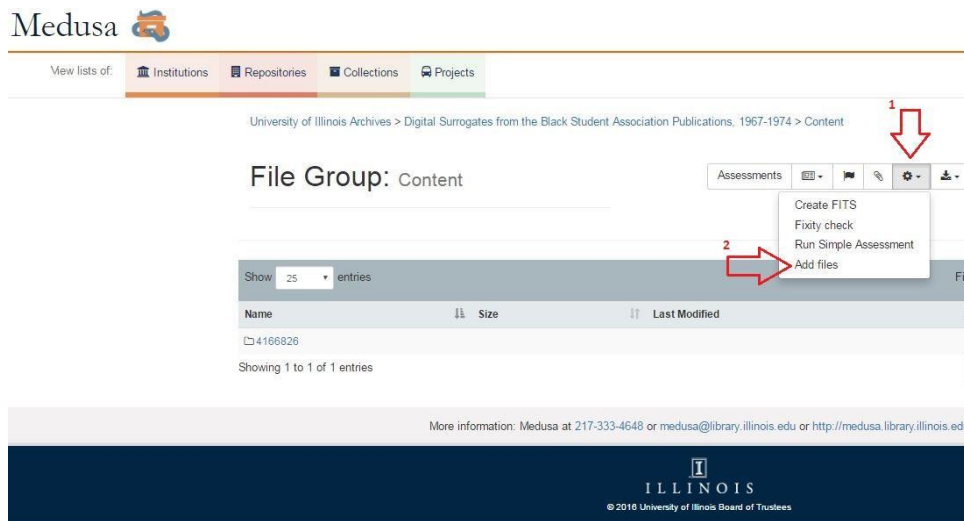
1. During this process, **make sure files have been copied to the UA Medusa Staging area in order to complete an automatic ingest.** Entering in file path information can be found in instructions about adding files to Medusa above.
2. Once the files are staged you have two options depending on the collection:
 - a. If this is a collection that was just created, after staging the content and creating a file group, click on the gear icon and select “Create bit-level file group.” This will create the file group into which your files will be ingested
 - b. **Or** if this is an accrual to an already existing bit-level file group and collection, click on the “edit” icon and under “Administrative Metadata” scroll to “Related File Groups and select the bit-level store you will be ingesting to. This will connect the file group

you just created to the bit-level file group you are ingesting the files into.

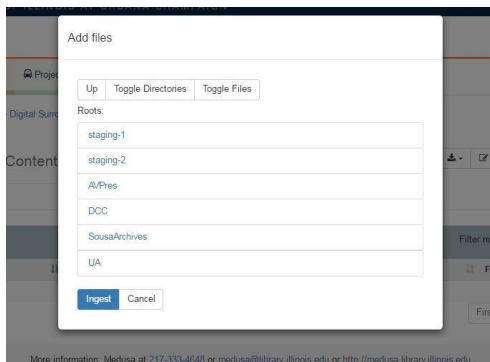
Related file groups

- 2009-2010 batch (bit-level store) Note
- Content (bit-level store) Note
Created by automatic ingest
- Metadata (bit-level store) Note

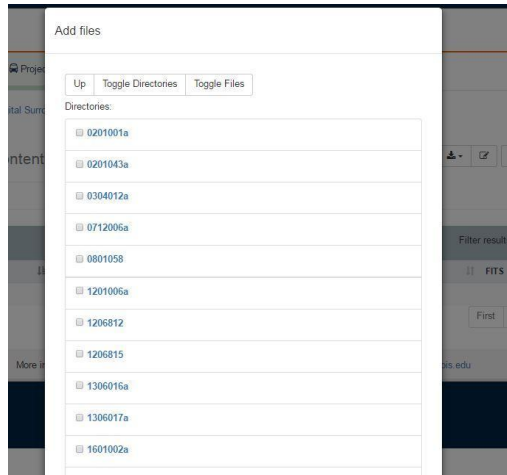
- Next, navigate to the bit-level file group (if you are ingesting files into a subfolder inside the main file group, navigate to the exact folder/level that you want to ingest files into. If the files you are ingesting follow the same folder structure as the file group you can simply ingest at the top most level), click on the gear icon and select “Add Files.”



- A window will pop up displaying the staging areas. Click on the appropriate one and you will see a list of the folders and files. From here you can select the folder you are ingesting or navigate down to the appropriate folder/files you are ingesting and select it/them and click



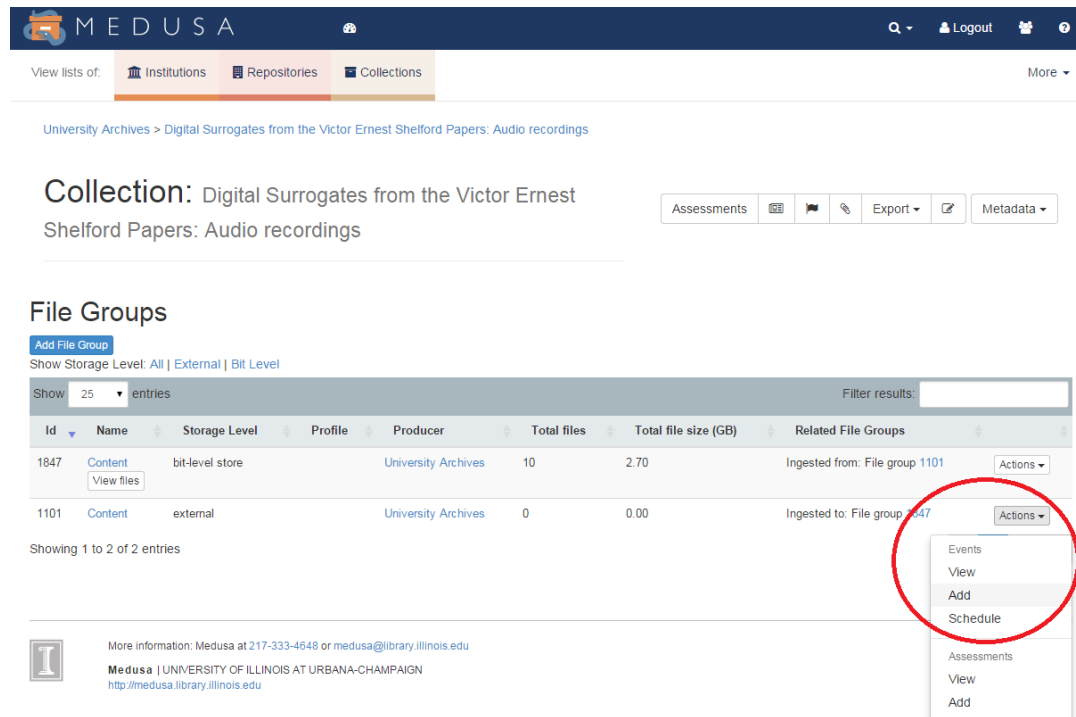
ingest. This will start the auto ingest process.



5. If you are working with University Archives materials make sure to update the Google doc as you go along under the “Completed” tab (input date of ingest, and file deletion, whenever that happens).

9.4. Add Events

1. In some cases you may need to document your steps as “Events” within Medusa. Certain things will automatically create events, such as accruals. Past events, such as information being backed up in Glacier (now legacy), will be available for viewing in the events menu. To create an event, click on “Actions” and “Add” an event.



View lists of: [Institutions](#) [Repositories](#) [Collections](#) [More](#)

University Archives > Digital Surrogates from the Victor Ernest Shelford Papers: Audio recordings

Collection: Digital Surrogates from the Victor Ernest Shelford Papers: Audio recordings

Assessments [📄](#) [🗨️](#) [🔗](#) Export [📄](#) Metadata [⌵](#)

File Groups

[Add File Group](#)
Show Storage Level: All | External | Bit Level

Show 25 entries Filter results:

| Id | Name | Storage Level | Profile | Producer | Total files | Total file size (GB) | Related File Groups | Actions |
|------|---|-----------------|---------|---------------------|-------------|----------------------|--------------------------------|-------------------------|
| 1847 | Content View files | bit-level store | | University Archives | 10 | 2.70 | Ingested from: File group 1101 | Actions |
| 1101 | Content | external | | University Archives | 0 | 0.00 | Ingested to: File group 1847 | Actions |

Showing 1 to 2 of 2 entries

More information: Medusa at 217-333-4648 or medusa@library.illinois.edu
Medusa | UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
<http://medusa.library.illinois.edu>

9.5. Approve Ingests

Once you finish the Add Files process, you will then need to approve ingest from the Medusa Dashboard.

1. In the Medusa Dashboard click on “Accruals.” This page shows you all the current jobs ingesting to Medusa. The initial “Add Files” action in the file group page should have added the ingest onto this Accruals page.
2. On this page the most relevant thing to note is the “Status” field. Some statuses you will see include:
 - a. Checking for existing files/Checking sync – These are visible when the “Add Files” action has occurred very recently. Once checking sync is done you will be able to approve the ingest. No Action Is Required while at checking sync stage. Basically, “Checking for existing files” checks the staging area for the files being ingested and “Checking sync” checks that they synced properly onto the Medusa file server so that they can be ingested. These statuses are usually very brief, though if you just moved files within the specific staging area it might take longer.
 - b. Awaiting approval – First level of approval. This can be approved by the person who added the files.
 - c. Awaiting Admin Approval – second level of approval. This must be approved by a Medusa admin, typically the DP GA.

- d. Copying files/running file assessment - Files are being copied onto the Medusa production server and indexed into the filesystem.
 - e. [Blank] - Once the above process has completed, the ingest will disappear from the Accruals list. This means it is now available in the web interface and backed up to secondary storage, and can therefore be deleted from staging when desired.
3. Ingest Status - Underneath the Status section will be one of two messages that notify you if the job is progressing or not:
- a. JOB OK - The system thinks everything is going as it should. No action is needed, unless you see that a job has been stuck in one portion of the process for an unusually long amount of time.
 - b. JOB ERROR - An error has been detected in the ingest process. Make sure that you can verify that the job does not appear to be progressing, as sometimes it will give the error but still be working. If it has indeed stalled, email the general Medusa support list (UI-LIB-MEDUSA medusa@library.illinois.edu) and notify them that Medusa has encountered an error in ingesting and ask if they can look into it.

9.5.1. Medusa Notification Emails

Digital preservation staff managing ingests will receive a number of email notifications as files go through the ingest process. If everything goes correctly, the **DP GA** should receive three emails total. The emails are related to the accruals tab on the main dashboard.

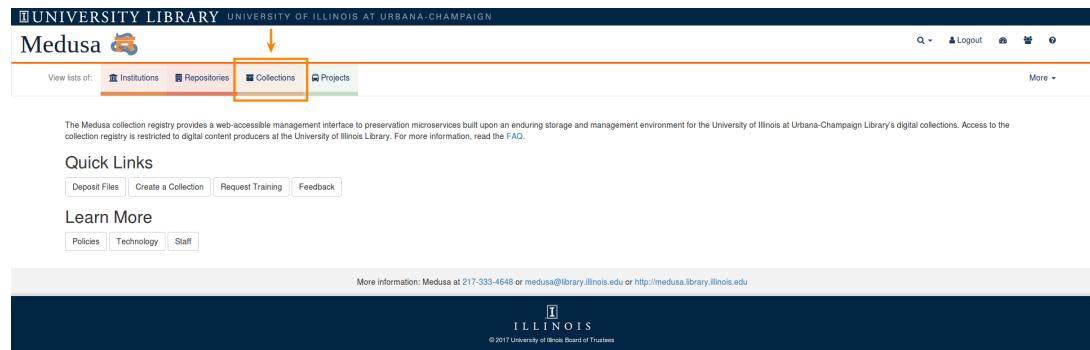
1. **Subject: Medusa accrual pending-** This email is triggered when you select Add Files in the file group page and select content to be ingested. The email describes in detail the content being ingested, the staging area and what the file structure will look like after ingest. It also shows you if there are any md5 conflicts (which you will want to look out for). In essence this email informs you that this ingest may now be approved at the accruals tab. The person who added the files should get this email.
2. **Subject: Accrual assessment completed.** This email is triggered when the ingest has finished and assessed. It includes information about the staging path and the collection and repository the files were added to.
3. **Subject: Accrual completed.** This email notifies you that the accrual was completed. It shows you what the accrual directory is (ex. 872/2948, 872 being the collection number and 2948 being the file group number). It also includes the name of the collection and repository that your files were ingested into.

Note: Emails two and three will usually arrive at the same time. As of July 2020, an error will sometimes cause duplicate emails of two and three to send, resulting in you receiving four emails when one ingest finishes.

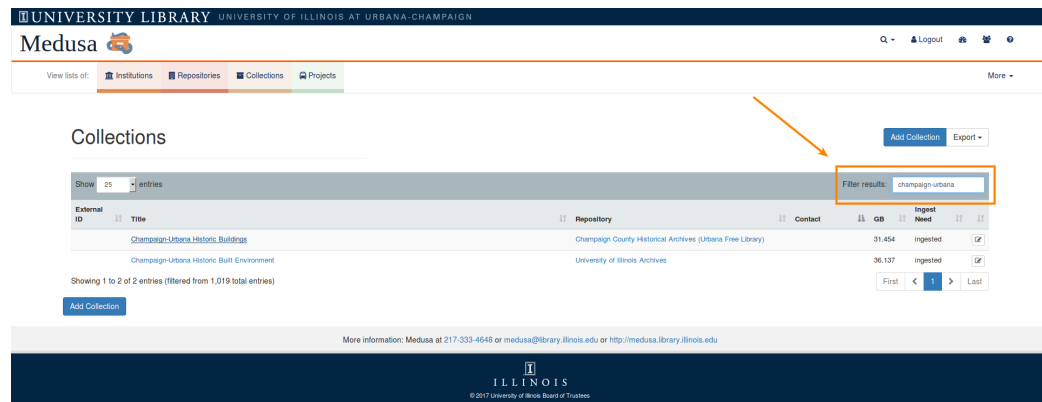
9.6. Add items to Digitization Queue as a Medusa Project

Medusa “Projects” are used to create digitization queues. They are listed at <https://medusa.library.illinois.edu/projects> and are used primarily by staff in Digitization Services. Every project is linked to a Medusa Collection.

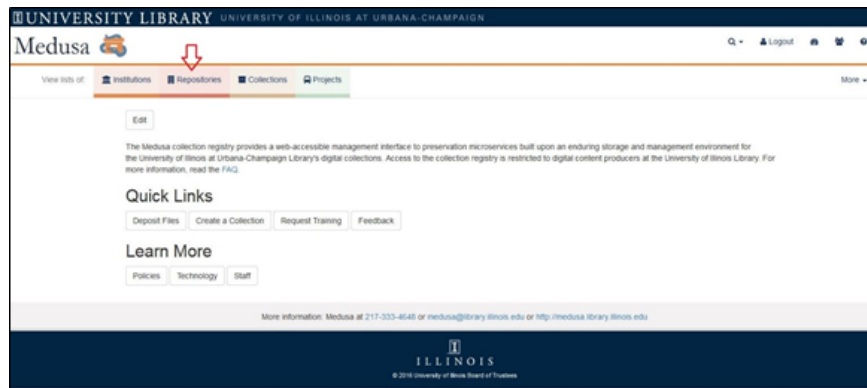
7. Locate your Collection in Medusa by either browsing Collections or Repositories. To search for the collection through “Collections”:
 - a. Go to the Medusa website: <https://medusa.library.illinois.edu/>
 - b. Click “Collections”. Login with University NetID and password if prompted



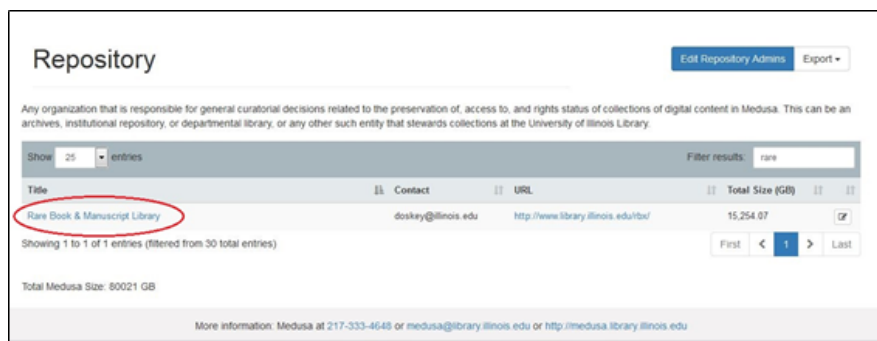
- c. Search for the collection created in Step 1 above by typing the Collection’s name into the filter box.



d. Alternatively, you may find your collection by going to repository

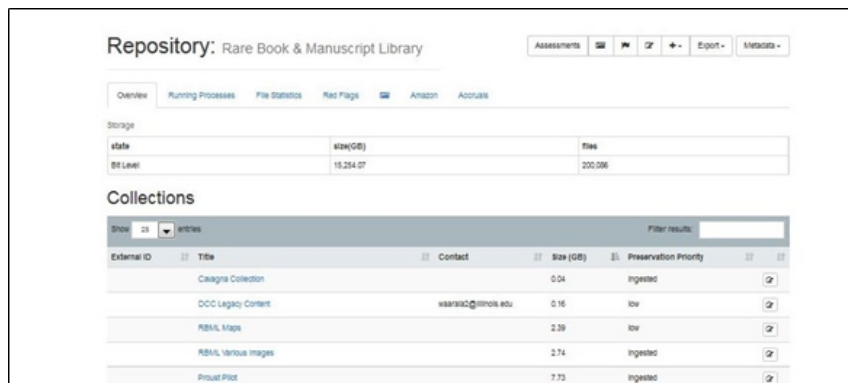


i. search for your repository in the filter box



ii. Click the title of your repository

iii. Click on the title of the collection created in step 1



e. Click “Add Project”



f. Enter metadata for the project. This metadata describes as a whole this particular batch of items about to be digitized. The following fields are required:

- i. Title
- ii. Manager email

- iii. Owner email
- iv. Start date
- v. Status
- vi. **Note:** This screen also features the fields “ingest folder” and “destination folder UUID” related to the automated ingest feature; these are not documented in this manual at present (coming soon).

g. To save and create the project, click “Create” at the top left.

The screenshot shows the 'New Project' form in the Medusa interface. The form is titled 'New Project' and has a 'Create' button highlighted with an orange arrow. The form includes the following fields:

- Title (text input)
- External id (text input)
- Manager email (text input)
- Owner email (text input)
- Start date (text input, value: 2017-07-19)
- Ingest folder (text input, value: Click label to select)
- Destination folder uuid (text input)
- Status (dropdown menu, value: active)
- Summary (rich text editor)
- Specifications (rich text editor)

h. On clicking “Create,” you will be redirected to a page with an interface for the project:

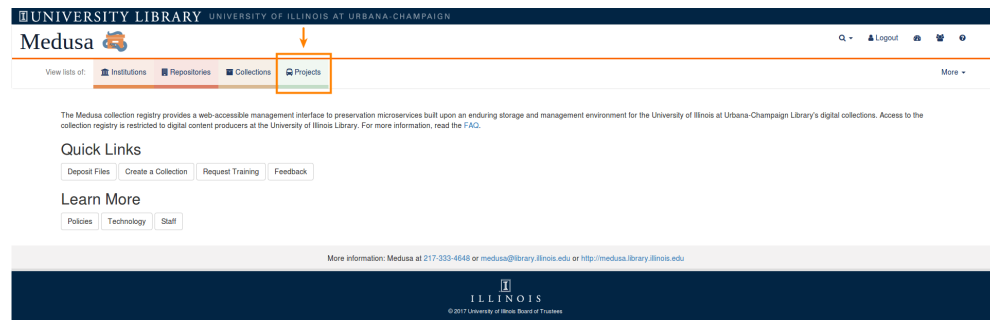
The screenshot shows the Medusa project interface for 'Test Project'. At the top, there is a navigation bar with 'UNIVERSITY LIBRARY UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN' and 'Medusa'. Below this, there are tabs for 'Institutions', 'Repositories', 'Collections', and 'Projects'. The main content area shows 'Project: Test Project' with buttons for 'Add Item', 'Export', and 'Metadata'. There are also buttons for 'Delete checked', 'Mass edit', and 'Ingest Items'. A table header is visible with columns: Action, Mass Action, Item Information, Unique Identifier, Batch, Barcode, File Count, Notes, Record Series ID, Bib ID, Rights Information, Item Number, Local Title, Status, and Reformatting Date. The table currently shows 0 entries.

8. Ideally, a **Curator** has already provided a metadata spreadsheet to the **Metadata Specialist** for use in this step. **Digitization Services** will upload this spreadsheet, possibly after making modifications for administrative purposes, into Medusa to establish a digitization queue.

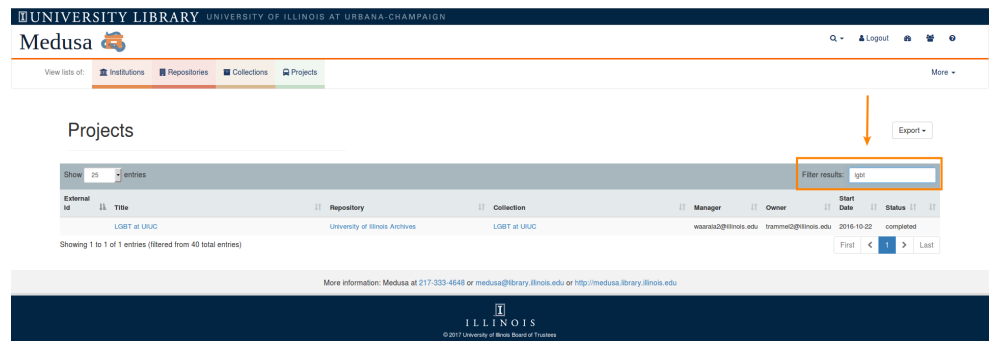
A comprehensive overview of Project metadata is described below, primarily for the benefit of Digitization Services staff. Technical staff may use any spreadsheet tool for editing the template provided above but Google Sheets is recommended. It allows for smoother collaboration, oversight, and tends to format more cleanly and easily than Excel when converting to CSV. To note:

- a. The inventory is used during inventory to identify objects and match them to the correct bibid or identifier
- b. The lab cannot digitize and name content with correct file names or ingest it into a repository unless the inventory is clear and correct
- c. To see all available fields, please consult the [Medusa Database Inventory Template](#). The template has columns suitable for a wide range of cataloged and uncataloged materials. Use all columns relevant to your project. The following columns are for items in the Voyager Catalog:
 - i. Barcode (may be used either for items in or not in the Voyager Catalog)
 - ii. Call Number (required)
 - iii. Title (required)
 - iv. Author (required)
 - v. Imprint (required)
 - vi. BibID (required). Used for file naming
 - vii. OCLC number
 - viii. Item number
- d. The following fields are for archives items not in the Voyager Catalog:
 - i. Unique Identifier (required). Used for file naming
 - ii. Record Series ID (required)
 - iii. Archival Management System URL (required). Taken from Archon
 - iv. Series
 - v. Sub-series

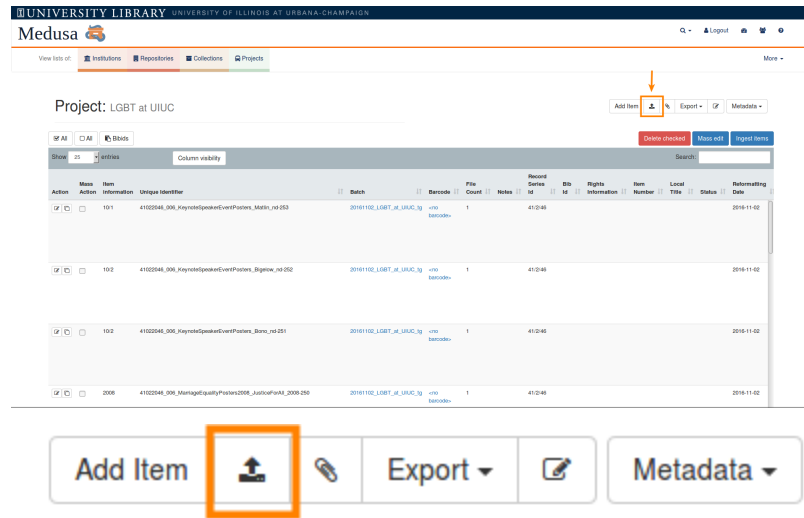
- vi. Box
 - vii. Folder
 - viii. Item title
 - ix. Creator (required)
 - x. Date (required). A significant date associated with object
 - xi. Rights Information
 - xii. Local title
 - xiii. File count
 - xiv. Notes
 - xv. Batch
 - xvi. Barcode (may be used either for items in or not in the Voyager Catalog)
- e. Note that the rest of the columns are for administrative metadata entered by DS staff
- f. Format the inventory spreadsheet barcodes column by doing the following:
- i. Select the barcodes column
 - ii. Go to Format Cells
 - iii. Go to the Number tab
 - iv. Select the Custom category
 - v. Select “0” code to format the barcodes correctly for upload
- g. Review the directions for saving a spreadsheet in the correct format. For Windows use “Unicode Text.” See the figure below for reference.
9. In Medusa, **DS Staff** uploads inventory CSV spreadsheet to project.
- a. [Login to Medusa](#)
 - b. Go to the green “Projects” tab.



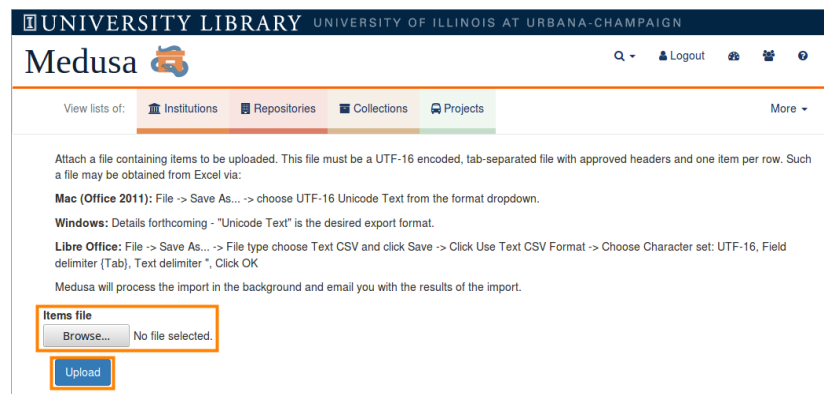
- c. Use the “Filter” textbox to locate your respective project and click on it.



d. Click on the upper right hand corner to the “Upload” button []



e. Check to make sure CSV file meets the specifications described on the upload page. Select your file with the “Browse...” button and click “Upload”



- f. You will receive an email confirming your upload including the number of items that successfully uploaded
- g. It is wise to confirm your upload on your project page to make sure all of your items appear. To do so, locate you collection on the project page and compare the items there to those on the original CSV you uploaded.
- h. Digitization occurs.

10. In Medusa, a **DS STAFF MEMBER** ingests content files.

9.7. Delete Content from Medusa

Recently, an option for deleting content through the Medusa platform has been implemented. However, deleting content is generally not done without a compelling reason such as replacing restructured or erroneous content. If you need to delete an entire file group:

1. Click on the Bit-level file group,
2. Next, click on the “edit” icon.

3. When you are on the Edit File Group page, click on the trash icon to delete. A pop-up will ask if you are sure you wish to delete the file group.
4. Click “OK to proceed.”
5. The next page will ask you to document the reason for deletion. Put in any relevant information for why this content is being deleted.
6. Click “Create.”

This process will notify Medusa Managers (currently **Preservation Librarian, Digital Preservation Coordinator, Medusa Research Programmer**) that content has been requested for deletion. One of them must approve it in order for the content to be deleted. When the deletion is approved by a Medusa Manager with “Medusa File Group deletion approve” as the subject and more information about the deletion in the body of the email. Currently deletions are stored for 30 days in the event that the deletion must be undone.

9.8. Delete Individual Files or Folders from a File Group

There is no way in the Medusa web application to delete **files or folders within a file group**. To do this, you have to log in to the preservation storage directly and delete any files or folders manually. This option is to be used only in rare cases of need.

9.9. Restructure Content in Medusa Storage

You may need to modify files or folder structures once content has been ingested into Medusa due to content restructuring or error. If the **DP GA** receives a request to significantly modify content which has already been ingested, accessing the content directly on Production storage may be required. If there is an **alternate option** to directly accessing Production storage, such as downloading the file group from the collection registry and modifying it on your workstation, and the option does not take an inordinate amount of time to complete, **use that option**.

It is **HIGHLY recommended** to create a copy of the folder containing erroneous content from Medusa Production to a working storage area and then replacing the folder in production. This provides you with a working copy in the event that you inadvertently delete content or make a mistake. If you are working directly on production there are little to no safeguards against mistakes. **If you erroneously delete data while working on production storage it may not be easily recoverable – if at all.**

9.9.1. Editing Content on Medusa Production/Primary Storage

Because this requires detailed information about local servers and access protocols, please contact the **Digital Preservation Coordinator** for internal documentation on this workflow.

9.10. Notes on Deleting or Moving/renaming/restructuring Files and Folders

Whenever moving files, make sure you use the file copying program TeraCopy to do so. If you do not seem to have TeraCopy installed on your computer please contact the **Digital Preservation Coordinator**.

9.11. Storage Growth Timeline (Documentation Coming Soon)

9.12. Medusa Virtual Repositories (Documentation Coming Soon)

9.13. Digital Content Format Registry (Documentation Coming Soon)

10. Digitized Books Tracking Tool (Documentation Coming Soon)

11. Useful Tools

11.1. Speedwagon (Documentation Coming Soon)

11.2. Other Tools

Teracopy

<https://wiki.cites.illinois.edu/wiki/display/LibraryDigitalPreservation/Teracopy>

Treesize Pro

<https://wiki.cites.illinois.edu/wiki/display/LibraryDigitalPreservation/Treesize>

OTRS

<http://www.library.illinois.edu/it/helpdesk/service/OTRS>

Jira

Use this platform to add a description of tweaks that need to be added to the Medusa interface.

You must have permission to access Jira. If you do not please contact Tracy Popp (tpopp2@illinois.edu) and she will contact the Jira administrator:

<https://bugs.library.illinois.edu/browse/MED/?selectedTab=com.atlassian.jira.jira-projects-plugin:issues-panel>