Contents

MANUAL FOR DIGITIZING SPECIAL COLLECTIONS .................................................................................

Software ...................................................................................................................................................... 1

ABBY FineReader 12 ................................................................................................................................. 1

Scheduling OCR PDFs creation for typed text: ....................................................................................... 1

Scheduling OCR PDFs creation for written text: ..................................................................................... 6

Adobe Bridge ............................................................................................................................................... 7

How to check and change metadata using Adobe Bridge: ..................................................................... 7

Jp2Cpnverter 0.3.2..................................................................................................................................... 14

Jp2Converter 0.3.2 – created by Henry Borchers ................................................................................. 14

Advanced Renamer .................................................................................................................................... 18

Renaming: ................................................................................................................................................... 18

ReNamer Lite ................................................................................................................................................ 22

Renaming: ................................................................................................................................................... 22

HathiTrust Preparation using Speedwagon .............................................................................................. 26

Hardware and Equipment .......................................................................................................................... 34

BC100 .......................................................................................................................................................... 34

RCAM – Reprographic Camera with Copy Stand .................................................................................... 34

The copy stand: ........................................................................................................................................... 35

Using the Camera: ..................................................................................................................................... 36

Leveling the Camera: ................................................................................................................................. 37

Extending camera: ...................................................................................................................................... 39

Light maintenance: ..................................................................................................................................... 39

Alternative light set-ups: ........................................................................................................................... 40

Using the light box and table: ................................................................................................................... 40

Workflows .................................................................................................................................................... 43

BC100 Content Workflow .......................................................................................................................... 43

RCAM Content Workflow .......................................................................................................................... 44

Reprographic Procedures Set-up ............................................................................................................. 45

Reprographic Procedures for Negative Digitization .............................................................................. 47

Quality Assurance Procedures .................................................................................................................. 52

Medusa Packaging and Ingest .................................................................................................................. 55
HathiTrust Packaging and Ingest ........................................................................................................ 56
Social Media Best Practices ........................................................................................................... 59
Software

ABBY FineReader 12

We use Abbyy FineReader to create OCR PDFs from image files. Abbyy Hot Folder is included in Abbyy FineReader and is used to schedule “tasks” for PDF creation.


Scheduling OCR PDFs creation for typed text:

1. You can either open Abbyy Hot Folder by going through Abbyy FineReader or by searching for Abbyy Hot Folder on its own.
2. Once you have Abbyy Hot Folder open, you will see any previous tasks and can create a completely new task by selecting the “New” button in the top left corner.

   a. You can copy or modify a previous task in the queue by right clicking it.

   b. You can import an already made task and modify it from Z:\DCC Unprocessed Files\+DCC TOOLS\DCC_workflow_tools\abby\ds_abbyyscripts_2018.
3. When you create a new task or modify a previous task, a “Task Setting” window will pop up.
   a. If you modify an existing task or import a task recipe, the “Task Setting” window will have information already inputted, but make sure that it is correct before scheduling!

   a. You can “Schedule” a new task on the left hand side to “run once” or “recurring.” Normally we select the “Run once.”
   b. Put in the start date and time. If you are scheduling more than one task, remember to stagger them so that they run at different times. (We have found that the software works quicker when you do this).
   c. You can also rename the task to reflect the item or library you are creating the PDF for.
4. Once you’ve scheduled, you can move to the “open” tab on the left hand side. Select the “File from folder” option and use the “browse” to locate the folder or folders with the files you would like combined into an OCR PDF.
   a. Make sure to “Keep in the original folder.”

5. Move to “Process document” under the “Process” tab on the left hand side.
   a. Analyze and read
      i. Document Language: select “Edit” and choose up to 6 languages depending on the item
      ii. Document processing settings: “Read page images”
      iii. Color mode: “preserve colors”
      iv. Document analyze areas: “automatically analyze areas”
b. “Recognition Options...” should look like this for typed text:

![Recognition Options dialog box with options to unclick headers and footers, table of contents, and numbered lists.]

UNCLICK all

(caption: Can select font.)

---

c. “Preprocessing Options...” should look like this: UNCLICK all

![Preprocessing Options dialog box with options to unclick for general fixes and photo correction.]

UNCLICK all
Next click on the “Save and Share” option in the “Save” tab on the left. This is where you will select the task to save as “PDF Document”, browse for the folder you would like the PDF to save to, and insert file name.

a. Make sure to select “Create a separate document for each folder” in the “Output” drop down menu if you are processing multiple unique IDs/BibIDs at once.
   i. Make sure that the file name remains original naming by using “[F].”

b. The “Options..” next to the “Save as” section should look like this:
Select the “Custom…” drop down menu in the “Image Settings” and make sure that the custom settings look like this:

![Custom Settings](image)

**Scheduling OCR PDFs creation for written text:**

1. The only real change for written text is changing the “Recognition options…” in the “Process” tab on the left hand side. The “Recognition options…” should have the reading mode changed and look like this:

![Recognition Options](image)
Adobe Bridge

We use Adobe Bridge to check technical and descriptive metadata. Metadata should be checked in Bridge during self-quality control and during final Quality Assurance.

*How to check and change metadata using Adobe Bridge:*

1. Open Adobe Bridge and navigate to “Output” files you would like to check.
2. Select a file or files to view the metadata on the left hand side. Check to make sure that the file or files have the correct mandatory technical and descriptive metadata.
   a. Verify correct technical metadata
      i. Preservation
         1. File Properties
            a. Document Type: TIFF image
            b. Resolution: 600 ppi
            c. Bit Depth: 16
            d. Color Mode: RGB
      ii. Access
         1. File Properties
            a. Document Type: TIFF image
            b. Resolution: 400 ppi
            c. Bit Depth: 8
            d. Color Mode: RGB
            e. Color Profile: sRGB IEC61966-2.1
   b. Verify correct descriptive metadata
      i. IPTC Core
         1. Creator: University of Illinois Library
         2. Creator Address: 1408 W. Gregory Drive
         3. Creator City: Urbana
         5. Creator Postal Code: 61801
         6. Creator Country: United States
         7. Creator Phone: +1(217)2442062
         8. Creator Email: digicc@library.illinois.edu
         9. Creator Website:
            http://www.library.illinois.edu/staff/preservation/digitization/
3. Check that technical and descriptive metadata fields are all the same for all the files. Non-mandatory fields will have a “multiple values” entry and that is fine!
4. The descriptive metadata can be changed in Bridge – **it cannot change technical metadata.**
   **Files will need to be outputted again from the original session using Capture One in order to fix technical metadata issues. Photoshop can be used for individual files.**
   a. Within the Metadata workspace, click on the “stacks” to replace the metadata for the selected files.
Please note – If you do not see the UIUC_metadata profile, you can “load” the UIUC_metadata profile under the “Create Metadata Template” option within the “stacks” dropdown menu. The “UIUC_metadata” profile can be found here: “Z:\DCC Unprocessed Files\+DCC TOOLS\DCC_workflow_tools\Adobe Bridge”.
5. Double check that the metadata has been applied by selecting the file or files and checking the metadata on the left hand side!

Please find the official Adobe Bridge User Guide here: https://helpx.adobe.com/bridge/user-guide.html
Jp2Cnverter 0.3.2
We use two scripts to covert tiff files into jp2000s - jp2Converter 0.3.2 and JP2Create. Both work in Windows command line program.

Jp2Converter 0.3.2 – created by Henry Borchers
Jp2Converter 0.3.2 will convert access tiff files into access jp2 files. This script is generally used for Digital Library packaging and will convert preservation tiffs if in an access folder.
https://www.library.illinois.edu/dccdocs/dcc_jp2_converter/usage.html#

1. Navigate to the session you would like to create jp2 files for. Make sure that the session has an “access” and “preservation” folder with files inside of them.

a. Look inside the “access” folder and make sure that the files have access specifications: 24 bit depth and 400 dpi
2. Open the Command Line
   a. The Command Line should look like this:

3. To use the jp2converter script type “makejp2” and copy paste the root folder file path to
the access files you would like converted and press enter when done to start the script.
   a. Type “--remove” after file path if you would like the access tiff files to be deleted
once converted to jp2s
b. You can also clean up the files once they have already been converted by typing “-clean”

4. Once you hit enter and initiate the script, it should look like this:

```
C:\Users\cgrody3> makejp2 "C:\Users\cgrody3\Desktop\20180830_WWIMaps_er" --clean
```

5. Once all access tiffs have been converted to access jp2s, it will look like this:

```
C:\Users\cgrody3> makejp2 "C:\Users\cgrody3\Desktop\20180830_WWIMaps_er" --remove
Script for creating JP2 files from tiffs for the Medusa Digital Library.
Written by Henry Borchers
Version: 0.3.2
```

6. You can double check that all access tiffs have been converted by navigating back to the session you needed converted and access files should now look like this:
Advanced Renamer

Advanced Renamer is one of the two renaming software we use to rename files and folders.

To learn more about Advanced Renamer, please see the user manual here: https://www.advancedrenamer.com/user_guide/gettingstarted

** Note: there is no undo button when renaming files on the server **

**Renaming:**

1. Open Advanced Renamer and change whether you would like to rename files or folders.
2. Add a method in the “Renaming method list.” Some common methods we use is “remove”, “renumber”, “replace” and “add”; although you may use other methods.

3. You can change where you would like the renaming method to be applied.
4. As an example, here is what it will look like when you remove bidIDs from file names.
   a. Add the files by dragging and dropping them into the Advanced Renamer.

   b. A sample of the new file name will be displayed and you can adjust the “remove count” to reflect where you would like to begin removing information from the file name.
You can stack several “methods”!

c. Once you are happy with the new filename, click “Start Batch” to rename the files!
ReNamer Lite

ReNamer Lite is one of the two renaming software we use to rename files and folders. **Note: there is no undo button when renaming files on the server**

Renaming:

1. Open ReNamer Lite and make sure there is no files queued in it or “rules” created. It should look like this.

   ![ReNamer Lite interface](image)

   - Click here to add a rule
   - Drag your files here

   a. You can also select the “New Project” option under the “File” tab to clear.

   ![New Project option](image)

   - Drag your files here
2. Click on the “+/Add” or the “Click here to add a rule” to select how you would like to rename the desired files. Some common methods we use is “delete”, “remove”, “insert” and “replace”; although you may use other methods.
   a. Select which “rule” is appropriate for the renaming job

You can stack several “rules”!
3. As an example, here is what it will look like when you remove bidIDs from file names.
a. Add the files by dragging and dropping them into the ReNamer Lite or by selecting the “Add Files” option and navigating to the files.

b. Set a “remove” rule and put in the bidID.
4. The “New Name” will be displayed in red and will change when you update the rule.
   a. You can update the rule by double clicking on the rule applied.
   b. You can preview the new file names by selecting the “Preview” option.
   c. When you’re done, click the “Rename” option and files will be renamed!
HathiTrust Preparation using Speedwagon

HathiTrust ingest requires a separate workflow and file packaging than the UI Digital Library. Speedwagon is a collection of tools and workflows for DS created by Henry Borchers that automates HathiTrust file packaging.

1. Please see the HathiTrust Packaging and Ingest workflow for procedures on Jiria task and proper HathiTrust Submission string. Open Speedwagon which is the tool we use to package and verify HathiTrust files.
   a. Download Speedwagon if not already on computer here: \storage.library.illinois.edu\HathiTrust\Tools\beta

2. Within Speedwagon, select the “Convert CaptureOne TIFF to Hathi TIFF package” in the “Tools” tab. This tool will split the files into folders based on bib IDs.
a. Click the input and output space to select folders – you can select the same location for both and hit “start.”

b. Once the task is completed, there will be duplicate files in the folder. These files can be deleted since the files are now split into folders.

3. Once duplicate files are deleted from directory, go back to Speedwagon and switch to the “Workflows” tab and select “Validate Metadata” from the list.
   a. Make sure to select the “input” location and file type under “profile.”
4. Next, create JP2 files by opening the command line and typing “makejp2 “file path” --profile=hathiflat --remove” and hit enter. See tutorial on JP2 creation for more detail.

5. Next, generate OCR (Optical Character Recognition) by navigating to the “Generate OCR Files” option in the Workflows” tab of Speedwagon. Remember to select JPEG 2000 as file type now.
6. Next, generate MARC record in Speedwagon by navigating to the “Generate MARC.XML Files” in the “Tools” tab. Remember to select an input folder.

a. A MARC record will be created in the bib ID folder. Check the MARC record and, in particular, check line 955 to make sure bib ID is there.
7. The next step is “Hathi Prep” which will create YML files and allow you to select title pages to display in HathiTrust. Navigate to “Hathi Prep” in the “Workflows” tab in Speedwagon. Select the input location and file type.

![Hathi Prep Workflow](image)

a. A box will pop-up that has a dropdown menu to select the title file.
b. Once title pages are selected, the YML files and checksums will be created.

c. You can check that all files are created by looking at the folders. See below for JP2, YML, Checksum, MARC, and text files.

8. The next step is to “Verify HathiTrust Package Completeness” which will check to make sure that the batch contains all the files needed for HathiTrust. Navigate to “Verify HathiTrust Package Completeness” in the “Workflows” tab and enter the “source” of file path. Change the settings for “Check for the page_data in meta.yml” and “Check ALTO OCR xml files” to “False.” Change “Check OCR sml files are utf-8” to “True.”
a. Check status of files in the text space in Speedwagon and if no errors occurred this is what it will say:

9. Now that all the required files have been verified, metadata needs to be sent to HathiTrust. In the Jira task, assign a subtask to Myung-Ja Han, the Metadata Librarian, titled “MJ send metadata to Zephir” and provide MJ with the file path to the RBML HathiTrust prepped files.

10. Wait until MJ has marked the subtask as “complete” before proceeding to the next steps.

11. Once MJ has sent metadata to HathiTrust, go back to Speedwagon and navigate to “Verify Checksum Batch [Multiple]” in the “Workflows” tab. Remember to set input location.

12. Before you zip the package, copy original packaged files to:
   \storage.library.illinois.edu\HathiTrust\packages\IngestedPackages-originalfiles

13. The last step in Speedwagon is to zip the packages! Navigate to “Zip Packages” in the “Tools” tab. Set output location HathiTrust packages server location:
   \storage.library.illinois.edu\HathiTrust\packages\DCC
Hardware and Equipment

BC100

RCAM – Reprographic Camera with Copy Stand

The RCAM is a single overhead camera system by Digital Transitions that has an adjustable arm for height and dual strobe lights.
The copy stand:

- The RCAM’s flat table is suitable for a plethora of formats including oversized materials using a black board to extend the table.
- The copy stand has adjustable feet which can be used to level the table.
Using the Camera:

- The Camera is mounted to the RCAM copy stand and should always have the lens cap attached when not in use.
- There is a button on top of the camera which will turn it on and off.
- The camera can be focused by turning the focusing ring near the camera lens. The tightness of the focusing ring can be adjusted by turning the bolt on the ring.
Leveling the Camera:

- The camera can be leveled using the Parallel by Versalab laser level which is located in the lab. The laser level includes a laser box and camera lens with tape.
  - Unscrew the lens on the camera and replace it with the tapped lens from the laser kit.
  - Place the laser box on the copy stand and turn on. The laser beam will bounce off the tapped portion of the lens and back onto the laser box.
  - Adjust the camera by loosening the hexagon shaped fastener and slightly moving the camera.
Changing camera height:

- Since the RCAM is an overhead camera set-up, it allows for the camera height to be adjusted using an automated system.
- There is a small box velcroed to the left side of the RCAM table which has three buttons.
  - The top button will move the camera height up and you can press the middle button to move it faster.
The bottom button will move the camera down and you can press the middle button to move it faster.

**Extending camera:**
- The camera arm can be extended outward to capture larger items.

**Light maintenance:**
- There are two strobe lights positioned on the left and right side of the RCAM. We generally do not move the lights unless we need to. The position of the lights are marked with black tape on the floor.
  - The strobe lights can be powered on using the control panel beneath the RCAM table. The control panel has a lot of buttons, but you usually only need to press the “Power” button on the button left.
Alternative light set-ups:

- Sometimes we may need to move the lights in order to capture item details or items that need alternative set-ups.

Using the light box and table:

- We use the RCAM camera and an external light box to capture items like film negatives. This set up does not include the dual strobe lights. See Negative Reprographic Procedures below for full instruction on using the light box and table.
- The light box has cradle, glass and a Plexiglas LCC.
Reprographic Procedures Set-up

1. Turn on and login into the workstation using unit login.
2. Turn on light bank.
3. Turn on the IQ280 digital back.
4. Launch Capture One and create a session using the following convention (yearmonthday_project_initial) this will be the session name, QA name and ingest name for this batch.
5. Open DCC Digitization Jira project (https://bugs.library.illinois.edu/secure/RapidBoard.jspa?rapidView=20029&projectKey=DCC&view=planning.nodetail&epics=visible), navigate to the correct project epic and create a new issue using the session name.
6. Upon launching Capture One for the first time go to Preferences – Image Settings –
   a. Pack as EIP when import
   b. Pack as EIP when capturing
   c. Enable JPG, Tiff, PNG Editing
   d. Prefer Embedded XMP over Embedded IPTC
   e. Make new files writable to everyone
7. Launch Shutter Control (dtch)
   a. Select Lens
   b. Select Ext. Release
   c. Adjust the shutter\aperture (f 5.6 to f 11 depending on what you are shooting and adjust shutter accordingly for exposure)
8. Place target or and/or content stand, focus (Live View – make sure you open lens, close lens and pause live view in the correct order or you could cause a shutter issue) before capturing a file, click back in the program.
9. Capture/create one exposure and set Curve to Linear Response and ICC Color Profile to Flash V2. This file will be deleted once actual captures are created. (this is different for negative digitization workflow)
10. Set Capture Adjustment tabs to copy from primary (this will be the default) so LCC and adjustments apply to every capture.
11. Adjust aperture for “ballpark” exposure. Get the exposure within 10 points under our target 240 on patch 10. Then use exposure tool to refine and get it to 240
   a. Note: If you adjust in Shutter Control - before capturing another file you must click back in Capture One before you can capture a file.
12. Adjust for Color Balance
   a. Target Readouts Patch 13 – White Balance - 3 points in each RGB Color channel – perform white balance (W) and click on 13 neutral grey. Readout in RGB color channels must be within 2 points of each other if not wb again. When this starts to drive a back calibration/reset is needed.
13. Shoot\Create LCC.
a. Select Generic – Create LCC, Check Exclude Dust and Scratches

14. Create exposure readouts to view now and during shooting

15. Adjust for Fine Tune Exposure
   a. Target Readouts Patch 10 – Exposure – Under between 238 to 240 (when shooting very light material its best at 238)
   b. You may adjust the exposure one of 2 ways at this point:
      i. Only use Exposure tab to make adjustment to exposure – do not use aperture as it changes the depth of field and can cause exposure inconsistencies.

16. Set file-naming parameters in Capture Naming Tab. This is according to the naming convention for a given project. You will likely have to change this throughout your session unless an item is bound
   a. Use unique identifier or bibid from Medusa DB as a prefix. Add sequential number count with Capture Naming Tab (-001 for Archival content and 00000001 for HT) sequentially through a single object. Change the prefix and reset capture counter in tool when changing objects.
   b. If a book you will need to use 2 number increments for left and right sides

17. Set a general crop for your first exposure. Make sure again you are copying from primary. This will reduce editing later and carry over adjustments for faster processing.

18. Shoot all of your content and update Medusa DB as you progress. Check focus, file naming and color readouts as you shoot to reduced QC issues.

19. Upon completion of the content check your crops, file names, exposures, color – perform a self QC.

20. Transfer your session to the mini network LIBSTFDCC10. Access it via the LIBSTFDCC13 processing workstation on processing days.(windows machine)

21. Apply the Illinois Metadata template to all files (contains institutional metadata for provenance of files)

22. Output the preservation and access derivatives using processing recipes presets standard on all workstations. We share the same login so these art static however they can be altered so check them to make they are correct.

23. Load content to respective location on server as well as the capture sessions to capture folder on the server. Do any other work needed according to the workflow for the project. (theses diss, nitrate negatives have specific sub directories for QA)

24. Note: Make sure the 3 items are turned off at the end of a work session
   a. Camera back off and lens cover on
   b. Light units is off
   c. Monitors are off.
Reprographic Procedures for Negative Digitization

1. Turn on and login into the workstation.
2. Place gatorboard under light table onto RCAM table for surface protection.
3. Set Kaiser light table in center of platform, as marked in front by tape, oriented with the power switch located in the lower right edge when facing the camera.
4. Plug the light table in with cord draped around the tripod of RCAM (this should be plugged into the upper right edge of the table).
5. Set film stage on top of light table in center of R-Cam platform, as marked.
6. Set loading light table on workspace next to R-Cam platform.
7. Bring R-Cam down column to ~ 326mm (white tape mark for 5x7 and 35mm, blue for larger sized).
8. Turn on the IQ280.
9. Launch Shutter Control
   ➢ Select Lens
10. Launch Capture One 9 and create a session: date_NitrateNegatives_initials.
11. Upon launching Capture One 9 for the first time go to Base Characteristics and set to Mode: Film Negative, ICC Profile: Phase One Effects B&W, Curve: Linear Scientific and Preferences – Image Settings – Check the following:
   ➢ Pack as EIP when import
   ➢ Pack as EIP when capturing
   ➢ Enable JPG, Tiff, PNG Editing
   ➢ Prefer Embedded XMP over Embedded IPTC
   ➢ Make new files writable to everyone

FOR 6.5” x 5” Negatives

Setup:

1. In Shutter Control (DTCH), set shutter speed to 1/60s, and adjust aperture to approximately f/11.1.
2. Drag Standard Negative image (smb://storage.library.illinois.edu/dcc/DCC Unprocessed Files/NitrateNegativeDigitization_Archives/Documentation/NitrateNegativeStandard_Kaiser_RAW.eip), or correlating sized standard (and LCC) to compare for target and focus from server into Capture folder of current session.
3. Match Standard Negative. Place Standard Negative (removed and flagged from box into manila envelope on Nitrate shelf in lab) in holder, shiny side up (emulsion down) and place holder upon the film stage. The Standard Negative functions as the target for the
purposes of this workflow. We will reserve Standard Negative from Box A for the
duration of the project, to ensure quality control.

4. Make sure anti-Newton-Ring glass is the correct way up (marked with tape on top,
milkier texture facing down, if the tape falls off, you can check for this by turning the
overhead lights on and observing the reflection of those lights on the glass surface. The
side that diffuses the light, making it soft, should face down. The side that shows a
sharper reflection of the overhead lights should be facing up.)

5. Marks on copy stand show where to generally raise the camera. The white tape marks
5x7 and 35mm, blue marks larger sizes. Larger sizes and 35mm will need the camera
back flipped from portrait to landscape on copy stand.

6. 5x7 negatives and larger negatives use standard 62mm lens, longer glass with the
longest extension tube is used for slides and 35mm film. Add extension tube first, then
lens—and reverse for putting it away in the locked cabinet. The extension tube should
not be stored on the lens, be sure the back lenscap is secure on lenses when they’re not
in use. They can be tricky to remove, gently using a longer bone folder for leverage is
helpful.

7. Shoot Standard Negative

8. White Balance on the edge of the of Standard Negative, where there is no emulsion on
the substrate.

9. Compare color readouts from the standard negative to your target in a few different
locations and adjust aperture slightly as needed +/- 1 to match.

10. Base Characteristics should look like this:

11. Zoom in on an area of film where there is a lot of even emulsion,
or text area if it is present.

12. Use focus ring on IQ280 to bring that as sharply into focus as
possible. Use the tape marks Focus on text at the bottom and the
film grain to help in the process of focusing. The globe on the
leffhand lamppost is a good spot to look for film grain.

13. Continue to adjust focus by nudging the focusing ring. Take an
image, nudge the ring, and repeat until the film grain is in focus.
Focus

14. Once focus is established, name target “target_001”

15. If you have to image a new LCC, Shoot this handheld at the same height of the
overtable, with the overtable removed. Create LCC. Toggle off “Color Cast”, check to
ensure curve is set to Linear Scientific.

Digitization notes:
1. Observe further exposures to retain the value of the substrate exposure reading to be within the range of 150-175. Place 3-4 level readouts on the clear edge of the film where there is no emulsion. Check to see the readout is between 150-175. These are the thresholds of for exposure for nitrate negatives. The reading should not be over or under these values unless the image is very overexposed-- make sure to pick the cleanest spot possible. Turn on exposure warning to help match aperture measurements with Standard Negative. This should end up at roughly f/11.1 for standard negative. When an image is covered with red, especially on faces, adjust the aperture for those frames open a stop or ~Aperture 8.

2. In Jira notes, record the box and folder you’re digitizing and all sequential negatives digitized by name. It can be helpful to sometimes record the item # for the UID in Medusa, as these are sequential and help with matching the correct records to physical items. Verify information in Medusa relates to the box you’re digitizing, for example, box information should match in Medusa and in person. Ask for a second set of eyes if it’s ambiguous to you, as these UIDs are sometimes duplicated or very similar.

3. Retain this note in Medusa notes field for each UID: (Strauch and Fairchild is just an example, it could be “Box 1, folder 1" or whatever part of the collection you’re digitizing.

   Box Strauch and Fairchild
   Reorganized after Preservation assessment

4. Autocrop in CaptureOne CH (lab macs) can helpful in this project, but it’s important that if you’re not cropping outside the negative as you go, that none of the substrate/physical negative and especially no content is obscured by the placement on the cradle. To ensure this doesn’t happen, it can be helpful to keep an eye to each negative being centered in the cradle and at least some black border (of light) around each negative. Cropping as you go checks this.

5. The sliding shields on top and bottom of the overtable should be open enough that the edges of the negatives are clear and have as much contrast as the centers. Usually, this is ½-1/3 the negative’s size in buffer above and below. If those light shields are too close or the negative isn’t centered properly, a soft taper of the image will appear on its edge and content may be lost. If a negative doesn’t fit, err to lose edge of substrate over loss of content. Digitize negatives as items, not just for content and crop outside.

6. Check the image for any text details (not written on later or printed on the substrate) to ensure exposure is the correct way around.

7. Shoot all of your content and edit the Medusa database as you progress. Take detailed notes in Jira and Medusa for any corrections that need made (spelling, serialization of negatives that need records created, nestled negatives). These will help if we need to QC with the physical items or reshoot. Check focus and exposure as you progress.
Processing adjustments in Capture One Pro: notes for access files 4-24-2017, RJ

All negatives in this batch are ~ 5’’x7’’

The straighten tool (r) was applied usually to the left edge of the negative (not the image, but the actual edge of the negative) unless this edge was very wonky, in which case it was applied to the right edge.

Auto Crop on these settings is generally good, a tip for autocropping is to jack the exposure and contrast up to better differentiate the edge of the nitrate from the background for applying, then revert these adjustments after cropping:

![Auto Crop settings](image)

Their crops are ~ one grid box outside the negative* when grid preferences** were set to 45x45 (because negative orientation between portrait and landscape varies, the longer end was slightly inside that grid box guide)—some crops were left very tight as space outside object was restricted.
Turn on/off grids in the tool bar by exposure warnings or cntrl G:

Using exposure warning tool: ⚠️, thresholds = 240 lightest light (unless specular or otherwise unavoidable)

20 darkest dark (in image not necessarily edges of negative)

To optimize contrast/thresholds, some minimal highlight (usually less than 15, unless very blown out) retrieval was applied and a subtle s-curve in RGB.

When images were grossly under or over exposed, the exposure adjustment was used to compensate and retrieve usable information. This seemed to work better when photography operator compensated for exposure faults with aperture setting.

Notes on S-curve: 2-3 nodes used, if no information on the right end shows in the histogram, the top node was moved to when information started (bringing the exposure up)*—nodes were placed closely together forming a subtle s-shape when the darker or lighter parts of the image needed tweaking**. When exposures were fairly accurate, generally ¼ of the left curve had a slight curve down and ¼ of the right had a slight curve up***. Images as nice as the target would not need adjustments. See screenshot examples below.
The goal was to respect the integrity of the original artifact by striking a balance between maintaining their original state with a conservative approach in processing and optimizing the images for contrast and detail. Finding prints of negatives reinforced that processing would have increased contrast substantially. Preservation raw files are output without adjustments in film positive mode to ensure that the original is accessible for future retrievals if desired.

Quality Assurance Procedures

This is the final step in assuring technical metadata and visual appearance are accurate. QA occurs after imaging, processing and self-quality control. Sessions to be QA’d must be placed in the corresponding QAqueue project folder.

1. Windows QA
   a. Set Windows Explorer/View to details. Right click on Details at top and set the following:
i. Name/ Date Modified/ Type/ Size/ Authors/ Bit Depth/ Dimensions (pixel array)/ Vertical Resolution

![File Explorer Screenshot]

- **Name**
- **Date Modified**
- **Type**
- **Size**
- **Authors**
- **Bit Depth**
- **Dimensions**
- **Vertical Resolution**

ii. Check each file for the following:
  - **Type** = TIF
  - **Size** = not 0
  - **Authors** = metadata present (University of Illinois Library)
  - **Bit Depth** = 24 access, 48 pres
  - **Dims** = access is 3000 or 4000 on long edge (depending on project)
  - **Resolution** = 400 access/600 pres ppi

2. Adobe Bridge QA – This step can be done in Capture One if preferred.
   
   **See Bridge tutorial above for more in-depth instructions.**
   
   a. Open Adobe Bridge and navigate to the session location. Select the “Metadata” workspace view and check technical and descriptive metadata for access and preservation files.
   
   b. Select the “Preview” workspace view and check the visual appearance of the access and preservation files.
i. Check crops and color

3. Capture One QA
   a. Open Capture One and navigate to the session location. Open a focus window and check 10% of both preservation and access files.
      i. Check targets for patches 10 and 13. Ideal range for patch 10 is 199-202 and acceptable range for patch 13 is 238-245.

4. Fixing QA Issues
   a. For most QA issues, “fixing” requires going back to the original EIP and re-processing:
      i. file type
      ii. bit depth
      iii. resolution
      iv. dimensions
      v. size
      vi. color space
      vii. exposure and white balance
   b. Metadata can be changed in Bridge – See Bridge tutorial above for instructions.

*Note* Changing the metadata of a tiff file in Capture One only updates of the “sidecar” xml file and DOES NOT update the actual tiff file. It will only appear updated because the edits are being saved in the “capture one” folder which is created alongside the tiffs. (This becomes apparent once that “capture one” folder is deleted and all edits are lost)

Quality Control Review Form
Use this form to guide the QC process and take notes on errors. This form can be copied in a new document. Name the new document with the session name the notes below will pertain to. Share via email with the Digital Collections Project Manager.

<table>
<thead>
<tr>
<th>DCC QUALITY CONTROL REVIEW FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title</strong></td>
</tr>
<tr>
<td>Sanborn Insurance Maps</td>
</tr>
<tr>
<td><strong>Unit/Selector</strong></td>
</tr>
<tr>
<td>Jenny Johnson</td>
</tr>
<tr>
<td><strong>Current File Location</strong></td>
</tr>
<tr>
<td>Z:\DCC Unprocessed Files\Sanborn_Maps</td>
</tr>
<tr>
<td><strong>File Naming Convention</strong></td>
</tr>
<tr>
<td>Bibid_001, Bibid_002, Bibid_003</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
</tr>
<tr>
<td>Reprographic P40</td>
</tr>
<tr>
<td><strong>Operator</strong></td>
</tr>
<tr>
<td>JP Goguen</td>
</tr>
<tr>
<td><strong>Person doing QC</strong></td>
</tr>
<tr>
<td>Nicole Stevens</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHECK FOR REQUIRED FILES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED</strong></td>
</tr>
<tr>
<td><strong>FILE TYPE</strong></td>
</tr>
<tr>
<td>☒ Preservation Master</td>
</tr>
<tr>
<td>☒ Access</td>
</tr>
<tr>
<td>☐ High-res PDF/A1b</td>
</tr>
<tr>
<td>☐ Optimized PDF/A1b</td>
</tr>
<tr>
<td>☐ OCR/Searchable</td>
</tr>
<tr>
<td>☐ OCR .txt file</td>
</tr>
</tbody>
</table>
OTHER CHECKS

<table>
<thead>
<tr>
<th>FILE TYPE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️ MARC.xml file</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**NOTES**

Preservation Master - Perform file validation, focus, target check, metadata, settings on 10% of files.

Access – Perform file validation, metadata, settings on 10% of files. Verify correct cropping for each file upon preview.

**Preservation Master**
- Adobe RGB
- Resolution – 600ppi
- Bit Depth - 16 bit
- Pixel Array - fixed
- disable sharpening for preservation
- include target
- Level/Rotate/Straighten
- No Cropping - unless original is messy.

**Access**
- sRGB
- Resolution - 400 DPI
- Bit Depth - 8 bit
- Pixel Array - 4000 pixels on long edge
- Sharpen
- Cropping - included page edge leaving 1/8” border around page and crop out target

**NOTES**: Use this space to make notes about specific QA errors and share with Digital Collections Project Manager.

---

**Medusa Packaging and Ingest**

Once QA is completed on a session, the files will need to be packaged for Medusa ingest.

1. The first step is to package files based on unique identifier. Open the Command Line and type: Packagemedusa “insert file location” “insert where you would like the packaged files to go” and hit enter.

2. The files will be sorted automatically. There will now be empty access and preservation folders and a medusa package folder. Double check that the access and preservation folders are empty before deleting.
3. Now that the files are sorted for Medusa, access files will need to be converted to JP2 format. Please see the Jp2Converter 0.3.2 for detailed instructions in converting files into JP2s.
4. Once access files are converted into JP2s, check that there are equal number of TIF and JP2 files in the session.
5. Go to the MedusaStaging storage serverer location here: \storage.library.illinois.edu\MedusaStaging and cut files from DCC Unprocessed location to MedusaStaging location.
6. Go to Medusa https://medusa.library.illinois.edu/ and go into the “Repositories” tab. Find the Library the collection belongs to and then the correct collection.

HathiTrust Packaging and Ingest
1. On the DCC Unprocessed Files server location (\storage.library.illinois.edu\dcc unprocessed files), locate RBML files that have been through quality assurance and have access & preservation files with the following format bibID_00000001 and are not split into separate folders:
   a. Directory and files should be in this format:
      i. 20181206_RBML_DRBC_co
         1. Access
            a. 2575584_00000001
            b. 2575584_00000002
            c. 2575584_00000003
         2. Preservation
            a. 2575584_00000001
            b. 2575584_00000002
            c. 2575584_00000003
   2. Once you have located RBML files for HathiTrust, navigate to the HathiTrust User Group folder in Box here: https://uofi.app.box.com/folder/5170753082
      a. Navigate to DCC folder → Tracking Spreadsheets → HathiTrust_RBML_Status
      b. Once in the tracking spreadsheet, open using Microsoft Excel Online and scroll down the spreadsheet until you find the last entry.
c. Look at the RBML files you would like to conduct HathiTrust prep on and add the BibIDs to the left Identifier (bib ID) column – entering a new bib ID per line.
   i. You’ll see that the “Handle” column will automatically update to include the bib ID:

<table>
<thead>
<tr>
<th></th>
<th>ID</th>
<th>Collection</th>
<th>Handle</th>
<th>AW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2149</td>
<td>5364541</td>
<td>Digital Rare Book Collection</td>
<td><a href="http://hdl.handle.net/2027/uic.5364541">http://hdl.handle.net/2027/uic.5364541</a></td>
<td></td>
</tr>
<tr>
<td>2150</td>
<td>8014122</td>
<td>Digital Rare Book Collection</td>
<td><a href="http://hdl.handle.net/2027/uic.8014122">http://hdl.handle.net/2027/uic.8014122</a></td>
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</tr>
<tr>
<td>2151</td>
<td>8016616</td>
<td>Digital Rare Book Collection</td>
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</tr>
<tr>
<td>2152</td>
<td>2575584</td>
<td>Project Unica</td>
<td><a href="http://hdl.handle.net/2027/uic.2575584">http://hdl.handle.net/2027/uic.2575584</a></td>
<td></td>
</tr>
</tbody>
</table>

d. In the Collection column, add the collection the files belong to – Digital Rare Book Collection, Cavanga Collection, Project Unica, etc.

<table>
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<td>2575584</td>
<td>Project Unica</td>
<td><a href="http://hdl.handle.net/2027/uic.2575584">http://hdl.handle.net/2027/uic.2575584</a></td>
<td></td>
</tr>
</tbody>
</table>

e. Once you have the bib ID and collection entered, go over to the HT Submission column on the right and update the date, collection and sequential numbering.

i. For example, if the last HT Submission entry was for “uiu_uiuc-loc_20181107_uiuc_DigitalRareBooksCollections_113” and the files you are prepping are also a part of the Digital Rare Books Collections then you will update the entry to be “uiu_uiuc-loc_20181206_uiuc_DigitalRareBooksCollections_114.”

<table>
<thead>
<tr>
<th></th>
<th>HT Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180814_uiuc_DigitalRareBooksCollections_110</td>
</tr>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180814_uiuc_DigitalRareBooksCollections_110</td>
</tr>
<tr>
<td></td>
<td>uiu_uiuc-loc_20181107_uiuc_DigitalRareBooksCollections_111</td>
</tr>
</tbody>
</table>

ii. If the last HT Submission entry was for “uiu_uiuc-loc_20181107_uiuc_DigitalRareBooksCollections_113” and the files you are prepping are a part of Project Unica then you will need to look at the last Project Unica entry to find the number.

<table>
<thead>
<tr>
<th></th>
<th>HT Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180814_uiuc_DigitalRareBooksCollections_107</td>
</tr>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180524_uiuc_DigitalRareBooksCollections_107</td>
</tr>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180524_uiuc_DigitalRareBooksCollections_107</td>
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<td>uiu_uiuc-loc_20180524_uiuc_ProjectUnica_300</td>
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<tr>
<td></td>
<td>uiu_uiuc-loc_20180814_uiuc_DigitalRareBooksCollections_109</td>
</tr>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180814_uiuc_DigitalRareBooksCollections_109</td>
</tr>
<tr>
<td></td>
<td>uiu_uiuc-loc_20180814_uiuc_DigitalRareBooksCollections_109</td>
</tr>
</tbody>
</table>
3. Go to the DCC project management space on Jira (https://bugs.library.illinois.edu/secure/Dashboard.jspa) and create a new task in the QC/Hathi Prep Epic using the HT Submission string to name the task.

4. Once you have the HT Submission string and Jira set up, navigate to “Ready_for_medusa” storage location in a new explorer window: Z:\DCC Unprocessed Files\Digital_Rare_Book_Collections\Ready_for_Hathi and create a folder with the HT Submission string.

5. Copy only the RBML access tiff files that you would like to prep for HathiTrust ingest to the folder – This will be the server location where packaging will occur using Speedwagon.

6. Follow the steps 1 – 8 found in the Speedwagon tutorial above.

7. Now that all the required files have been verified, metadata needs to be sent to HathiTrust. In the Jira task, assign a subtask to Myung-Ja Han, the Metadata Librarian, titled “MJ send metadata to Zephir” and provide MJ with the file path to the RBML HathiTrust prepped files.

8. Wait until MJ has marked the subtask as “complete” before proceeding to the next steps. Then proceed following steps 11 – 13 in the Speedwagon tutorial above.

9. The next step is to email HathiTrust (feedback@issues.hathitrust.org and hathi@library.illinois.edu) using the following template:

   Hello,

   This submission is ready to be ingested:

   ![HT Submission string]

   The content is being submitted under our FY18 DASI for Locally Digitized Content. I have attached our contact and inventory.

   Please let me know if you have any questions.

   Thank you,
10. You will receive three emails from HathiTrust.
   a. An automatic verification email.
   b. A status update which will notify if there were problems with files.
   c. An ingested in HathiTrust email.

Social Media Best Practices
Digitization Services has three social media accounts – Twitter, Instagram and Facebook. Here are best practice resources for maintaining social media accounts.

Resources from the University of Illinois

1. The Library has a Social Media Working Group which meets throughout the academic year: https://www.library.illinois.edu/staff/committee/social-media-working-group/
2. The Library has a Social Media Best Practices LibGuide: 
   https://guides.library.illinois.edu/social-media-best-practices/home
3. Illinois Public Affairs Social Media Best Practices: 
   https://publicaffairs.illinois.edu/resources/socialmediabestpractices.html
4. The Library has a list of Library blogs and other social media accounts: 
   https://www.library.illinois.edu/geninfo/blog/
5. For images with visible faces, the university requires talent release forms: 
   https://publicaffairs.illinois.edu/resources/release/index.html

General resources

1. Social media schedulers are extremely helpful! There are many options, but we use 
   Hootsuite: https://hootsuite.com/
2. Tutorial on adding alt-text to:
   a. Instagram posts: https://learn.g2crowd.com/instagram-alt-text
   b. Facebook photos: https://www.lireo.com/how-to-add-alternative-text-to-facebook-photos/
3. Pablo by Buffer - open images you can use or you can upload your own image and size 
   according to social media requirements and add text to image: 
   https://pablo.buffer.com/
4. Tutorial on closed captioning with Instagram: 
   https://support.automaticsync.com/hc/en-us/articles/360000126363-Closed-Captioning-with-Instagram
5. Federal Social Media Accessibility Toolkit Hackpad: 