

New York Heritage (NYHeritage.org)
Scanning Guide

Some Digital Imaging Principles¹

- Scan at the highest resolution appropriate to the nature of the source material.
- Scan at an appropriate level of quality to avoid rescanning and re-handling of the originals in the future.
- Create and store a master image file that can be used to produce derivative image files and serve a variety of current and future user needs.
- Use file formats that are non-proprietary.
- Use image file formats and compression techniques that conform to standards within the cultural heritage community.
- Create backup copies of all files on a stable medium.
- Create meaningful metadata for image files or collections.
- Store media in an appropriate environment.
- Monitor and recopy data as necessary.
- Document a migration strategy for transferring data across generations of technology.
- Anticipate and plan for future technological developments.
- Scan an original or first generation (i.e., negative rather than print) of the source material to achieve the best quality image possible.

Scanning Quick Guide

1. Clean the glass of your flatbed scanner as well as your monitor's screen.
2. Check the original/source item—the one you are going to scan.
3. Place the original/source item on the glass bed.
4. Use your scanner software's Professional or Advanced Mode.
5. Preview the scan before actually scanning.
6. Press the Scan button on your scanner or in your software/preview mode.
7. View/edit the completed scan in your image editing software.
8. Backup the file(s), especially the master, somewhere other than your hard drive.
9. Upload scanned digital image files to CONTENTdm using the Project Client or through the online interface, Contentdm Administration.

Step-by-Step Scanning Guide

Prior to the Scan

1. **Clean the glass of your flatbed scanner as well as your monitor's screen.**
 - Carefully dust off the scanner's glass and the item being scanned, if necessary, using some kind of anti-static monitor wipe/cloth.
 - Avoid using spray liquids on your scanner's glass. It is possible that it can seep under the glass along the edges and condensate, causing obvious problems with the scans.
 - Do not use household cleaning products or abrasive materials for cleaning the scanner's glass. This prevents scratches from forming, which will show up in the scans (even the smallest scratches will appear).

¹ These principles were taken from **The Collaborative Digitization Program's** (Colorado/Western States) *Digital Imaging Best Practices* document (created 1/2003), Version 2.0 June 2008: (<http://www.bcr.org/dps/cdp/best/digital-imaging-bp.pdf> accessed 6/2010)

- Clean glass carefully. Do not apply too much pressure to the glass (e.g., intense scrubbing); the glass may break or drop down out of place. Also, when wiping the screen, do not use circular, scrubbing motions. Apply smooth horizontal and vertical strokes across the length of the glass.
- 2. Check the original/source item—the one you are going to scan.**
 - If possible, remove dust, staples, tape, and fingerprints as best you can without causing any damage to the document/item. Staples can scratch the glass. The other things negatively affect the quality of the scan by their appearance in the result.
 - 3. Place the original/source item on the glass bed.**
 - Position the item on the flatbed scanner glass as straight and flat as possible, using your scanner's "home" corner marking.
 - Be sure to put the scanner lid down or remove it.

Starting the Scan

- 4. Use your scanner software's *Professional* or *Advanced Mode*.**
 - Advanced Mode provides full control/choice of the settings and options for the scans (instead of an automatic mode).
 - Input the settings (resolution, etc) appropriate to the item being scanned and its projected uses. Adhere to the Minimum Scanning Recommendations
 - Fill in the Administrative Metadata Worksheet (*the worksheet is optional but highly recommended*) to pass along to those responsible for entering the metadata for the digital file into CONTENTdm.
- 5. Preview the scan before actually scanning.**
 - Press the *Preview* button in order to have a preliminary look at what you will be capturing in the scan. Previewing helps you avoid re-scanning.
 - *Rotate* and *crop*, if necessary, being careful *not* to exclude any elements of the source items. For this project, no real image-editing will be done. The scan should reflect the original item as closely as possible.
 - If necessary, select the targeted area for the scan by cropping (choose the chunk you actually want to scan).
 - Apply further scanning software enhancements or fixes at this point sparingly (descreening may be needed for magazine pages).

Making/Completing the Scan

- 6. Press the Scan button on your scanner or in your software/preview mode.**
 - Press the *Scan* button in your scanner software to complete the scan. Many scanning software programs will prompt you at this point (if not, you should have the option somewhere in the program to do so before making the scan (in the preview mode, for instance), to *name the file and file format* for the digital file that is about to be created. Refer to the Technical Advisory Service for Images website's section on *File Naming* for advice (<http://www.tasi.ac.uk/advice/creating/filenaming.html>).
 - A progress bar should appear, indicating the approximate time the scan will take at its present configuration.
 - The saved file should, by default, save in the My Pictures folder of Windows, unless you directed it elsewhere. Click on the thumbnail to view the scan.

Fine-Tuning the Post-Scan

7. View/edit the completed scan in your image editing software.

- Open or import the file in an image editing software application such as Adobe Photoshop or Photoshop Elements.
- Check the following:
 - ✓ Image is the correct size and resolution (not pixilated)
 - ✓ Image straight and centered, not upside-down or sideways
 - ✓ Overall image quality: exposure, contrast and focus
 - ✓ Image is in correct bit depth and color mode (i.e., color image has not been accidentally captured as a grayscale)
 - ✓ Noise (odd patterns, dots, reflections, etc.), especially in dark areas or shadows
 - ✓ Any dust or debris showing
 - ✓ Moire patterns resulting from the scanning of glossy printed material
 - ✓ No loss of detail in highlight or shadows
 - ✓ Flares (bright spots from the glare of the glass)
 - ✓ No digital artifacts (such as very regular, straight lines across picture)
- If any of the above quality issues are noted in the master scan, first correct your scanning software settings and rescan rather than manipulating the master post-capture. Some limited image correction may be necessary, but it is best to start out with the best possible capture before making any modifications.
- Use the imaging program sparingly to apply color correction (in Photoshop use Edit>assign scanner's profile>Covert to profile) and adjust the image size as needed to create an Access Image. IMPORTANT: Be sure to save any changes that you apply as a separate file in order to preserve a completely unedited image for your Master.
- Create compressed derivative files (.jpps), saved separately from the master/archival files. Derivative files are used for a variety of purposes, the most prominent being for manageable size in web delivery/access and printing. But it is important to maintain the integrity of the master file separate from the files derived from it.

8. Backup the file(s), especially the master, somewhere other than your hard drive.

- Write the file(s) to writeable CDs or DVDs (CD-R/RW, DVD-R/RW), or save them on some form of portable storage device (hard drive or robust USB drive).
- Label the storage device appropriately. Keep appropriately organized and stored for easy retrieval and access of your preserved digital images.
- Think about preservation, preserving the digital image files over the long haul. This may involve their eventual migration to another storage device in keeping with current trends of technology hardware.

9. Upload scanned digital image files to CONTENTdm using the Project Client or through the online interface, Contentdm Administration.

- *Upload* your high-quality (lesser compression) JPEG files (either derived from the master .TIF image file or ones that you created from the point of scan as JPEGs) to your organization's CONTENTdm Collection using the Acquisition Station or the web interface. Use CONTENTdm software to generate a thumbnail image file.
- Refer to CONTENTdm Help accessed via the Acquisition Station and the CONTENTdm Administration web interface for more information about uploading files. In order to access CONTENTdm's Help, you must register yourself as a CONTENTdm user at their User Support Center (<http://www.contentdm.org>). You will need your organizational ID number to register.

Please call your local council for this number. Each time you want to access the Tutorials you will be required to enter your email address and password.