

## Guide for Creating Accessible PDFs

The purpose of this guide is to help ensure that PDFs you create meet accessibility standards (WCAG 2.1/2.2 and Section 508) and are usable with assistive technologies like screen readers.

For information on WCAG 2.1/2.2 guidelines, visit the following website: [Web Content Accessibility Guidelines \(WCAG\)](#)

For information on Section 508, visit the following website: [Test for Accessibility | Section508.gov](#)

### Introduction

Accessible PDFs allow everyone, including users of screen readers, keyboard-only navigation, magnifiers, and voice input, to utilize your content. This guide provides tips on using Adobe Acrobat Pro's tools and maps them to widely accepted best practices so you can reliably make your PDFs accessible – from simple flyers to multi-section reports.

This guide is for content editors, communication professionals, and anyone responsible for publishing PDFs.

### Tools You Will Need

- Adobe Acrobat Pro 2017 and up.
- A color contrast checker: Adobe Acrobat Pro (2017 and up) no longer includes a color contrast simulator or checker. Consider using an external application, such as [Colour Contrast Analyser by Vispero](#), to check your PDF's color contrast.
- Optional secondary PDF accessibility checkers and editors:
  - [PAC, PDF Accessibility Checker for Windows](#)
  - [PDFix Desktop Lite for Mac, Linux, and Windows \(requires Java v8 or newer\)](#)
  - [Foxit PDF Editing Software](#)
- Optional screen readers you can download to check screen reader behavior in your document:
  - [NVDA](#) (free screen reader software) and [NVDA Commands Quick Reference](#)
  - [JAWS](#) (free 40-minute trial sessions) and [JAWS Hotkeys](#)

## Best Practices for Keeping Files Accessible When Saving as a PDF

- Always fix accessibility in the source file whenever possible, then export it to a tagged PDF. You must have Adobe Acrobat Pro to export a tagged Word document as a PDF. Always use headings (e.g., Styles in Word), lists, alt text for images, and proper table headers in your source document.
- Add a Document Title Using File Properties: To add a document title, go to File → Info, then enter a title under Properties. Adding a document title in the file properties is important because it improves accessibility and usability:
  - Screen readers announce the document title first, helping users immediately understand what the document is.
  - Screen reader users can easily switch between multiple open documents because titles appear in the screen reader's document list.
  - Supports accessibility standards, including WCAG and Section 508 compliance.
  - Benefits all users, as the document title appears in file lists, email attachments, and learning management systems, making files easier to identify and manage.
- Use the correct export method: In a Microsoft tool (Word, PowerPoint, Excel), go to the Acrobat tab and select Create PDF. This preserves the source document's accessibility features.
- Preserve tags and structure: Enable Document Structure Tags for Accessibility in export settings and create bookmarks for headings.
- Set document language: Ensure the language is set in the source file for accurate screen reader interpretation.
- Check links and alt text: Verify descriptive link text and confirm alt text is retained after export. If using AI-generated alt text, ensure it is accurate before including it in your document.

## Accessibility Tips for PDF Creation or Remediation

The Adobe Pro accessibility checker provides a list of potential improvements to help ensure your document is usable by all readers. As you review the results, complete each fix that makes sense for your content. Some items may not be required. Your document's needs and context will determine which steps are appropriate. For the most accurate and

up-to-date instructions on completing each accessibility step, refer to [Adobe Acrobat User Guides](#).

Use the tips below as you work through the steps in the Adobe Acrobat User Guides.

## Set Document Properties & Language

- This check will determine if the primary text language is set correctly, allowing screen readers to access the contents of your document.

## Run the Accessibility Check

- The Prepare for Accessibility (or Accessibility in older versions of Adobe Pro) tool in Adobe will check your PDF for accessibility problems that need to be remediated.
- Remember to always run the accessibility checker again, after you have corrected issues in the document.

## Tag the PDF

- Tags are hidden labels that tell screen readers what each part of your document is (e.g., section, heading, table, figure). Accurate PDF tagging is essential for ensuring screen readers can identify and interpret each element of your document.
- If the document has excess tagging issues that cannot be resolved easily, start with auto-tagging, then refine manually.
- Remember to always mark decorative elements as artifacts so screen readers will ignore them. When deciding if an image is decorative, ask yourself, “If this image were removed, would the meaning or function of the document change?” If your answer is *No*, mark the element as decorative. Below are some examples of common decorative elements:
  - Divider graphics that don’t communicate information
  - Watermark-like shapes or images used for visual appeal
  - Bullets, checkmarks, or arrows used as decoration, not indicating user action or status
  - Repeating institutional or organizational logo used as a header/footer
  - Illustrations used only to make the page look appealing, without supporting or conveying educational, instructional, or contextual information
  - Transparent or invisible images used to control layout
  - Small decorative shapes or images added as visual accents

## Fix the Reading Order

- The reading order tool allows you to correct the document’s existing reading order.

- Once you open the reading order tool, numbers will appear on each section of the page. Ensure the numeric order follows top-to-bottom and left-to-right reading order for each page, unless a different logical order is intended.
- This is an essential step for screen reader users, who rely on reading order to understand the order and flow of the document.

## Images: Add Meaningful Alt Text

- Alt text is a short written description of an image that helps people understand the image when they can't see it. Alt text is read aloud by screen readers and displayed when images don't load, ensuring everyone can access the information.
- Alt text should be concise, objective descriptions.
- If an image is decorative, mark it as an artifact rather than adding alt text.
- For complex graphics like charts, provide a brief alt text description and include a detailed description in the body or appendix of your document, which you reference in the alt text.
- Always check your alt text for spelling accuracy.
- Read [Authoring Meaningful Alternative Text](#) to learn more about the best practices for writing alt text descriptions.

## Tables: Headings and Design

- Avoid merged cells if possible.
- For tables with complex designs, consider simplifying or splitting into multiple simple tables. A complex table is one where the structure goes beyond a simple grid of one header row and one header column. Examples of complex tables include:
  - Tables that have layered or multi-tiered headers.
  - Tables with headers that span irregular ranges, such as merged cells across several columns or rows.
  - Tables that a user cannot understand the meaning of by reading across a row or down a column, without cross-referencing multiple header groups.
- Ensure a logical reading order across the tables (i.e., left-to-right, row-by-row).

## Headings and Lists: Semantic Structure

- Headings should accurately reflect the document's structure because they provide a framework for navigation and comprehension. For assistive technology users, headings function as an organized outline that reveals how content is arranged.
- Headings must reflect document hierarchy. It is important to indicate all heading levels. Common levels include: H1 for title; H2 for sections; H3 for subsections.
- Ensure lists are tagged as lists and avoid using manual bullets or hyphens.

- Use consistent styles across pages.

## Forms: Labels, Tooltips, and Tab Order

- When creating a fillable form, it is important to set a Tooltip for each field.
- The Tooltip is the text a screen reader will read aloud to describe what information belongs in that field. For example, “Enter your first name.”

## Scanned PDF: OCR

- This step determines whether your PDF contains readable text or if the content is just an image of text.
- Image-only PDFs can create access barriers because screen readers may not reliably read them.
- Running OCR (optical character recognition) can convert image-based text into real text that is consistently accessible to assistive technologies.

## Color, Contrast, and Visual Cues

- It is important to ensure that the text and background colors have sufficient contrast so that the content is easy to read for all users, including those with low vision. (Remember, this check must be done with an external tool.)
- Do not communicate information using color alone. Always provide textual or symbolic cues.
- Ensure the document has sufficient line spacing and font size for readability. Text spacing requirements can be found on the [WCAG Text Spacing \(Level AA\) guidelines](#).

## Security Settings and Assistive Access

- Avoid permissions that block content copying or screen reader access.
- If you must restrict printing or editing permissions, ensure *Enable Text Access for Screen Reader Devices* remains allowed.

## Final Accessibility Checks and Reporting

- Re-run the accessibility checker until no errors remain and review all warnings. Warnings aren’t always failures, but they should be evaluated.
- Create and store a copy of the accessibility report so you have a clear record of your accessibility compliance efforts.
- Lastly, consider validating the PDF’s accessibility with an alternative accessibility checker, like PAC which checks for some additional accessibility issues, and perform a screen reader (e.g., JAWS, NVDA) spot check to confirm reading order and labels.

## Conclusion

When you follow these practices, you're not just completing a checklist; you're actively building a more inclusive experience for your audience. Your attention to accessibility today ensures better access and usability for everyone tomorrow.



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