

Adobe Acrobat Pro: Make PDFs accessible

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Adobe Acrobat Pro is a tool you can use to make PDFs accessible. The process to make PDFs accessible involves **three steps** that are outlined below.

Before you start, you will need access to the following:

- Adobe Acrobat Pro DC
 - Acrobat Pro DC is part of Adobe Creative Cloud and available on all [college-owned computers](#), including library and lab computers.
 - Faculty and staff can also install copies [on personal devices](#).
- A PDF file. For best results:
 - If your PDF is a scan, make sure it is [a clean, high-quality scan](#).
 - If you created the PDF in another program (such as Word), make the document accessible in that program *first* and use **File > Save as...** to save as a PDF that includes those accessibility features. See:
 - [Microsoft Accessibility Features](#)
 - [Accessibility Best Practices](#)
 - [Save a file as a pdf](#)

First time set up for Adobe Acrobat Pro

The first time you use Adobe Acrobat Pro, you will need to enable a few features before being able to check documents for accessibility. Once you enable these features, they will be available to you every subsequent time you use Adobe Acrobat Pro.

1. Open Adobe Acrobat DC and click **Tools** in the top menu bar.
2. Scroll down to **Protect & Standardize > Accessibility** and click **Add** to place it in the Tools sidebar on the right side.
3. Under **Customize > Action Wizard** and click **Add** to place it in Tools sidebar.

From now on these tools will appear at the bottom of the **Tools** pane on the right.

Step 1: Run the Make Accessible wizard

1. Open your PDF file.

2. Click the **Action Wizard** icon, then click **Make Accessible**.
3. The **Make Accessible** steps appear in the right sidebar: click **Start** to begin.

Tips:

- Acrobat highlights each step as it is performed, and places a check beside it once it is completed.
- Not all steps require user input; only those that do are described here.
- If you need to temporarily exit the wizard, click **Stop** at the top of the sidebar, then **Resume** to restart it where you left off.
- You can double-click completed steps to re-run them.

4. For the **Add Document Description** step, uncheck the **Leave As Is** box under **Title** and **Author** and enter the document's title and author, respectively, then click **OK**.

Note: The Subject and Keywords fields aren't required for accessibility, but can make it easier for readers to find the document.

5. For the **Recognize Text** step, Acrobat will prompt you to edit or approve the settings it uses when using OCR to identify text in the document. Ensure that **Document Language** is correctly set, then click **OK** to begin the OCR process.

Note: If your document's language is not listed or it contains long passages in multiple languages, use [ABBYY Fine Reader](#) to OCR the text instead. See **Multiple or Unusual Languages**, below.

6. Toward the end of the OCR process, a dialog window will pop up asking if the PDF is "intended to be used as a fillable form."
 - If the document IS a form, click **Yes, Detect Form Fields**. Acrobat will attempt to auto-detect the form fields and insert the field tags that enable a reader to enter data. This step is *required* in order for the form to be accessible.
 - If the document IS NOT a form, click **No, Skip this Step**.
7. For the **Set Reading Language** step, again check the document language is correct and click **OK**.
8. During the **Set Alternate Text** step, provide alternate text (alt text) for the images Acrobat auto-detected as needed.

- Acrobat places a grey box over the image on the PDF page to identify which one you are describing. (If you can't see that box, close the **Set Alternate Text** window, use the page zoom controls (and) to resize the page, then double-click **Set Alternate Text** in the right sidebar to re-open the window.)
- Enter a **short** description of the image **IF** a) this description would help a reader understand the document **AND** b) the image is NOT already described or explained in a caption or accompanying text.
- Check **Decorative figure** instead if the image does contribute to a reader's understanding or is already explained or described.

- Click the right arrow to move to the next image; when you have finished adding alternate text for all images, click **Save & Close**.
 - For advice on what to include alt text see: [Writing good alt-text](#) or the [Poet alt-text training tool](#).
 - Readers will need more than a brief alt-text description to understand complex images such as charts and graphs. Ideally, complex images should be described and explained in the accompanying text for the benefit of all readers. [Digital publishers are still working out standards for adding longer descriptions](#) when this is not the case.
9. For the final, **Run Accessibility Full Check** step, an **Accessibility Checker Options** window may appear. If so, keep the default settings and click **Start Checking**.
 10. Once the accessibility check is complete, you're done with the Action Wizard and **Close** the sidebar.

See also:

- [Effective practices for describing science content within digital talking books](#).

Step 2: View Accessibility Checker results

Accessibility Checker results display in the left sidebar panel. If you close it, click the **Accessibility Checker** icon (the person in a circle with a check over it) to reopen it.

Running the **Make Accessible** wizard fixes most issues, so most tests should be listed as **Passed**.

A few issues will always be listed as **Needs manual check**:

- **Logical Reading Order** — A human needs to verify that the document is “tagged” in such a way that assistive technologies read elements in a logical order. See the next section, **Manually check for logical reading order**.
- **Color contrast** — A human needs to verify that there is enough contrast between text and background for the text to be legible. For black text on a white background, the answer is always yes. For other color combinations, you can set text and background colors in [WebAIM's Contrast Checker](#) to check.
- **Navigation links** — A human needs to check that hyperlinks and URLs work and open the correct webpages.

If there are any items marked **Failed**:

- Right-click or (Ctrl-click on a Mac) on the item, and click **Fix** if available.
- If **Fix** is not an option: complete the **Manually Check for Logical Reading Order** steps in the next section, then reopen the Accessibility Checker results, right-click (or Ctrl-click) on the **Failed** item, and choose **Check again**. In most cases, those steps will have fixed the problem.

See also:

- [Adobe's fix accessibility issues documentation](#) □

Step 3: Manually check for logical reading order

An accessible PDF has “tags” or invisible bits of code that identify document elements (e.g., heading, image, paragraph, etc.) and the order in which assistive technologies should “read” them. Adobe Acrobat “auto-tags” documents as part of the **Make Accessible** process, but human review is needed to catch and fix mistakes. More complex documents – for example, with multiple columns of text or footnotes – are more likely to have mistakes. This section covers the most commonly needed checks and fixes; for more in-depth information, see Adobe's [Reading Order Tool for PDFs](#) □.

Open the Reading Order pane

1. Click the **Accessibility** tool in the right sidebar.
2. Click **Reading Order**.

While the Reading Order pane is open, Acrobat puts boxes around structural elements on a page, as shown in the image below. You may need to move the pane and/or resize your page to see all page elements.

The boxes are labeled according to the **Show page content groups** setting in the Reading Order pane:

- If **Page content order** is selected, they are **numbered** in the order a screen reader will read them aloud (as pictured below).
- If **Structure types** is selected, the type of tag is indicated (e.g., P for Text/Paragraph, H1 for Heading 1, etc.)
- **To select an entire box**, click its number or type label. (The cursor will change to a hand when you are over the correct area.)
- **To select part of the text inside of a box or across multiple boxes**, click on the page and drag a box around the text you want to include. Acrobat will put a purple box around the selected text as shown below.

Note: Although headers and footers help *sighted* readers navigate multi-page documents, in non-visual formats they lose referential value and become disruptive — as, for example, when read in the middle of a sentence or paragraph. If the headers or footers contain essential text that is not repeated in the body of the document, leave the first or last instance (whichever would be least disruptive when read aloud) marked as **Text/Paragraph** and don't tag it on the subsequent pages.

Step 3A: Check the reading order

1. Make sure **Page content order** is selected on the Reading Order tool.

2. Look at the numbers at the top left corner of each purple box. Are all the elements in the right order to be read aloud?
3. If the numbers are not correct, click the **Show Order Panel** button in the Reading Order pane.
4. The **Order** panel opens in the left sidebar and lists each “box” on page, with its number and a snippet of the first line for identification, as shown below.
5. To re-order, click-and-drag an item to its correct place in the list and release when an insertion line appears.

Pay particular attention to documents with complex layouts, including:

- **Documents scanned “two-up”** (i.e., with two facing book pages visible on each document page): If text from both pages is grouped together, a text-to-speech reader will read across both pages. You need to create Text/Paragraph tags around page of text and/or tag each paragraph in order for it to read correctly.
- **Multi-column documents:** Make sure each column is in a separate box; if not, click and drag a box around the right-most column and click **Text/Paragraph** in the Reading Order pane to separate it. Repeat for each additional column.
- **Documents containing “non-body” text** (e.g., captions, footnotes, or sidebars): Select the text and click **Text/Paragraph** to tag it as a separate group, to be read separately. You may need to adjust the reading order so they are read at an appropriate point. (See **Footnotes, Endnotes, and References** below for more discussion.)

Step 3B: Fix tags and nesting

Tags allow people who use screen readers to navigate through a document. People who are blind or who have limited mobility use screen readers to isolate all the tags in the document, and then they down arrow through the list to find the section they want to go to. If elements on the page are not tagged appropriately, it makes it difficult for people to navigate or understand the context of the element if they can't see it in relation to the rest of the page.

Text should get a P (paragraph) tag, images get an Figure tag, and Headings should get an H tag appropriate to where it falls in order with the other headings.

Headings should be tagged in hierarchical, outline order — in other words, the first heading should be tagged as a Heading 1 (H1), its sub-headings are Heading 2 (H2), their sub-headings are Heading 3 (H3), and so on. There is only ever one H1 tag, and it is usually the title. The Accessibility Checker may report a “Nesting” failure if it detects headings that are out of order — for example, a H3 that is preceded by an H1 instead of an H2.

1. In the **Reading Order** pane, change the **Show page content groups** setting to **Structure Types**.
2. Uncheck **Display like elements in a single block**. Each line of text should now show up in a separate box as shown below.
3. Check that each box that contains a heading is tagged with the appropriate heading style.
4. If a heading has the wrong level or is marked as ordinary text (**P**), select it and click the correct **Heading** button on the **Reading Order** pane to retag it.
5. Once you finish reviewing the tags, go back to step 3A and check the reading order one last time. (Sometimes the reading order changes when you change tags, so it is good to double check this at the

end of your workflow.)

Things that require special attention

Multiple or uncommon languages

Adobe's can recognize text in several commonly used languages (including some with non-Latin alphabets), but only in one language at a time.

You can often correct individual words and short phrases in a second language within Acrobat:

1. Click **Tools** and choose **Scan & OCR**.
2. Click **Recognize Text** and choose **Correct Recognized Text**.
3. By default, Acrobat shows you only "suspect" words: the **Image** box contains the thing it "suspects" is text and the **recognized as** box the text that Acrobat inferred is there. The corresponding spot will be highlighted within the page in light red. Click inside the **recognized as** box to correct the text if needed, then click **Accept** to move to the next suspect.
4. If the second-language words were not among the suspects, uncheck the **Review recognized text** box to see *all* of the text that Acrobat recognized super-imposed over the page image. Double-click on any incorrect words within the page itself, then type the correct text in the **recognized as** box and click **Accept**.

Note: For documents containing long passages in multiple languages or languages that Adobe Acrobat does not support, use [ABBYY Fine Reader](#), which recognizes text in 201 languages and lets you set the OCR language at the passage level, or have a human transcribe the document.

Decorative fonts, unusual characters and complex layouts

Acrobat's Make Accessible wizard and Accessibility Checker works best with documents printed in common fonts and using simple page layouts. For more atypical documents, [ABBYY Fine Reader](#), which librarians and archivists use digitizing large and historical collections, may help. It has built-in support for recognizing typewritten text and text printed in Gothic fonts used in 19th and early 20th century. If you have a large corpus of documents with other kinds of unusual elements, you can use ABBYY's pattern training and page templating features to "teach" the software to better recognize and process them. However, if you have only a few documents with these unusual elements, it is typically easier and faster to have a human transcribe them.

Mathematical and scientific notation

OCR software can usually recognize the text surrounding mathematical and scientific formulas, equations,

or special characters, as long as the ratio of surrounding text to these elements is high enough to determine context. However, you will need to tag the formulas, equations and special characters in Adobe Acrobat and/or provide alt text so that they will be correctly “read” by assistive technologies.

Footnotes, endnotes, and references

Citations can present a challenge: [This APA blog post explains the “non-body text” problem](#) in more detail as relates to citations.)

For more information

Check out the following resources for more information:

- [Accessibility Best Practices guide](#)
- [Linkedin Learning video course "Creating Accessible PDFs"](#)

Questions?

If you have any additional questions or problems, don't hesitate to reach out to the **Help Desk!**

Phone: 610-526-7440 | [Library and Help Desk hours](#)

Email: help@brynmawr.edu | [Service catalog](#)

Location: Canaday Library 1st floor
