

Making PDFs accessible benefits all users. For instance, the document structure that allows screen readers to read a PDF aloud also enables mobile devices to display the document more effectively on small screens. Additionally, the preset tab order of an accessible PDF form makes it easier for all users, not just those with mobility impairments, to fill out the form.

Accessibility features in Acrobat and Acrobat Reader fall into two main categories: features that enhance the reading of PDF documents and features to create accessible PDFs. To create accessible PDF documents, use Acrobat, not Reader.

PDF accessibility features

- Saving as accessible text for braille printers and other assistive devices.
- Navigation enhancements like automatic scrolling and opening PDFs to the last page read.
- An Accessibility Setup Assistant for easy preference configuration.
- Keyboard alternatives to mouse actions.
- Reflow capability, displaying PDF text in large type and converting multicolumn layouts to a single, readable column.
- Read Out Loud for text-to-speech conversion.
- Support for screen readers and screen magnifiers.

Accessible PDF creation features

- Authoring applications generate tagged PDFs.
- Conversion of untagged PDFs to tagged ones.
- Screen reader access while preventing copying, printing, editing, or text extraction through security settings.
- Ability to add text to scanned pages for improved accessibility.
- (Acrobat Pro) Tools for editing reading order and document structure.
- (Acrobat Pro) Tools for creating accessible PDF forms.

Acrobat Standard provides some functionality for making existing PDFs accessible. **Acrobat Pro** enables you to perform tasks, such as editing reading order, or editing document structure tags that are necessary to make some PDF documents and forms accessible.

Additional resources

For more information about accessibility features, see these resources:

- Acrobat accessibility, overview, new features, and FAQ: www.adobe.com/accessibility/products/acrobat/
- Creating accessible PDF documents: www.adobe.com/accessibility

- General accessibility tips: <http://acrobatusers.com/forum/accessibility/>

About accessible PDFs

Accessible PDFs have the following characteristics.

- **Searchable text:** A document that consists of scanned images of text is inherently inaccessible because the content of the document is images, not searchable text. Assistive software cannot read or extract the words, users cannot select or edit the text, and you cannot manipulate the PDF for accessibility. Convert the scanned images of text to searchable text using optical character recognition (OCR) before you can use other accessibility features with the document.
- **Alternate text descriptions (Acrobat Pro):** Screen readers cannot read document features such as images and interactive form fields unless they have associated alternate text. Screen readers can read web links; however, you can provide more meaningful descriptions as alternate text. Alternate text and tool tips can aid many users, including users with learning disabilities.
- **Fonts that allow characters to be extracted to text (Acrobat Pro):** The fonts in an accessible PDF must contain enough information for Acrobat to extract all of the characters to text for purposes other than displaying text on the screen. Acrobat extracts characters to Unicode text when you read a PDF with a screen reader or the Read Out Loud feature. Acrobat also extracts characters to Unicode when you save as text for a braille printer. This extraction fails if Acrobat cannot determine how to map the font to Unicode characters.
- **Reading order and document structure tags (Acrobat Pro):** To read a document's text and present it in a way that makes sense to the user, a screen reader or other text-to-speech tool requires a structured document. Document structure tags in a PDF define the reading order and identify headings, paragraphs, sections, tables, and other page elements.
- **Interactive form fields (Acrobat Pro):** Some PDFs contain forms that a person is to fill out using a computer. To be accessible, form fields must be interactive to let the user enter values into the form fields.
- **Navigational aids (Acrobat Pro):** Navigational aids in a PDF include links, bookmarks, headings, table of contents, and preset tab order for form fields. Navigational aids assist users in understanding the document without reading completely through it. Bookmarks are especially useful and can be created from document headings.
- **Document language (Acrobat Pro):** Specifying the document language in a PDF enables some screen readers to switch to the appropriate language.

Security that doesn't interfere with assistive software (Acrobat Pro): Some PDF authors restrict users from printing, copying, extracting, adding comments, or editing text. The text of an accessible PDF must be available to a screen reader. You can use Acrobat to ensure that

security settings don't interfere with the screen reader's ability to convert onscreen text to speech.

For more information about PDF accessibility, see www.webaim.org/techniques/acrobat/.


About tags, accessibility, reading order, and reflow

PDF tags are similar in many ways to XML tags. PDF tags indicate document structure: which text is a heading, which content makes up a section, which text is a bookmark, and so on. A logical structure tree of tags represents the organizational structure of the document. Therefore, tags indicate the reading order and improve navigation, particularly for long, complex documents without changing the PDF appearance.

Assistive software determines how to present and interpret the content of the document by using the logical structure tree. Most assistive software depends on document structure tags to determine the appropriate reading order of text. Document structure tags let assistive software convey the meaning of images and other content in an alternate format, such as sound. An untagged document does not have structure information, and Acrobat must infer a structure based on the **Reading Order** preference setting. This situation often results in page items being read in the wrong order or not at all.

Reflowing a document for viewing on the small screen of a mobile device relies on these same document structure tags.

Note:

Acrobat usually tags PDFs during creation. To check if a PDF contains tags, go to  > **Document Properties**. Under *Description* tab, check the "Tagged PDF" value in the Advanced pane.

In **Acrobat Pro**, the logical structure tree appears on the Tags panel. It shows document content as page elements nested at various levels.