

Using Bulk Rename Utility and Photoshop to Increase Efficiency of Digital File Processing

Alston Cobourn

Washington and Lee University

Introduction

The Special Collections and Archives Department at Washington and Lee University contains 2.5 FTE staff in addition to its department head. During each of the last two fiscal years these staff members created an average of 11,000 digital files while scanning materials from our collection to fulfill patron reference requests, which are received daily. Staff must also accession and process a steady stream of newly acquired materials and a substantial backlog of older materials, as well as prepare for and lead multiple visits to the archive each term by classes of students and groups such as university alumni. In short, it is a very busy department.

Problem

Requests that include scanning oversized and/or non-reflective materials are completed on specialized equipment (a Bookeye 3 overhead scanner and an Epson 11000XL flatbed scanner) located in our Digitization Room. However, most requests do not contain these kinds of materials and many require a fast turnaround. Therefore, staff members frequently complete them using the Bizhub printer/scanner/photocopier located in the Special Collections and Archives Department. The Bizhub is capable of producing archival quality master files; it will scan up to 600 DPI and can produce TIFF files. See Appendix A for the details of our local standards which were informed by the University of [Colorado Digital Library's Digitization Best Practices](#) and by the Federal

Agencies Digitization Guidelines Initiative's (FADGI) most recent draft of [Technical Guidelines for Digitizing Cultural Heritage Materials](#). However, researchers frequently desire JPGs, and the Bizhub employs an auto-generated file naming convention that cannot be modified. Therefore, staff resisted scanning items on the Bizhub in accordance with our standards for archival masters because they feared doing so would exacerbate the time-crunch pressure they already felt since it would add two steps into the process – first, deriving JPGs from the TIFFs and second, renaming the archival and access files – before the scans could be sent to researchers.

This staff reluctance resulted in inefficiency and unnecessary wear on primary source materials because these items frequently needed to be scanned again at a later date, either to fulfill another researcher request or to create an archival master for inclusion in [W&L's Digital Archive](#) (DA). Archival master files remain hidden in our DSpace DA system, which takes actions upon them to ensure their long-term preservation, while the access files and metadata are made freely available to all. My goal as a manager was to eliminate this inefficiency and additional wear in a way that minimized the pain for staff, thereby encouraging their compliance.

Solution

[Bulk Rename Utility](#) is an open source software program created in the UK that was intended, as its name implies, to be used for renaming files in batch. Although it was not created specifically for the archival community, it is listed in [Community Owned Digital Preservation Tool Registry \(COPTR\)](#) as a File Management tool. A colleague first told me about the tool, which I ultimately chose to add into the staff's existing workflow because it is very easy to use and has a low learning curve. After scanning materials on the Bizhub, staff members use this program to first rename their newly created files to conform with our established file naming convention.

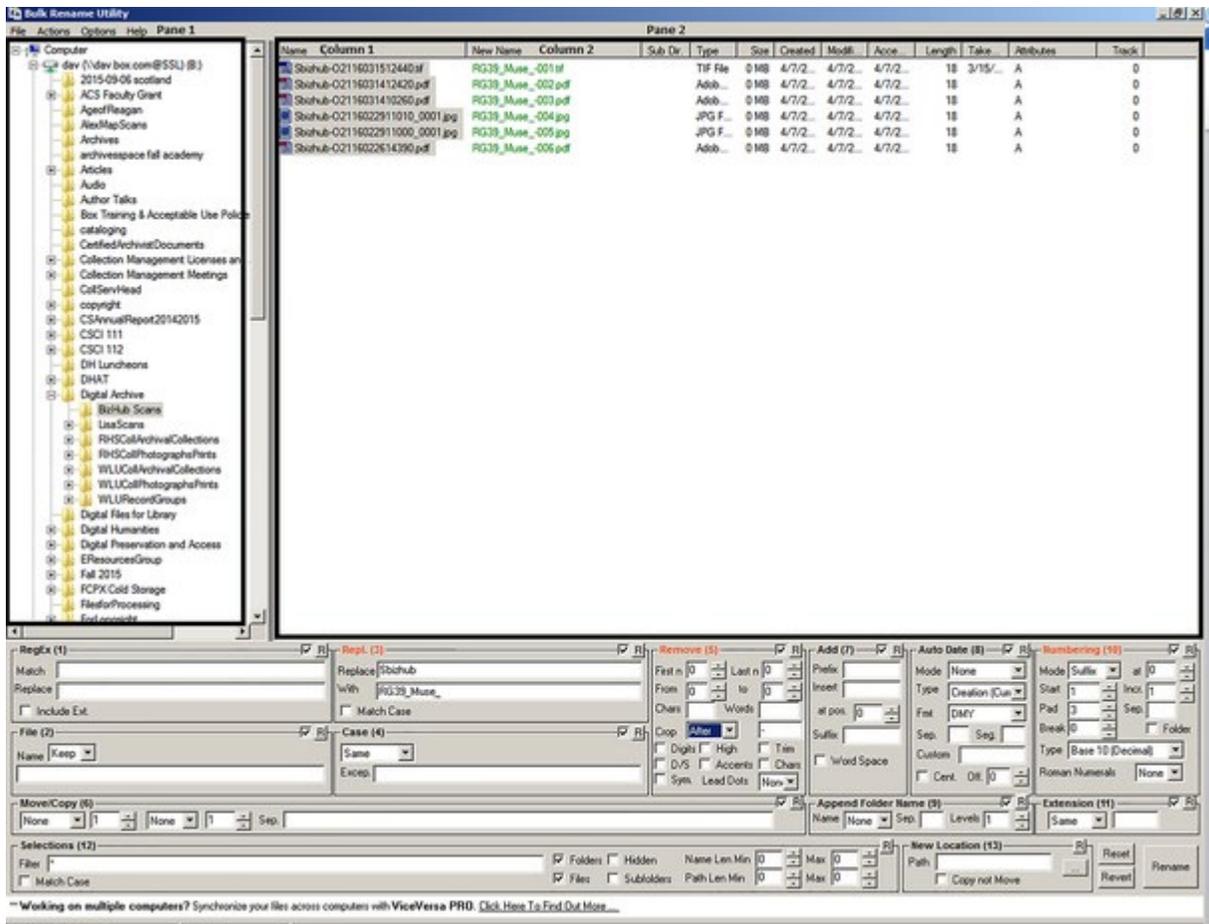


Figure 1. Screenshot of Bulk Rename Utility being used to rename several files simultaneously.

First, in Pane 1, they navigate to the location of the files that need to be renamed. They select specific files in Pane 2, Column 1. Then they use the various logic boxes below to achieve the desired changes in the names of the selected files. Pane 2, Column 2 shows a preview of the changes, which are then executed by clicking the Rename button.

Second, staff use the Image Processor tool in Photoshop, which is located under File > Scripts, to derive JPGs in batch. [Detailed instructions for this process](#) are available in Photoshop Help.

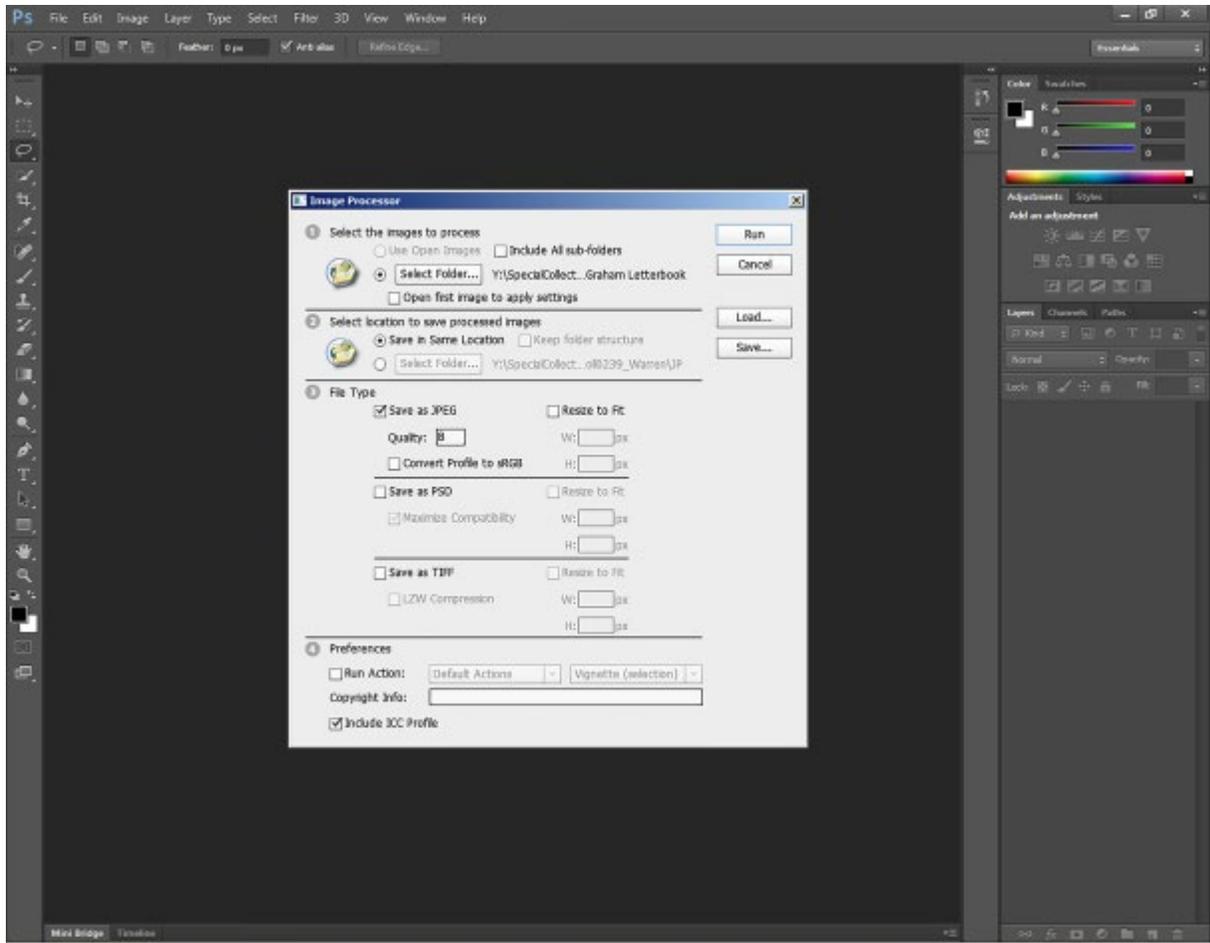


Figure 2. Screenshot of Photoshop's Image Processor tool pop-up window.

Staff save their scans in our Box cloud storage in named folders corresponding to the collection or record group to which the scanned materials belong. When our student worker returns in fall 2016 for a new academic year, I plan to begin regularly alerting him to the presence of new files and any needed pre-ingest processing and providing him with background information needed in the creation of descriptive metadata. File pre-ingest processing will typically involve addressing any related accessibility issues. For example, PDF is our preferred access format for scans of printed textual documents. On such files the student worker will use Adobe Acrobat Pro's Optical Character Recognition (OCR) functionality to create a layer of searchable text and its Preflight tool to run an accessibility check and then remedy found issues, such as lack of embedded structural metadata and image alternate text. He will then add the archival and access

files and descriptive metadata to our Digital Archive. Lastly, I will review these items and alert him to any needed changes.

Conclusion

Using Bulk Rename Utility to rename files and Photoshop's Image Processor function to derive access files are both very simple batch processes, but adding them into the staff's reference request workflow has been a game changer. Doing so has made it practical for staff to scan the materials fulfilling these requests in accordance with our standards for digital archival masters by breaking down the ease-of-use and time barriers they previously identified. This means that the same scans can be used to fulfill the needs of multiple individual researchers and to further our overall mission to preserve the collection and increase its visibility and use as widely as possible. Staff are happy that their work is now able to fulfill multiple parts of the department's mission without much additional work or inconvenience, I am happy with the increase of files available to be processed by the student worker for ingestion into our repository, and all of us are happy to decrease the wear on our valuable and fragile collections.

Appendix A: Standards for Archival Digital Masters

1. Still Images: Photographs, Slides, Negatives

- DPI: 600
- File Format: TIFF
- Bit depth:
 - color items: 24
 - black and white items: 8
 - Consider sepia toned items to be color

2. Textual Documents

- DPI: 400
- File Format: TIFF
- Bit depth:
 - color items: 24
 - black and white items: 8
 - Consider sepia toned items to be color.

About the author

Alston Cobourn earned a B.A. with majors in English and minors in Creative Writing and Journalism in 2007 as well as a MLS with a concentration in Archives and Records Management in 2012 from UNC-Chapel Hill. While working on her MLS, Alston worked with electronic resources at North Carolina State University's D.H. Hill Library for four years. Since November 2012 she has been the Digital Scholarship Librarian at Washington and Lee University in Lexington, Virginia. There she leads ArchivesSpace implementation and digital preservation efforts, spearheads campus educational efforts about scholarly communications issues such as open access, helps with electronic resources management, and supports Digital Humanities projects.