

# How to Create Accessible PDF Documents

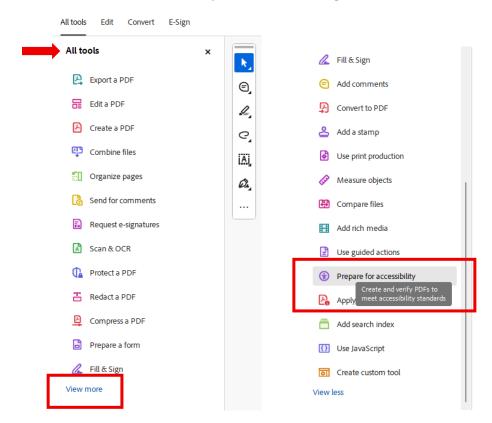
# **Purpose**

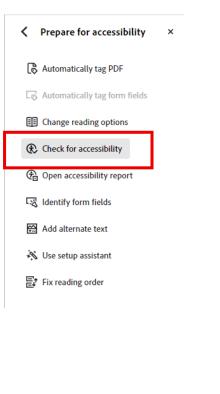
Ensuring accessibility in PDF documents is essential for users who rely on assistive technologies. PDF documents are widely used due to their compatibility across various platforms. Begin with an accessible source document such as a Word document before converting it to a PDF.

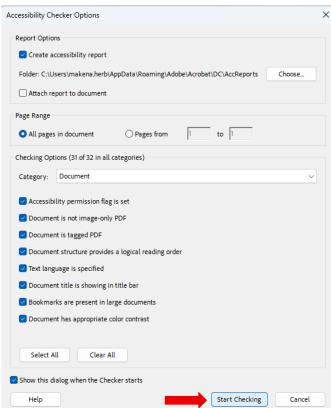
## Tips for Making PDF Documents Accessible

## Use the accessibility checker

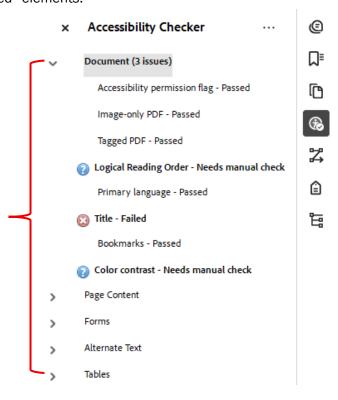
- Adobe Acrobat Pro's built-in tool will identify possible issues in your document and give suggestions on how to correct them (remediating the source document is best).
- \*Disclaimer: Although good practice, it should not be assumed that the tool guarantees 100% accessibility compliance with WCAG 2.1, level AA.
- To use the accessibility checker tool:
  - 1. Select "All Tools" -> "View More" -> "Prepare for accessibility"
  - 2. Select "Check for Accessibility" -> "Start Checking"







- 3. Once the check is complete, a side panel will show a list of any issues found for you to fix.
- 4. Use the drop-down arrows next to each section to see a detailed list of "passed" and "failed" elements.



#### Remediate issues in the example above:

• In this example, the report came back with 3 document issues – logical reading order, title, and color contrast.

#### Logical Reading Order:

- 1. The blue question mark icon indicates "Needs Manual Check."
- 2. Follow instructions under <u>"Check the reading order"</u> section in this document to review.
- 3. Once remediated, right-click on the question mark icon in the side panel and select "Pass."

#### Title:

- 1. The red "X" icon indicates "Failed."
- 2. Right-click on the "X" icon in the side panel and select "Fix"
- 3. Enter the title of the document -> click "OK."

#### Color Contrast:

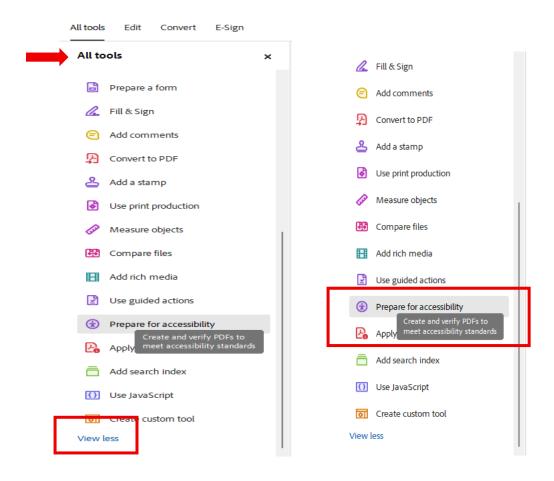
- 1. The blue question mark icon indicates "Needs Manual Check."
- 2. Review your document for any text and background colors that have low contrast.
- 3. Once you have reviewed the colors, right-click on the question mark icon in the side panel and select "Pass."

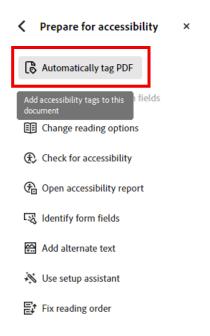
## Check for tags

- Tags enable assistive technologies to read and interact with PDF documents by telling the user what is on the page.
- Headings (H1), paragraphs (P), images, tables, form fields, and lists are tag types.
- Check the tags panel to ensure there are tags, and if not, add them.

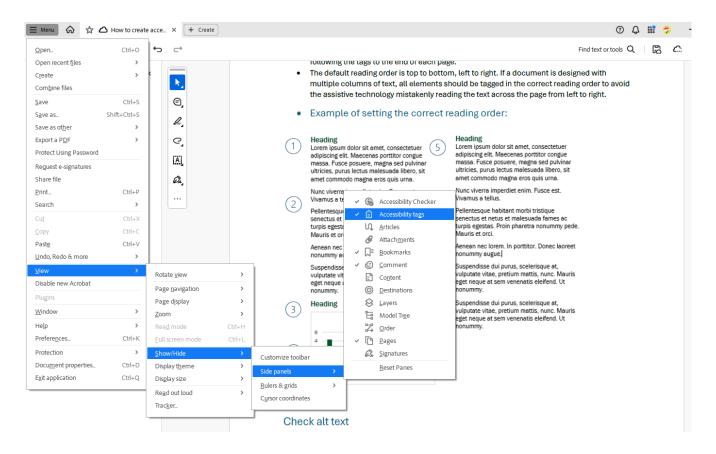
#### Add a tag:

- 1. Select "All Tools" -> "View More" -> "Prepare for Accessibility"
- 2. Select "Automatically tag PDF"
- 3. Use the Accessibility tags panel to review and edit tags.

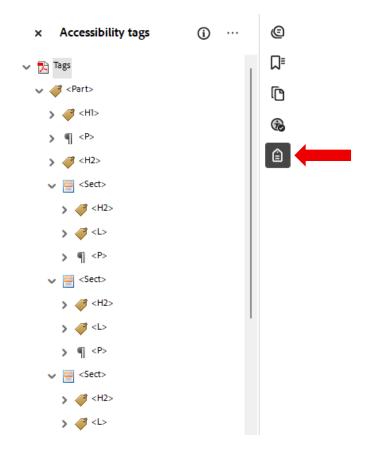




- View tags panel:
  - 1. Select menu -> "View" -> "Show/Hide" -> "Side Panels" -> "Accessibility Tags."



2. The tags panel shows tagged elements sequence. Review order and rearrange as needed.



# Check the reading order

- Review the order of the tags in the tags panel to ensure the correct reading order.
- Screen readers use the tag order to read content, starting at the top of the tag tree and following the tags to the end of each page.
- The default reading order is top to bottom, left to right. If a document is designed with multiple columns of text, all elements should be tagged in the correct reading order to avoid the assistive technology mistakenly reading the text across the page from left to right.

# Example of setting the correct reading order:

( 1 ) Heading

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas portitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.

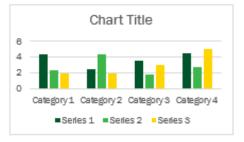
> Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Meuris et orci

Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.

Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy.

(3) Heading

4



5 Heading

6

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas portitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Mauris et orci.

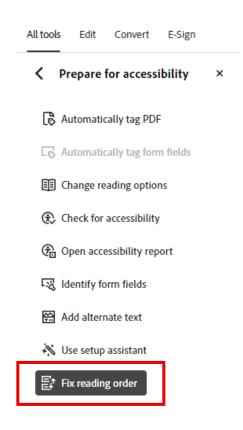
Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.

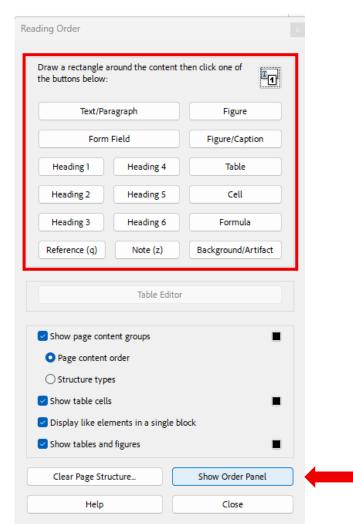
Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy.

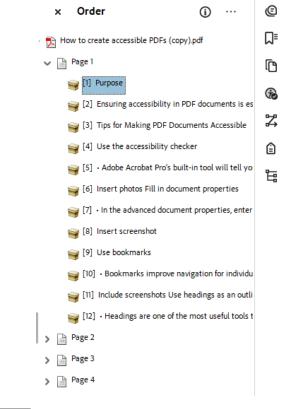
Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy.

### Reading order tool:

- 1. Use the reading order tool to fix the reading order and tagging problems.
- 2. Select "All Tools" -> "Prepare for Accessibility" -> "Fix Reading Order"
- 3. In the reading order form, you can drag a rectangle around the content you want to retag and click the corresponding label.
- 4. Select "Show Order Panel" to view the reading order -> drag the tag to the correct location.









2 suring accessibility in PDF documents is essential for users who rely on assistive technologies. PDF documents are widely used due to their compatibility across various platforms. Begin with an accessible source document such as a Word document before converting it to PDF.

3 ips for Making PDF Documents Accessible

# <sup>4</sup> Jse the accessibility checker

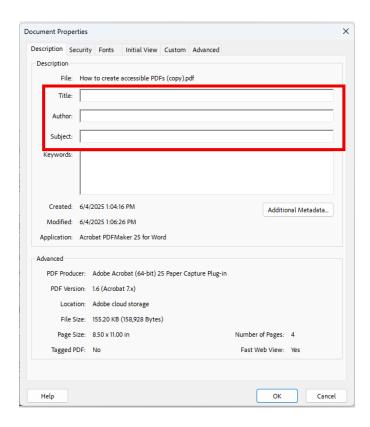
- Adobe Acrobat Pro's built-in tool will tell you about possible issues in your document and give suggestions on how to correct them.
- Select "All Tools" -> "View More" -> "Prepare for accessibility"
- Select "Check for Accessibility" -> "Start Checking"
- Once the check is complete, a panel will list any issues found.
- Select the ellipsis in the Accessibility Checker panel and Acrobat will either fix the items automatically or prompt you to fix them manually.

## Use color carefully

- High contrast color schemes and texture variations make it easier for people with low vision and colorblindness to see and use the content.
- Use high contrast color schemes for background and text. You can test your color schemes by printing them in black & white.

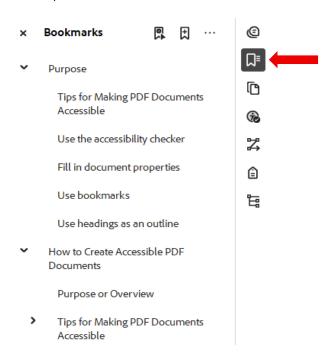
## Fill in document properties

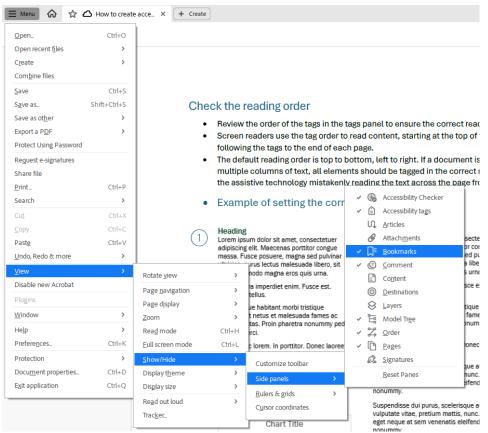
- 1. Go to "Menu" -> "Document Properties"
- 2. Enter information for the title, subject, and author, click "OK."



## **Use bookmarks**

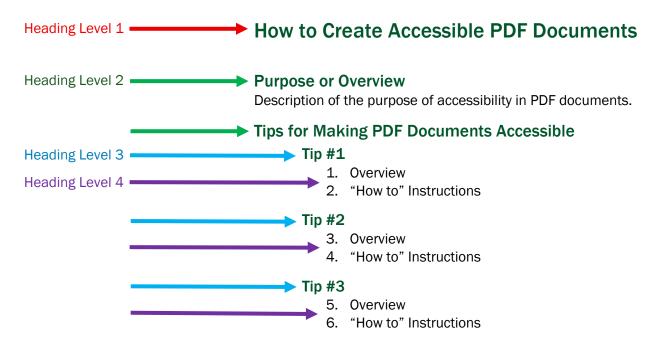
- Bookmarks improve navigation for individuals using screen readers.
- Include bookmarks for all main sections of the document.
- Use the bookmark tab on the menu to the right of the document. If it does not show up, add bookmark view.
- 1. Menu -> "View" -> "Show/Hide" -> "Side Panels" -> "Bookmarks."





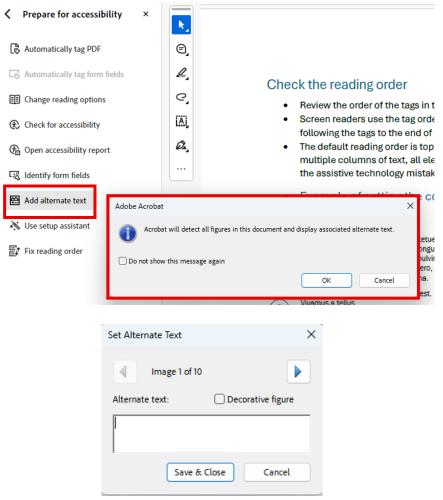
## Use headings as an outline

- Headings are one of the most useful tools to help the reader find information easily.
- There should only be one heading level 1 or your document will not pass compliance.
- Heading structure is hierarchal (there should not be headings level 3 without headings level
  2).



#### Check alt text

- Add clear, concise descriptions to all images, charts, tables, shapes, embedded objects and SmartArt graphics.
- Assistive Technology will read "image" or "graphic" without alt-text.
- For a logo, simply use the description "Company Name Icon" or "Company Name Logo."
- For a pie chart or graph, provide all data points and values for each section.
- To verify alt text is added to an object:
  - 1. Select "All Tools" -> "View More" -> "Prepare for Accessibility"
  - 2. Select "Add Alternate Text" -> "OK"
  - 3. Use "Set Alternate Text" form to fill out alt text for all figures.



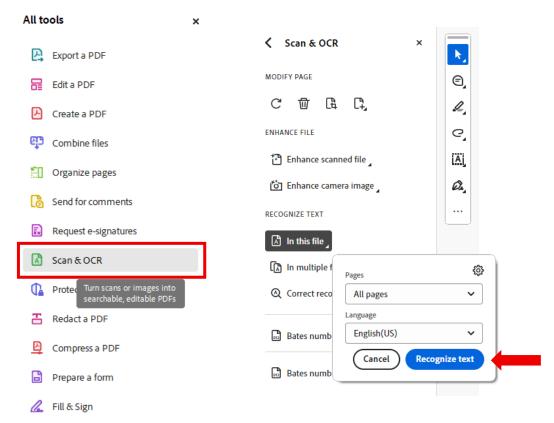
## **Convert scanned text**

 Documents should not contain scanned text. If it does, recreate the PDF file using the source document or convert it to include true text.

#### Convert on Adobe Acrobat:

1. Adobe Acrobat offers an Optical Character Recognition (OCR) software. Use the OCR tool to automatically convert the document to a PDF with editable text.

2. Select "All Tools" -> "Scan & OCR" -> "In this File" -> set the language -> "Recognize Text."



# Set the document language

- Setting the document language in a PDF enables some screen readers to switch to the appropriate language.
- This is the first step in checking for accessibility of the document to ensure information is relayed in the user's expected language.

#### **Artifacts**

- Artifacts are elements that are ignored by a screen reader, such as decorative borders or background elements that do not contain useful information.
- Acrobat may incorrectly tag artifacts as figure tags which need to be removed.
- To remove the artifact tag, redefine them with a "Background/Artifact" tag or delete the tag.