

Adobe Acrobat: Make PDFs accessible

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Adobe Acrobat has simplified the process of making PDFs accessible, with a “Make Accessible” action wizard that walks you through the steps needed to make a PDF accessible, and an Accessibility Checker that scans for accessibility issues and provides guidance on fixing them.

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

- Adobe Acrobat DC
 - Acrobat 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:
 - [Create Accessible Documents in Microsoft Word](#)
 - [Create Accessible Presentations in PowerPoint](#)

Set up Adobe Acrobat

Adding the tools you need to make files accessible to the Tool sidebar makes them easier to access in the future.

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.

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 enter the document's title, then click **OK**.

Note: The Subject, Author 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](#).

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](#)

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](#).

Note: A large or second monitor is *extremely* helpful. If you have only a laptop screen, consider using one of the College’s library or computers with a large monitor.

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 (as pictured below). For most checks will want this option selected.
- 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.

Tag any “artifacts”

Select any box or area of text that text-to-speech readers and assistive technologies should *ignore*, then click the **Background/Artifact** button in the Reading Order Pane.

Things that should be tagged as artifacts include:

- Marks on a page misidentified as text
- Images that are purely decorative
- Text or marks that are part of an image (for example, labels or lines in a chart). (Any important information about the image should be conveyed more coherently in the surrounding text, a caption, or alternative text for the image.)
- Headers and footers

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 tag the rest as **Background/Artifact**.

Fix page grouping

Once you've removed any artifacts, check that the remaining text is grouped correctly. Each group will be enclosed in a box; assistive technologies will "read" the text in that box line by line (according to language order), then move to the next box.

Caution: You can't "undo" these changes, so save your document before any major step in case you need to revert to the saved version.

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. Separate them by clicking and dragging a box around the right-hand page, then clicking **Text/Paragraph** to make it a separate group. (If this doesn't work, create a file with one book page per document page.)
- **Multi-column documents:** Make sure each column is in a separate group; 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): If these elements repeat information stated in the main body of the text (e.g., [pull quotes](#)), mark them as artifacts. Otherwise, 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.)

Fix reading order

Once the elements are grouped correctly, reorder any page elements that are in the wrong order:

1. Click the **Show Order Panel** button in the Reading Order pane.
2. 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.
3. To re-order, click-and-drag an item to its correct place in the list and release when an insertion line appears.

Tag headings and fix nesting

Tagged headings can help all readers navigate within long documents and become especially important when visual cues such as headers or page numbers lose relevance. 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. 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.

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.)

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
