Creating Legal Exhibit Sets with PDF-XChange Editor Plus

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Abstract

This tutorial teaches technically-minded lawyers, legal technicians, paralegals, and *pro se* litigants how to use the budget PDF editing software "PDF-XChange Editor Plus" to efficiently create legal exhibit sets, such that the resulting PDF file is suitable for both printing and in-court electronic navigation.

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Part I

Introduction

Chapter 1

Motivations for this approach

1.1 Benefits of publishing from one PDF file

In many law firms, assembling exhibit sets is a "war room" activity involving a conference table devoted to multiple stacks of paper, each hopefully receiving the same printouts in the same order. At the least tech-savvy firms, one of those stacks will ultimately be re-scanned to create that exhibit set's electronic edition.

This tutorial instead advocates publishing from one archival PDF file. Such a workflow yields several important benefits.

1.1.1 Eliminating discrepancies

Since the same file will be used for printing, navigation, and electronic filing, there should never be discrepancies between what is submitted as working copy, what is used during oral argument, and what is e-filed.

1.1.2 Facilitating third-party printing

Bar association membership may yield remarkable printing discounts at Office Depot / OfficeMax, to the point where outsourcing legal printing can be smart even apart from the time saved and the errors avoided[1]. But all of this goodness is only possible if you can upload a PDF file that's ready for publication as-is.

1.1.3 Reducing physical recordkeeping

Since the PDF file will never be altered once published, provided you have a reliable backup policy you shouldn't need to retain even one physical copy.

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[1] via automated three-hole punching and document set shrink-wrapping, just to pick two examples

1.1.4 Enabling rapid in-court searching

Even the best printed tables of contents with corresponding physical tabs can't take the place of being able to search for arbitrary text across an entire trial binder. As the process described in this tutorial preserves as much machine-readable text from generated originals as possible, and includes a high-quality OCR step for scanned originals, the odds of being able to respond to a surprise question in court with a simple "find" command radically improve.

1.2 Reasons to pick PDF-XChange Editor Plus

1.2.1 Why not pick Adobe Acrobat Pro DC instead?

In a word, price. Although nobody denies the richness of Adobe Acrobat Pro DC's feature set, and the value of it also being available for macOS, because of its price alone it seems to be available in far fewer law firms than one might expect. As a consequence, far cruder tools than either Adobe Acrobat Pro DC or PDF-XChange Editor Plus may be resorted to on a daily basis by law firm staff. The price point of PDF-XChange Editor Plus can make it an effective backstop against such a scenario, whether via firm purchase or individual purchase.

1.2.2 Why not pick the non-Plus edition?

Because as of this tutorial's writing the price difference was small, and it was also no longer possible to purchase a license upgrade from the non-Plus version to the Plus version.[2] This matters, since the Plus version includes greatly enhanced Optical Character Recognition capabilities, and OCR is a critical part of making PDF files even more useful than their best paper equivalents.

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[2]On a related matter, the oldest PDF-XChange Editor Plus version still capable of all the procedures described in this tutorial is version 9.0.353.0 (see `https://www.tracker-software.com` for a full version history).

Chapter 2

Gaining firm buy-in, if necessary

If you're a new paralegal hire at a law firm, then at least initially it may not be entirely up to you how you assemble exhibit sets. In such a situation, the following might be worth keeping in mind going forward.

2.1 Habits aren't court rules

In law firms with entrenched "correction fluid and sticky note" cultures you will likely hear many justifications for inefficiency, only some of which would prove legitimate upon further examination.[1]

2.2 Automation prevents mistakes

The chaos of physical binder assembly in a law firm "war room" invites mistakes, and at least at the trial level more seems to be lost through the presence of mistakes than the absence of brilliance.

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[1] Just to pick one example, several legal writing habits persist today which only ever benefitted *mechanical typewriter*s [1, pp. 216-17].

Part II

Foundational skills

Chapter 3

PDF-XChange Editor Plus procedures to rehearse

Do you recall the scenes from the 1984 film *The Karate Kid* in which the student learns a few simple "waxing," "sanding," and "painting" movements by repeating each many times in a row? And how he was later pleasantly surprised by how easily each came to him under pressure? That's the way to use this chapter.

3.1 Restoring expected behavior

3.1.1 Resetting preferences

If other people have been using PDF-XChange Editor Plus on your computer, or if you've been experimenting with it for a while, then changes may have been made to its defaults. Such changes may cause its behavior to deviate from what this tutorial leads you to expect. The following procedure resets its preferences back to their defaults.

1. **File → Manage Settings → Reset Settings**

2. (Uncheck "Trusted/Untrusted list," "Places," "Custom Stamp Collections," "Digital Signature Appearance Templates," and/or "Signatures and Initials" if in-use for anything other than testing)[1]

3. **OK**

3.1.2 Switching measurement units from points to inches

Court rules generally specify page margins in inches rather than points, so the following procedure makes inches the default.

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[1] For clarity, throughout this tutorial detailed instructions get (parentheses) but detailed commentary gets {braces}.

1. **File → Preferences → Measurement**

2. **Units and Rulers → "inch" → OK**

3.1.3 Suppressing unnecessary startup prompts

If you prefer to use Adobe Acrobat Reader DC, Google Chrome, or your operating system's built-in PDF viewer to display PDF files which you don't intend to edit, then you'll quickly tire of the PDF-XChange Editor Plus startup prompts asking you to make it your default PDF application. The following procedure disables those prompts.

1. **File → Preferences → File Associations**

2. **Notify when PDF-XChange Editor is not the default PDF application → [unchecked] → OK**

3.2 Habitualizing basic keyboard shortcuts

Committing to "muscle memory" the essential shortcuts for zooming and navigation will radically enhance your comfort with PDF-XChange Editor Plus. There are exactly four.

3.2.1 Zooming shortcuts

- **Ctrl-0** to see the entire page {which works best with **View → Single Page** on, the full-screen interface location for which may be seen in Figure 3.1}

- **Ctrl-2** to see the entire page width

3.2.2 Navigating shortcuts

- **Ctrl-[Right/Left]** for next/previous page

- **[Home/End]** {which may be **Fn-[Left/Right]** on some laptop keyboards} for first/last page

3.3 Creating a combined file with bookmarks

This is a procedure which kills multiple birds with one stone, since it creates a single PDF file with bookmarks named after each document it contains, and those bookmarks later allow the automatic generation of a table of contents. That's why it's well-worth your time to get the individual file names exactly right before executing this procedure.
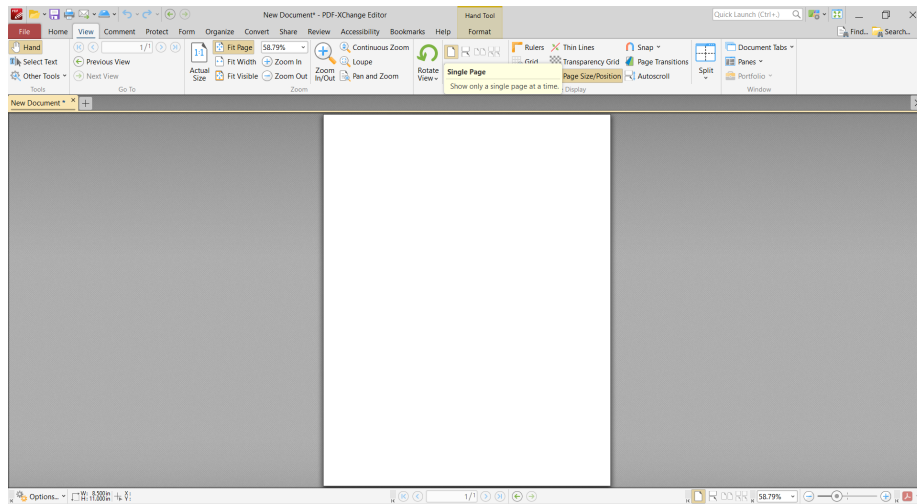
Figure 3.1: Single Page button location

1. **File → New Document → Combine Files into a Single PDF**

2. **Options... → Add root bookmark with filename → [checked] → OK**

3. **Add Files...** → (select files to include) → **Open** → (reorder files if needed by clicking and dragging within the "Combined Files" window) → **OK**

3.4   Reordering a bookmarked file

In a perfect world this procedure wouldn't be necessary, because the files were given their correct order in the "Combine Files" dialog prompt of Section 3.3. In an even more perfect world even *that* wouldn't have been necessary, because the alphabetical order of the file names matched their desired order in the combined file. But if both those ships/worlds have sailed, then the following procedure lets you reorder the combined file based on its bookmarks. Note that the final command will not appear to have done anything, but non-bookmarked pages will be out of order if you skip it.

1. **Ctrl-b** {to open Bookmarks pane}

2. (Reorder bookmarks by clicking and dragging)

3. **Bookmarks → Sort Pages**

3.5   Standardizing page sizes

E-filing systems will often reject PDF uploads with anything other than 8.5"×11" pages. This procedure fixes that type of problem.

1. **Organize → Resize**

2. (Check "Scale page content according new page size," as can be seen at the bottom of Figure 3.2, if content would otherwise be too tall/wide for the new paper size/orientation)

3. **OK**

3.6   Confirming margin compliance via guides

Local court rules, or failing that state-level rules, generally specify minimum margins. The following procedure lets you place non-printing guidelines along each of those margins, so that you can quickly skip through your file and see if anything exceeds them.

1. **Page Measurement**[2] **→ Add New Guides...**

2. (Define a guide in the dialog box shown in Figure 3.3 by setting "Count per Page" to 1, choosing either Horizontal or Vertical, specifying "Position on Page," and finally clicking **OK**)

3. (Repeat the above two steps until you have all the guides you need)

3.7   Reordering pages via thumbnails

If instead of moving an entire document within a combined file you only need to move a few specific pages (e.g. a separator page), then the following is the most foolproof way to accomplish that.

1. **Ctrl-t** {to open Thumbnails pane}

2. {If your document's pages aren't always clearly distinguishable from its thumbnails, then first choose the page before or after which you want the page range in question moved *to*}

3. (Click on the thumbnail for the first page in the range you wish to move)

4. (Hold down **Shift**)

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[2]"Page Measurement" is the tool presenting the page size toward the left of the bottom toolbar; if it's not visible then make sure **View → Page Size/Position** and **Help → Customize Toolbars → Toolbars → Document Toolbars → Document Options** are both on.

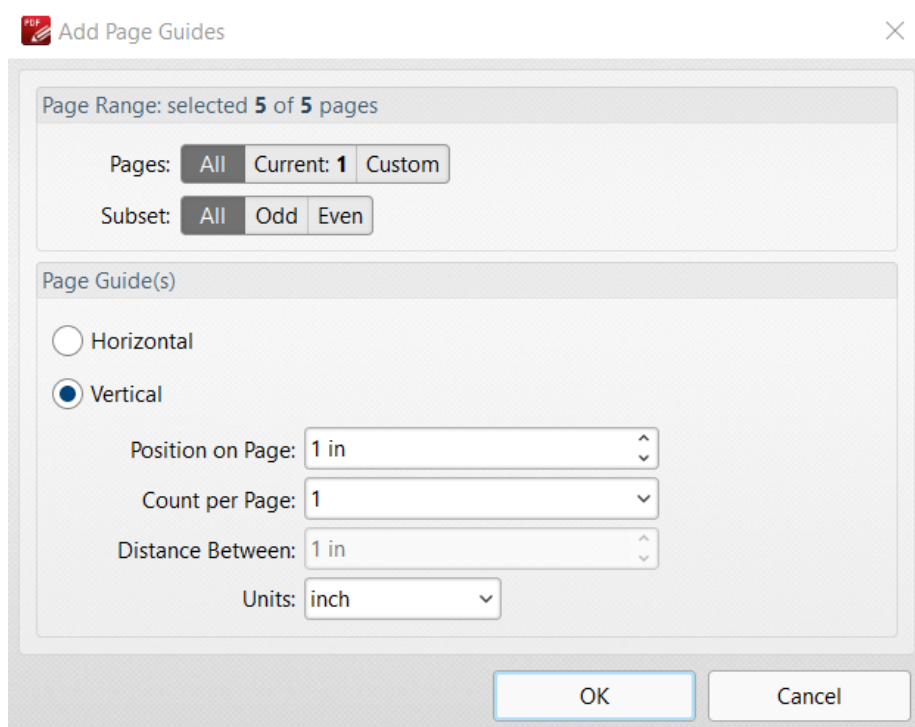Figure 3.2: Resize Pages prompt

Figure 3.3: Add Page Guides prompt

5. (Click on the thumbnail for the last page in the range you wish to move {note that you can click on other pages as you go to discern the correct last page})

6. (Release **Shift**)

7. (Click and drag your range to the correct location via the Thumbnails pane)

3.8   Deleting pages via thumbnails

This is the most foolproof way to remove specific unwanted pages, such as blank pages from a duplex scan where only some of the physical pages actually had material on both sides.

1. **Ctrl-t** {to open Thumbnails pane}

2. (Click on the thumbnail for the first page in the range you wish to delete)

3. (Hold down **Shift**)

4. (Click on the thumbnail for the last page in the range you wish to delete {note that you can click on other pages as you go to discern the correct last page})

5. (Release **Shift**)

6. (Right-click and pick **Delete**[3])

3.9   Inserting separator pages, if truly required

Separator pages can be a pain, and assuming comprehensive Bates numbering they're actually a far less efficient method for navigating a physical three-ring binder than tables of contents. As such, you'll want to be *sure* court rules actually require separator pages before making a habit of inserting them. But if they're truly required, then once you've created your series of otherwise blank 8.5"×11" single-page PDF files with exhibit numbers, you can insert them whenever needed with the following procedure.

1. (Navigate to the document page which the separator page should *precede*)

2. **Organize → Insert → Insert Pages...**

3. **Browse...** → (select your separator page PDF file as illustrated in Figure 3.4) → **Open**

4. (In the prompt's "Destination" section, set "Location" to "Before")

5. **OK**

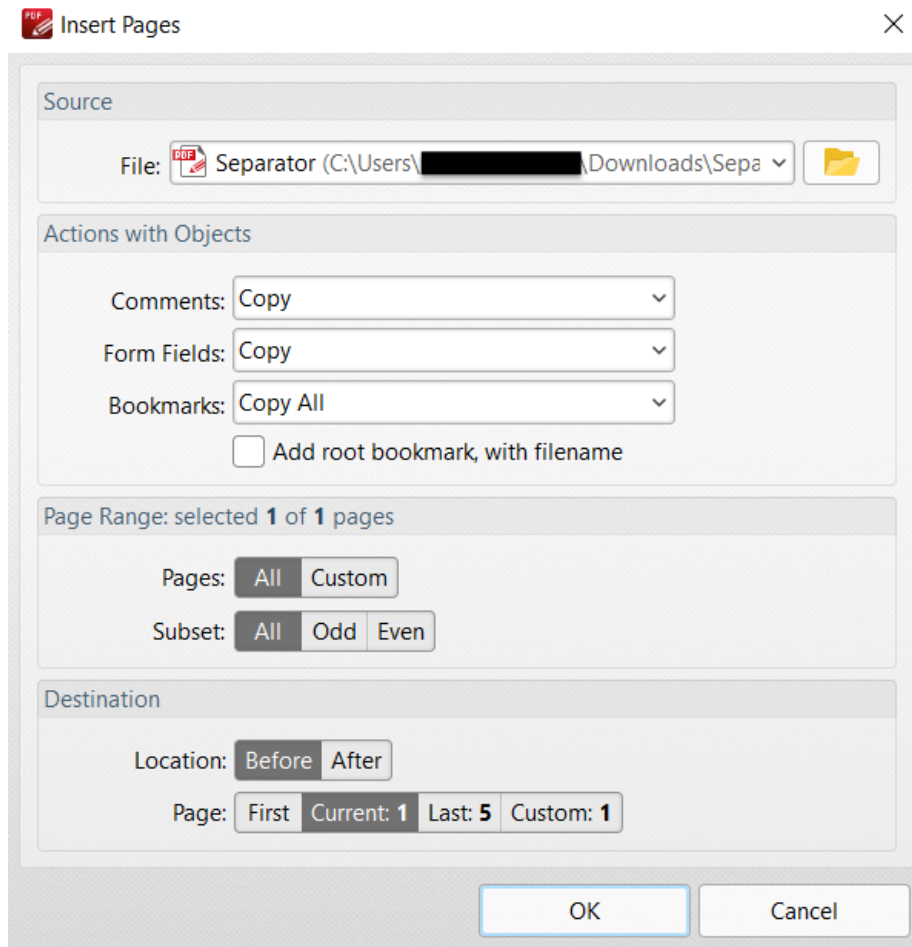---

[3] *not* **Delete Pages...**

Figure 3.4: Insert Pages prompt

3.10 Adding Bates numbering

The following procedure adds consecutive numbers to each page which are easily distinguishable from any pre-existing page numbers.

1. **Organize → Bates Numbering → Add...**

2. (Click **Font...** to set the font/style/size/fill for your Bates numbers, then click **OK**)

3. (Specify the desired distance from physical paper edges for your Bates numbers in the "Margins" section)

4. (In the appropriate left/central/right and header/footer section for your desired Bates numbers, click the downward-pointing arrow, select **Bates Numbering Settings...**, make any necessary changes[4], and finally click **OK** to exit the "Bates Numbering Format" prompt, after which the dialog box should look like Figure 3.5)

5. **OK**

Note that the "Add Bates Numbering" dialog box also gives you an opportunity to create "SEALED" stamps in the appropriate position, when required by local rules for sensitive exhibits.

3.11 Adding a child bookmark

In a typical case, bookmarks will have names like "Exhibit 1 - [description of exhibit 1]," "Exhibit 2 - [description of exhibit 2]," etc. But in the case of an exhibit that was originally contained in one file but which nevertheless had distinguishable sub-documents, such as a file containing six months of monthly bank statements, it can be helpful to manually add child bookmarks for each of those sub-documents, which among other things will conveniently include them in the eventual table of contents. That's what the following procedure accomplishes.

1. **Ctrl-b** {to open the Bookmarks pane}

2. (Navigate to the page getting the bookmark)

3. (Left-click **New Bookmark...** in the Bookmarks pane)

4. (Type the new bookmark's name and press **Enter**)

5. (Click and drag your new bookmark in the Bookmarks pane to underneath the bookmark you want it to be a child of, then move the mouse to the right[5] to make that new bookmark a child bookmark)

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[4]Note that "Number of Digits" must accommodate the last page number of your document, e.g. it should be "3" if the last page number will be 999 and "4" if it will be 1000.

[5]or in the alternative type **Alt-Right**

Figure 3.5: Add Bates Numbering prompt

3.12 Creating a TOC via bookmarks

This procedure creates a PDF file's table of contents based on its bookmarks.

1. (First add any desired Bates or page numbering to your document)

2. **Bookmarks** → **Build Table of Contents** → (change "Output page numbers as" to "Bates Numbers" and check "As last page") → **Build**

By checking "As last page" you caused this table of contents to be placed at the *end* of your document, rather than at the *beginning* of your document. Obviously this is the traditional placement of an index, rather than the traditional placement of a table of contents. But it's the right choice here, since (among other reasons) the Bates numbers already placed on each page will then remain identical to the PDF file's page numbers.

Note that with matching bookmarks and table of contents, you now have a choice as to how to electronically navigate this PDF file in court. Using the bookmarks instead of the table of contents saves time, and mastering your preferred PDF viewer's keyboard shortcut for displaying/hiding its bookmark pane might just win you over to their use.

3.13 Adding signature images

There's a lot to be said for authenticated electronic signatures, in the sense of what services such as DocuSign, HelloSign, or Adobe Sign facilitate. But when neither o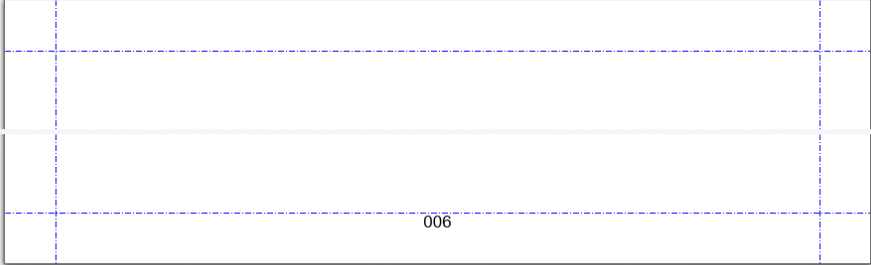pposing nor third parties need to sign the PDF file in question, there can be real value in being able to quickly "stamp" it with a simple electronic replica of your physical signature, just as you might stamp a physical page with a physical stamp of your signature. As such, the following procedure lets you equip PDF-XChange Editor Plus with simple electronic replicas of physical signatures.

3.13.1 Defining a signature

This is the procedure you only have to execute once.

1. **Protect** → **Manage** {it's in the "Signatures and Initials" section} → **Add...** → **Import from File** → **Browse...** → (pick the graphic file of the scanned signature) → **Open**[6] → **OK** → (enter the full name of the person whose signature this is in the "Signature Name" field) → **OK** → **Close**

2. **Protect** → **Hand** {just to exit signature placement for now}

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[6] If you don't see a signature in the Preview window of the "Add Signature from File" prompt when the "Remove Background" option is checked but *do* when that option is *unchecked*, then **Cancel** and correct that graphic file's problem before proceeding.

See Appendix A if you'd like guidance on preparing a signature scan for import, such that the resulting file meets the two critical standards of being in PNG format and *having a transparent background.*

3.13.2   Placing a defined signature

This is the procedure you execute every time you sign.

1. **Protect** → (left-click the desired signature in the "Signatures and Initials" section)

2. (Left-click on the place you want this signature in your document)

3. **Apply All**

3.14   Converting images to pages

This procedure lets you convert a series of image files to one PDF file, e.g. for an exhibit comprised of mobile phone screenshots.

1. **File → New Document → From Image File(s)**

2. **Options... → New Page Options →** (set correct margins in "Margins" section) **→ OK**

3. **Add Files... →** (select desired files) **→ Open →** (reorder files if necessary by clicking and dragging) **→ OK**

3.15   Redacting a non-OCR scan

It's common for courts to require the redaction of all but the last several digits of Social Security numbers, bank account numbers, and child birth dates. This procedure accomplishes that for a scanned document on which Optical Character Recognition either wasn't performed, or else *was* performed but didn't catch everything.

1. **Protect → Mark for Redaction**

2. (Left-click and drag to create redaction boxes)

3. **Apply All**

3.16   Splitting a file by size

Many court e-filing systems impose a 5MB per-upload limit, and Gmail imposes a 25MB per-email limit. This procedure lets you automatically split one PDF file into a sequence of smaller PDF files, each under a size limit you specify. It's

very helpful to do this only after no further modifications will be made, so that the split files don't necessarily need to be retained along with the archival file they were generated from.

1. **File → Save**

2. **Organize → Split → Split Document... → By size less than →** (enter desired maximum file size) **→ OK**

Figure 3.6 illustrates a reasonable maximum file size for a 5MB per-upload limit.

3.17 Reducing a file's size

This procedure attempts to reduce the size of a PDF file by attempting to lower the resolution of any photographs or scans it contains. After executing this procedure, you should always skip through the newly-reduced file to confirm nothing which *was* legible became illegible, and that no important details in any photographs became unclear.

In the interest of preserving as much fidelity as possible, it's important never to reduce a file which was already reduced; instead, reduce its *original* with more stringent settings.

1. **File → Save as Optimized**[7] **→ OK**

2. **Save**

3.18 Performing OCR on a scan

After a paper document is scanned, the pages of the resulting PDF file are just like photographs of abstract art to computers, and they can't yet search for specific text those pages might contain. Optical Character Recognition attempts to decipher what the text is actually supposed to be on those pages, an attempt which is almost certain to get a few words wrong along the way. As such, for legal work it's important to always perform OCR in such a way that the appearance of each page doesn't change, and any purportedly recognized text is kept only "behind the scenes" to facilitate later searches; that's what the "Searchable image" setting in the following procedure ensures.

1. **Convert → Deskew Pages → OK** {this step is optional but highly recommended due to its positive potential impact on the subsequent optical character recognition — just *be sure* to step through each page of your document once the deskewing is complete to confirm the deskewer algorithm didn't get confused and rotate any particular page out of full legibility within required margins}

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[7]The defaults on the Images tab of the "Optimize PDF" prompt (i.e. Color to 150dpi, Grayscale to 150dpi, Indexed to 150dpi, and Monochrome to 300dpi) are all reasonable, and lowering them further could significantly degrade document legibility; consider *splitting* the file by size, per Section 3.16, if further file size reduction is needed.
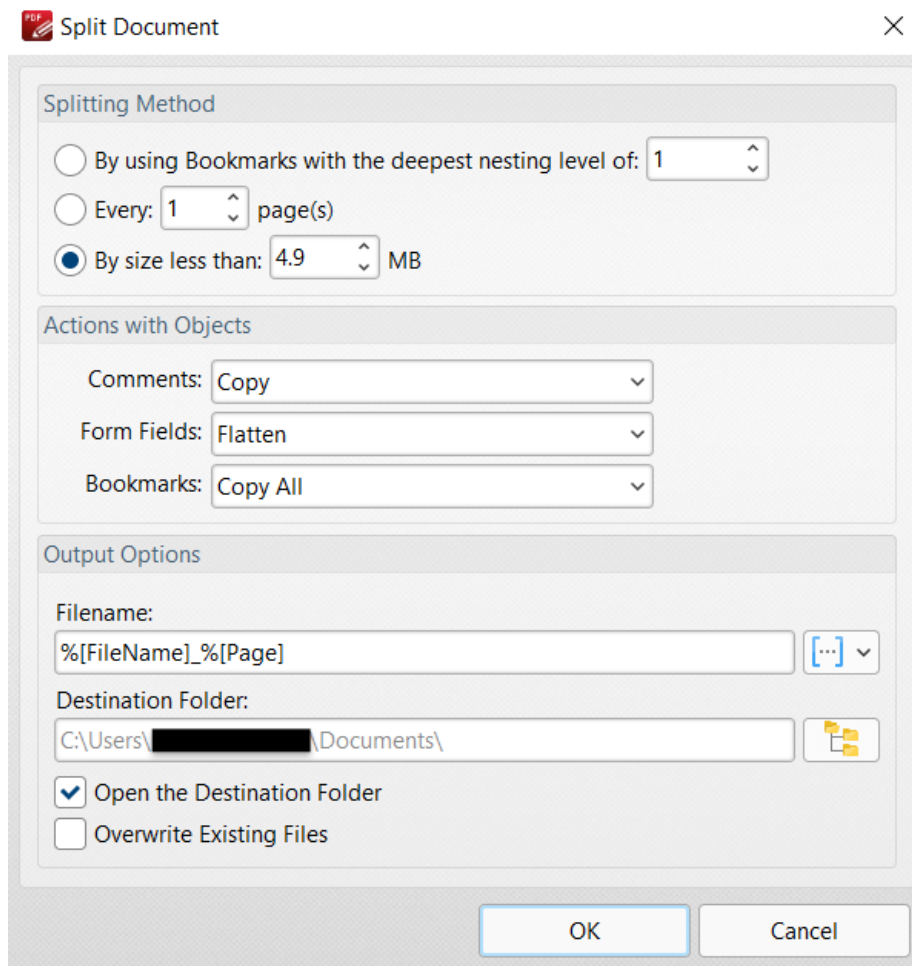
Figure 3.6: Split Document prompt

2. **Convert → OCR Page(s)** → (change Type to "Searchable Image" and uncheck "Fix content skew and incorrect page rotation" as shown in Figure 3.7) → **OK**

3.19   Redacting an OCR scan

Once OCR has been performed any subsequent redaction can potentially go more quickly, since most of the text which needs to be redacted was probably correctly recognized. However, some text which *should* be redacted may have been misread, and some text which *shouldn't* be redacted may have been misread as text which should. As such, the following procedure tells PDF-XChange Editor Plus that you want to personally confirm any redactions it believes needs to be made, and once it's done you should skip through your document and perform a manual (i.e. Section 3.15) redaction on anything it missed.

1. **Protect → Find and Redact**

2. (Enter the "Single word or phrase" you wish to redact)

3. (Change "Page text" in the "Redact Options" section to "Mark found text for redaction," as shown in Figure 3.8)

4. **OK**

5. **Apply All**

3.20   Redacting original text

When you directly save a word processor document as a PDF file, rather than printing that same document and then scanning it, all of that word processor document's text is perfectly preserved in the resulting PDF file.[8] In such cases you *should* be able to trust "Find and Redact" to actually find all the instances of the text you asked it to find. This is reflected in the following procedure, which differs from that of Section 3.19 only in not requiring you to manually confirm the proposed redactions.

1. **Protect → Find and Redact**

2. (Enter the "Single word or phrase" you wish to redact)

3. (Change "Page text" in the "Redact Options" section to "Redact found text")

4. **OK**

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[8]The same may be true for PDF files automatically generated for download, such as bank statements.
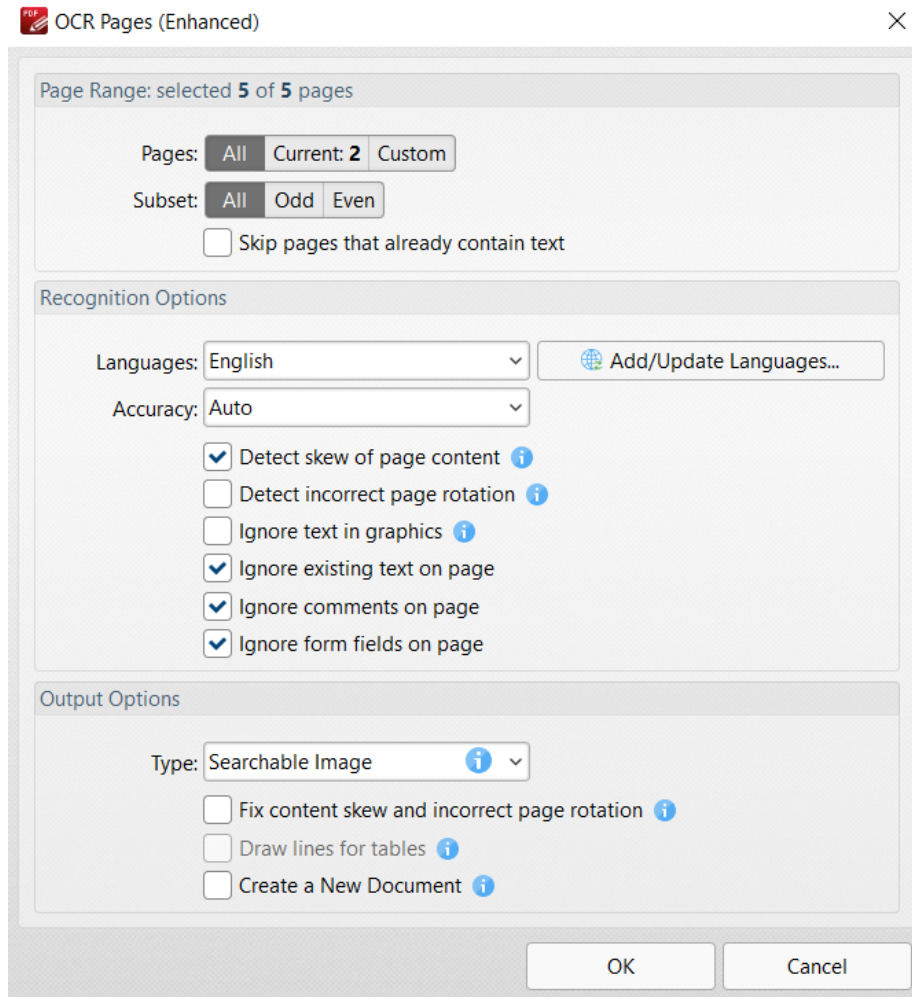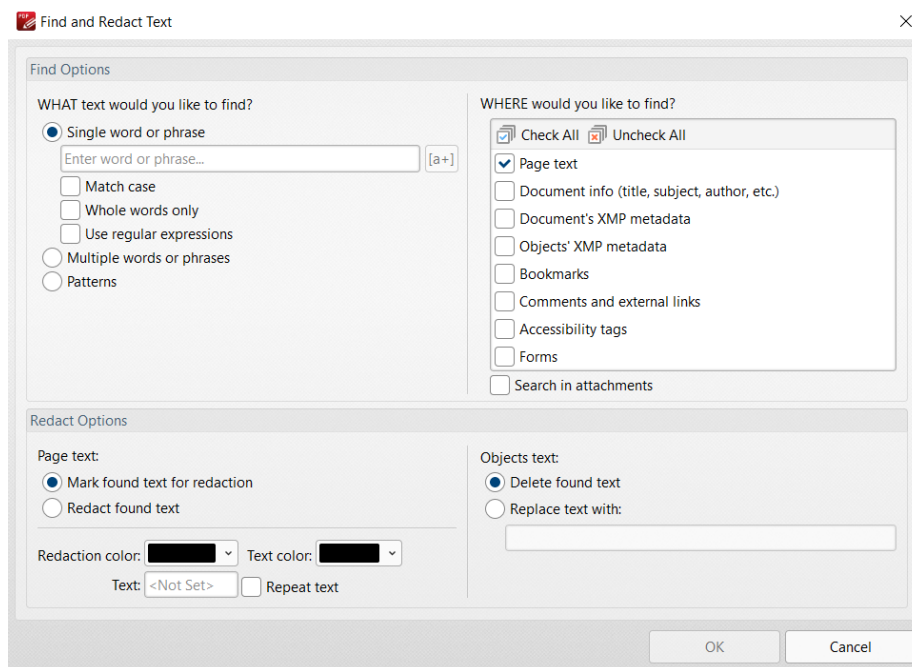
Figure 3.7: OCR Pages prompt

Figure 3.8: Find and Redact Text prompt

3.21 Sanitizing a file

Protect → **Sanitize Document** lets you remove "behind the scenes" material from a PDF file, including the metadata shown in **File** → **Document Properties** → **Description**. Note that it's unlikely you would want to remove bookmarks, or the results of any OCR you performed.

Chapter 4

Microsoft Windows procedures to rehearse

4.1 Removing PDF security restrictions

It's very common for bank statements to be a necessary part of an exhibit set. But some downloaded bank statements have PDF restrictions enabled by the issuing bank, preventing you from redacting or combining them. Unless even printing is restricted, then one way to remove these restrictions is to "print" each such statement to another PDF file rather than to a physical printer. Here's how that can be done under Windows 10:

1. **File → Print**

2. **Printer → Name → Microsoft Print to PDF → Print**

3. (Enter new file name)

4. **Save**

If this is something you find yourself doing on a regular basis, then you can streamline the procedure by making PDF-XChange Editor Plus your default PDF viewer (**Start → Settings → Apps → Default apps → Choose default apps by file type → .pdf → PDF-XChange Editor**) and making "Microsoft Print to PDF" your default printer (**Start → Settings → Devices → Printers & scanners → Microsoft Print to PDF → Open queue → Printer → Set As Default Printer**). Once you've made those two changes, then in File Explorer you'll be able to do either of the following:

- Hover the pointer over a PDF file and immediately know (by the presence of an "Encrypted" field in the resulting pop-up) whether that PDF file is restricted

- Right-click a PDF file and select "Print" from the resulting context menu to immediately print it to PDF
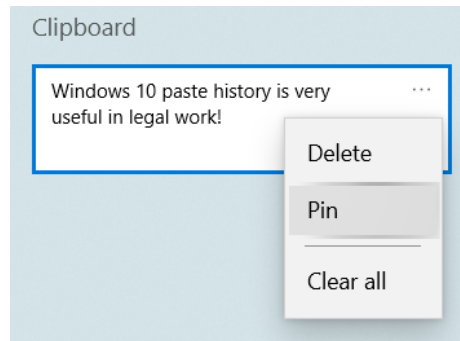
Figure 4.1: Clipboard history pinning

4.2 Using Windows clipboard history

Legal work often involves standardized text, such as notifications regarding privileged communications, which needs to be provided in multiple contexts. A few years ago, Microsoft added a "clipboard history" feature to Windows 10 (subsequently carried forward into Windows 11) that lets you preserve such standardized text for subsequent pasting *anywhere*. To use it simply type **Win-v** instead of **Ctrl-v**, and you'll then have the option to paste not only any of your recently-copied material, but also any material you pinned in "clipboard history" via the command illustrated in Figure 4.1; if **Win-v** doesn't do anything, then confirm "Clipboard history" is turned on in **Start** → **Settings** → **System** → **Clipboard** → **Clipboard history**.

Although this admittedly isn't a skill specific to PDF-XChange Editor Plus, it's nevertheless relevant to electronic communications regarding documents created with PDF-XChange Editor Plus, and it's arguably one of the best favors Microsoft has done for legal professionals in recent memory.

4.3 Checksumming files, optionally

Many court e-filing systems won't accept PDF files with security restrictions enabled, as those e-filing systems are configured to modify all PDF files upon upload with things such as receipt timestamps. An alternate way to be able to later confirm exactly what original you uploaded may be to add a checksum for that original file to its file name before uploading. This method works because changing the name of a file does not change its checksum.

Here's a way to gain the ability to easily compute file checksums in Microsoft Windows:

1. Install the free and open source application "7-Zip" (available at `https://www.7-zip.org`).

2. In **Tools** → **Options...** → **7-Zip**, make sure 7-Zip is integrated into the

shell context menus, and that "CRC SHA" is selected to be one of its context menu items, as shown in Figure 4.2.

Having done that, you can then compute a file checksum appropriate in length for inclusion as part of that file's filename by:

1. Selecting the file in File Explorer

2. Right-clicking it, which should present the context menu shown in Figure 4.3

3. From that context menu choosing **CRC SHA** → **CRC-32**, which should present a result similar to that shown in Figure 4.4

4.4   Conforming with PDF/A, optionally

Forcing a PDF file to conform with a PDF/A standard means that file will print properly even centuries from now, since it's guaranteed to contain within it all the resources (especially fonts) necessary for it to print as originally intended. Forcing such conformance may be a good habit when a document needs to be retained indefinitely without paper backup, and PDF/A conformance is also required by some government agencies. Here's how PDF-XChange Editor Plus lets you impose PDF/A conformance:

1. **File** → **Save As** → **Browse**

2. (Change "Save as type" to "PDF/A Document")

3. **Save**

Note that the default of level "2b" PDF/A conformance, as shown in Figure 4.5, is not something you would likely ever need or want to change.
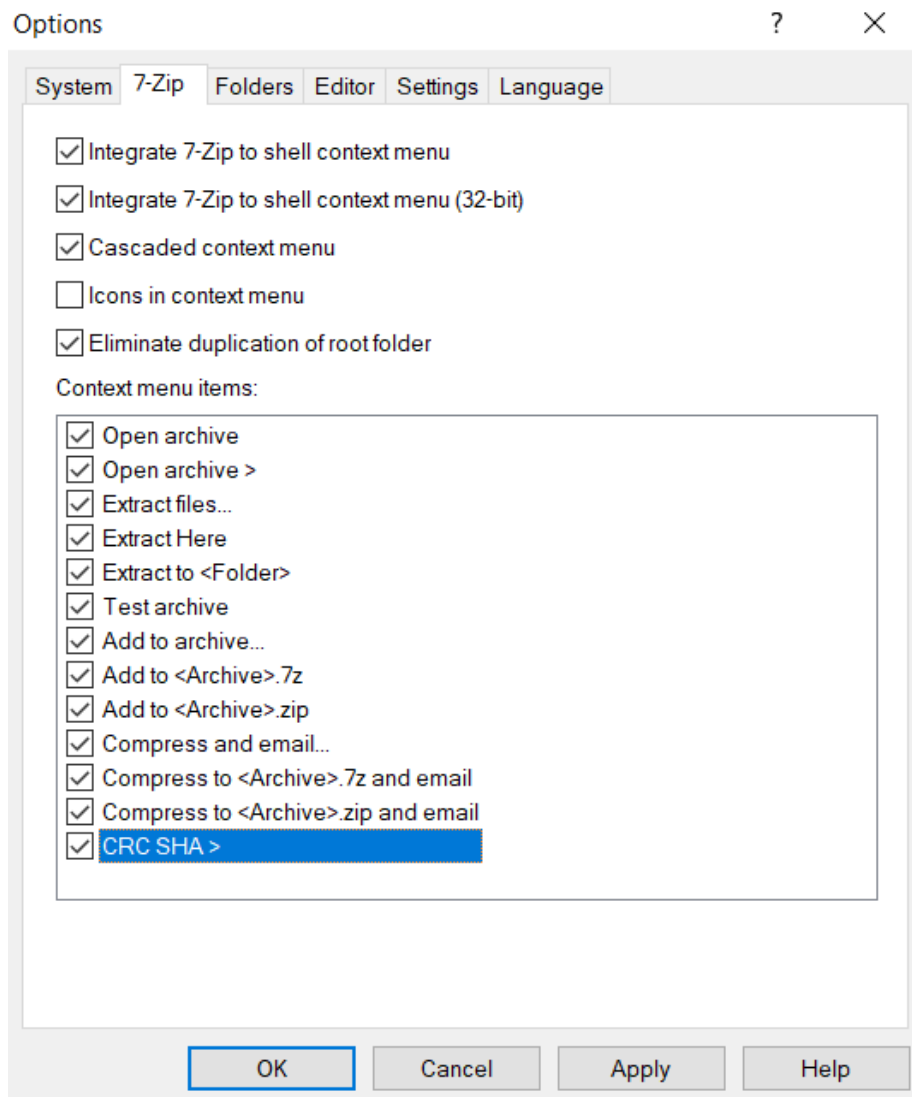
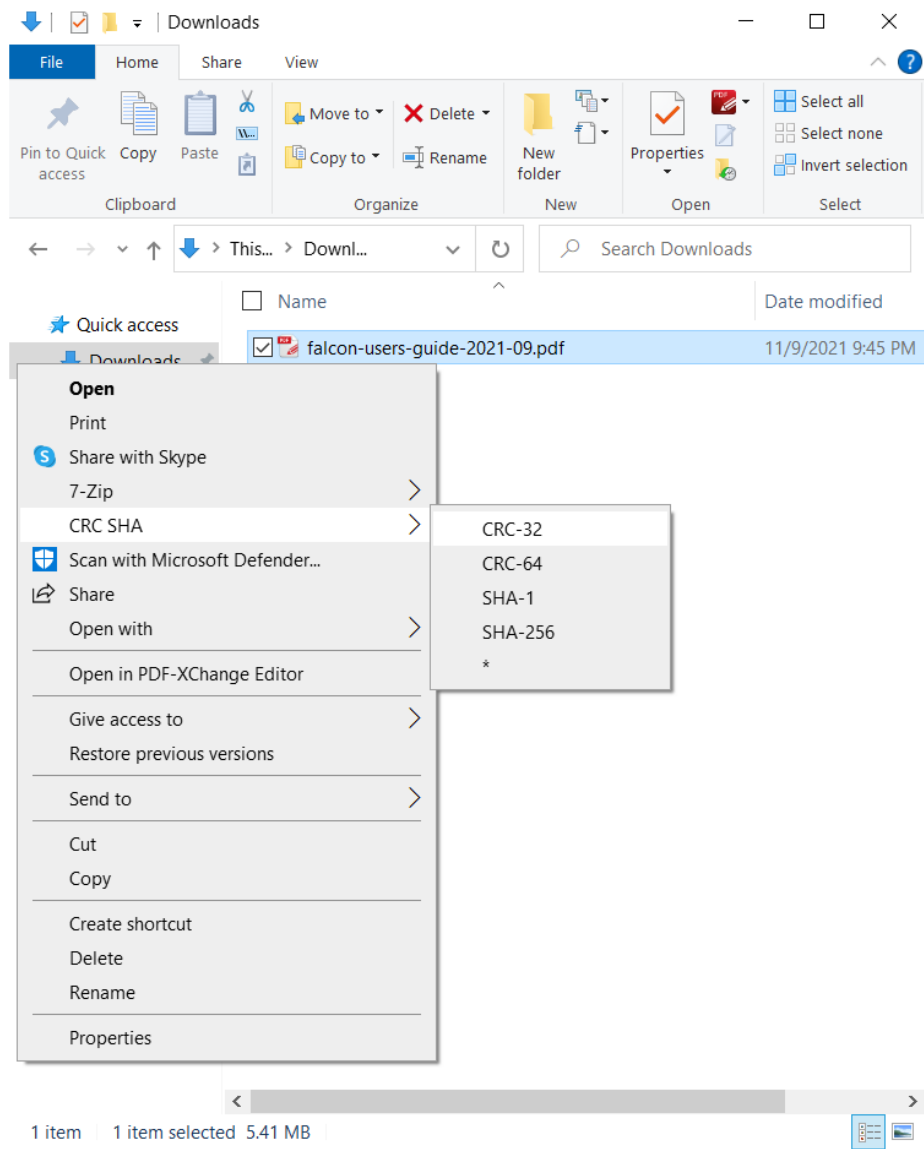Figure 4.2: CRC-32 activation in 7-Zip

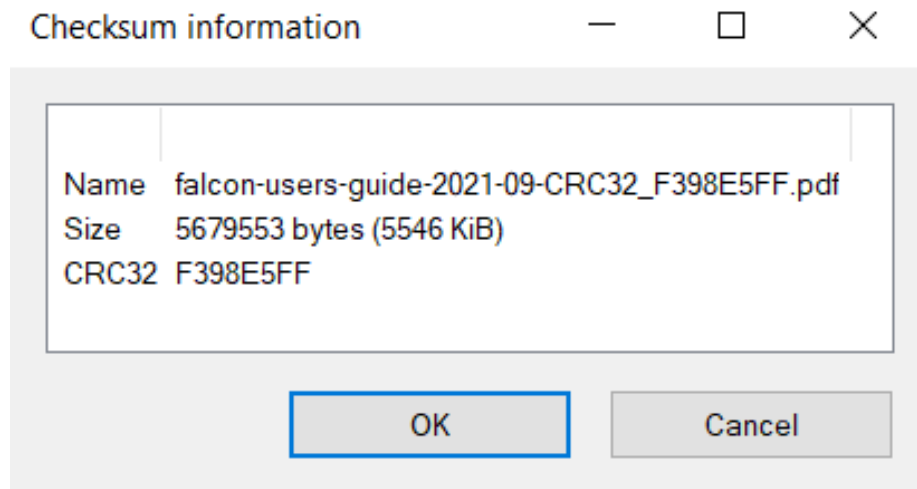Figure 4.3: CRC-32 computation in File Explorer
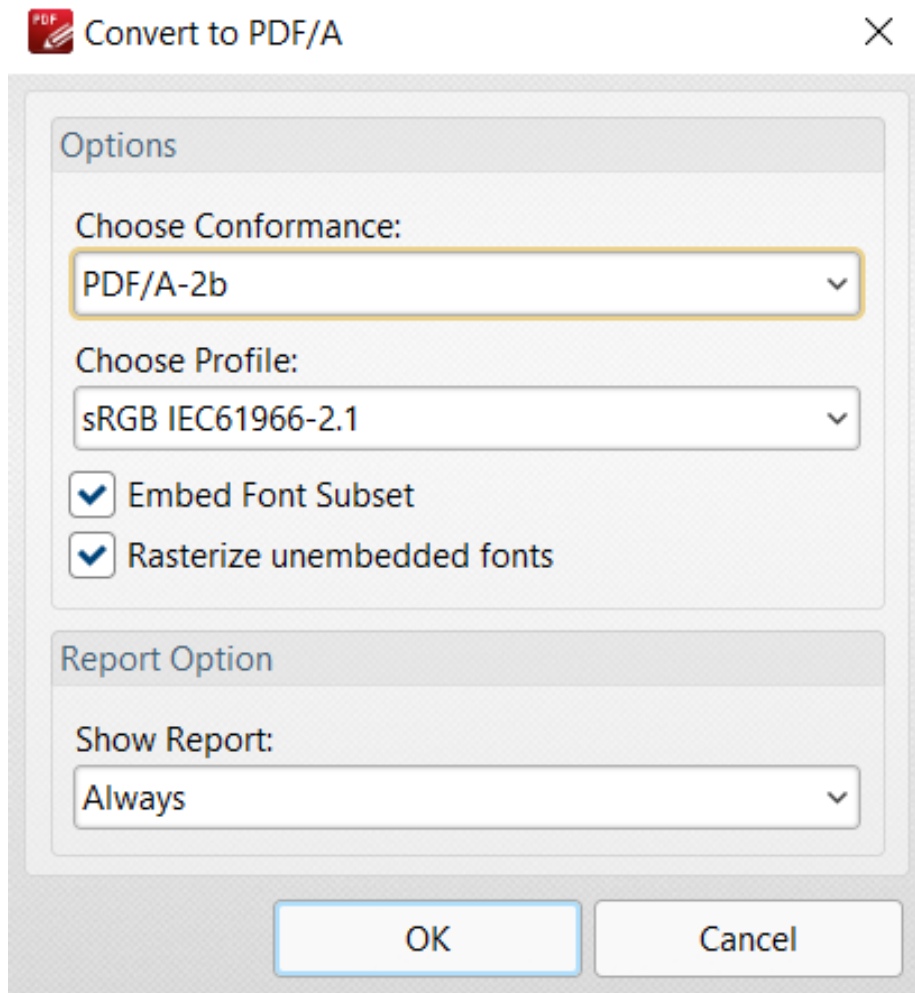
Figure 4.4: CRC-32 result in filename

Figure 4.5: Convert to PDF/A prompt in PDF-XChange Editor Plus

Part III

Creating the exhibit set

Chapter 5

Making the PDF file

Please note that the following basic procedure doesn't use *every* "fundamental skill" presented above; just to pick one example, it doesn't involve signature placement per the process of Section 3.13.2, since that process doesn't suit every workflow.

1. If this hasn't already been done, then for the sake of convenience change PDF-XChange Editor Plus's default measurement unit from points to inches (Section 3.1.2).

2. Gather up all the individual PDF files this exhibit set will contain.

3. Rename all of those files with the names by which each should appear in this exhibit set's eventual table of contents (i.e. prefixed with exhibit designations such as "Exhibit [X] -" for typical cases).

4. Combine all of those files, in their correct order, into one bookmarked PDF file (Section 3.3). [Note: If this process fails due to some of those PDF files being cryptographically restricted from assembly, as is sometimes the case for downloaded bank statements, then unrestrict each of those files per Section 4.1 and try again.]

5. Create a new "Level 1" bookmark for each sequence of files which should actually be part of the *same* exhibit (e.g. a series of monthly bank statements), then demote to "Level 2" the bookmarks for each file in that sequence, so that those individual files will go on to appear as sub-headings in the table of contents.[1]

6. Force all pages in this combined file to letter size (Section 3.5), then if necessary confirm each of its pages fits within required margins (Section 3.6).

7. Perform OCR on this combined file without changing its appearance in any way (Section 3.18).

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[1]See Section 3.11, and feel free to try the **Alt-[Right/Left]** keyboard shortcut for demotion/promotion of existing bookmarks in the Bookmarks pane.

8. Perform any necessary redaction (using the OCR scan redaction procedure from Section 3.19 followed by the non-OCR scan redaction procedure from Section 3.15 for any text incorrectly recognized), followed by any other necessary edits other than page/Bates numbering.

9. Add Bates numbering (Section 3.10).

10. Create a Table of Contents (Section 3.12), after which no further modifications should be made to this file, and it should be saved.

11. If the resulting saved file exceeds the maximum file size allowed by any uploading or e-mailing procedure to which it will later be subject, then create either a second "split" version of this file where each new file is under that limit (Section 3.16), or else a second "reduced" version of this file where the file as a whole is now under that limit (Section 3.17).

Chapter 6

Printing the PDF file

6.1   Adding tabbed dividers?

There's no question that adding tabbed dividers can make skipping to a section head in a three-ring binder just a little faster. But keep in mind the significant downside: the necessity of manual intervention throughout each printout, which re-introduces the possibility of a paper mishandle. And also keep in mind the limited scope of the upside, since with comprehensive page numbering and an accompanying table of contents the time saved will be no more than a few seconds per skip. All that said, if you still prefer to add tabbed dividers, then especially if ordering them in bulk you may wish to first price-compare the equivalent Avery and Office Depot products, per Table 6.1.

6.2   Small office hardware selection

6.2.1   Printer considerations

6.2.1.1   Scanning to standard-size PDF files

When scanning to PDF, some multifunction printers set the resulting PDF file's page size to be the area in which they could potentially print to the user-requested page size, instead of the *actual* user-requested page size. So, if you request a PDF file with 8.5"×11" pages, you may instead get one with 8.26"×10.78" pages. This may seem minor, and indeed it's easily corrected via the procedure in Section 3.5, but non-standard page sizes can cause failed

Table 6.1: Tabbed divider product numbers for exhibit sets

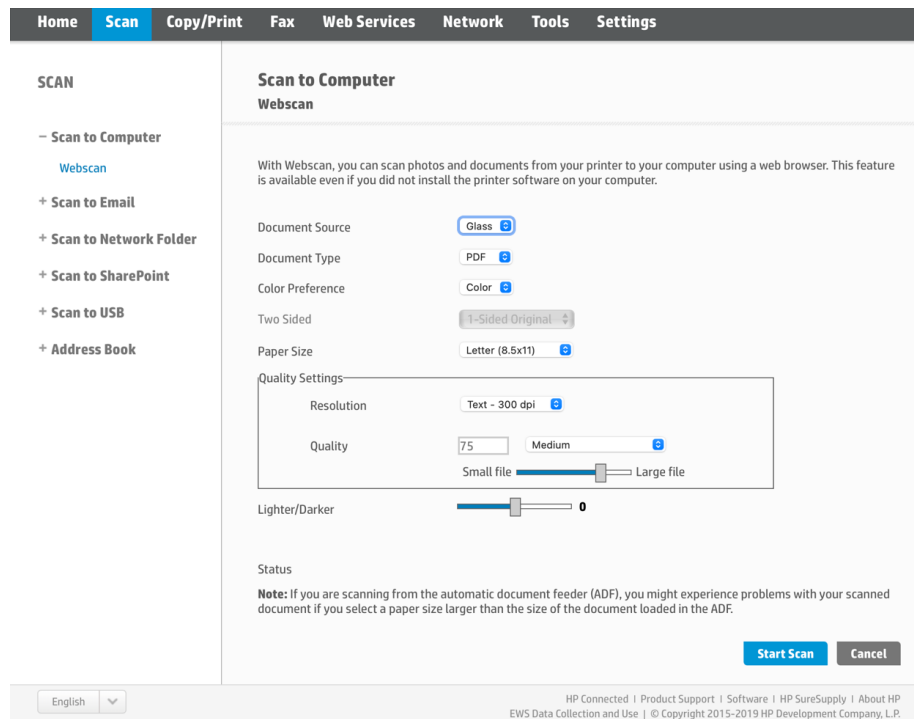| Brand	Tabs 1-25	Tabs 26-50
Avery	#11370	#11372
Office Depot	#408753	#408843

Figure 6.1: HP M428fdw web scanning

uploads to some court e-filing systems, meaning this is just one more thing to potentially go wrong under a deadline.

For some multifunction printers with this problem, upgrading them to their latest firmware revision fixes it. Others are just stuck with it. So, try to avoid multifunction printer models exhibiting this problem, perhaps by making a one-page letter-sized PDF scan in the store via a flash drive, and then checking the dimensions of that PDF file via your laptop.

6.2.1.2   Value of Wi-Fi scanning

It can be tremendously helpful for anyone in an office to be able to scan documents without having access to any cloud accounts, without locating a flash drive, and without installing scanner drivers. Being able to offer scanning via a web-based interface provided by the printer itself is an excellent way to accomplish this. See Figure 6.1 for this type of interface on the reasonably-priced HP M428fdw.

6.2.2 Three-hole puncher recommendation

If you can punch twice as many pages at once then you've cut punching time by half, and you've also cut the risk of an associated paper handling mistake by half. As such, a quality three-hole punch is almost certainly a wise investment for anyone who fills three-ring binders on a regular basis. Consider the Carl XHC-150N, which punches up to 150 pages at a time and is often heavily discounted on Amazon; when its performance declines simply rotate its punch disks to unused portions, and when there are no more unused portions simply replace the disks.

Appendix A

Refining signature scans

This procedure supplements Section 3.13.1 by illustrating how to refine a scanned physical signature using the free, open-source, and cross-platform "GNU Image Manipulation Program."[1] Its goal is for the resulting image to be as indistinguishable as possible from a physical signature once any PDF file it's placed in is printed.

Please note that the same image file this procedure yields will also be ideal for insertion into Microsoft Word documents.

1. (Scan the physical signature from an otherwise blank piece of clean white paper[2] to a 600dpi single-page black-and-white TIFF file)

2. **File → Open... →** (select your scan) **→ Open**

3. **Layer → Transparency → Add Alpha Channel**

4. **Layer → Transparency → Color to Alpha... →** (confirm "Color" is white) **→ OK**

5. (Scroll and repeat **View → Zoom → Zoom In** as needed to make the signature easier to select)

6. **Tools → Transform Tools → Crop →** (click and drag to select the signature) **→** press **Enter**

7. **Tools → Paint Tools → Eraser →** (in the eraser's "Tool Options" dialog reduce "Size" but activate "Hard edge") **→** (click and drag wherever needed to eliminate stray marks[3])

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[1]See https://www.gimp.org, noting that this procedure was tested with version 2.10.28 on Windows and version 2.10.30 on macOS.

[2]To help its writer keep the signature straight, you can optionally use the calligraphy trick of paper-clipping behind the sheet of paper which will receive the signature a second sheet of paper containing one bold and black straight line.

[3]This task may be significantly easier if you further zoom in and scroll horizontally.

8. **File** → **Export As...** → (provide a new filename ending in ".png") → **Export** → (change the export options so that only "Save resolution" and "Save color values from transparent pixels" remain checked) → **Export**

Bibliography

[1] Butterick, Matthew. *Typography for Lawyers: Essential Tools for Polished & Persuasive Documents.* 2nd ed. Houston: O'Connor's, 2015.