

Basics of PDF Accessibility

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Housekeeping

- Recording
- Captioning
- Handouts
- Q and A



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Handouts

exploreaccess.org/handouts/



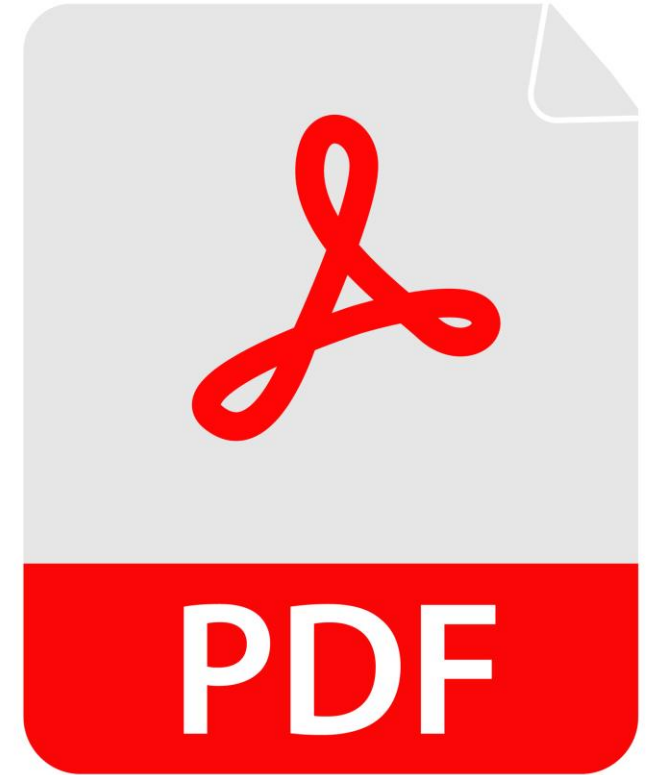
Alternative Ways of Navigating

- Screen readers:
Voiceover, JAWS/Fusion, NVDA
- Magnification Software
- Braille display
- Voice recognition software
- Keyboard only navigation
- Other mouse alternatives



Why PDF?

- PDF stands for Portable Document Format
- Often used to maintain specific look of a document
- **Advantage:** Will open across several devices and platforms 👍
- **Disadvantage:** If not designed with access in mind, can be completely inaccessible to screen reader users 👎



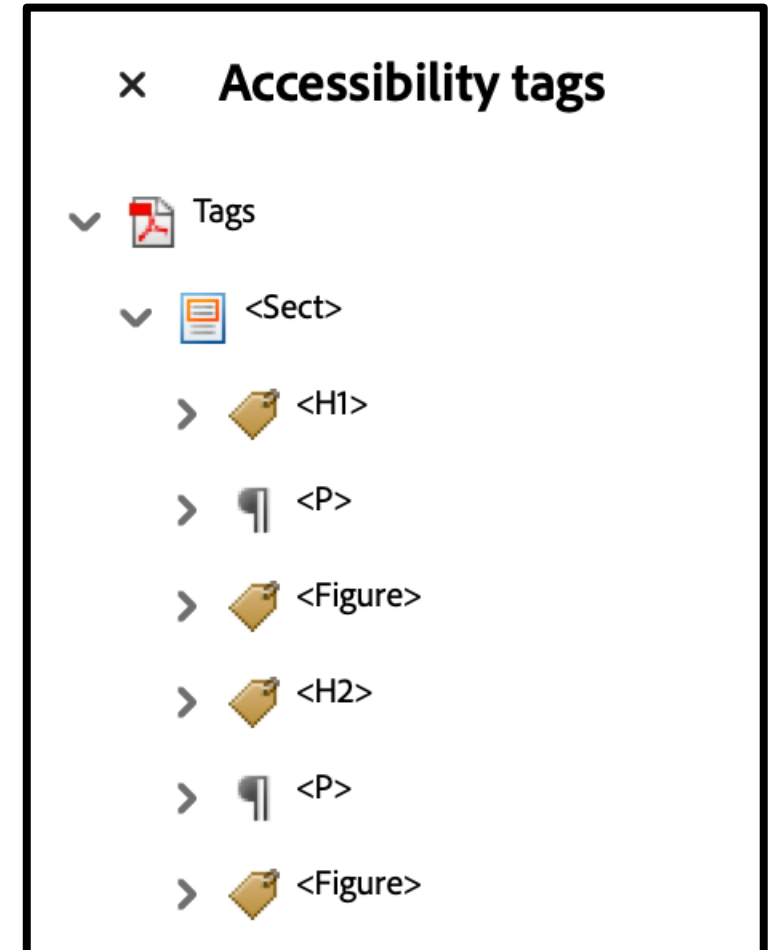
What Makes a PDF Accessible? (1 of 2)

- PDFs must meet the same accessibility standards as other documents:
 - Good contrast
 - Clear, readable fonts of at least 12-point size
 - Proper heading structure
 - Meaningful link text
 - Alt text for images.
 - Well-structured tables



What Makes a PDF Accessible? (2 of 2)

- Tagging layer:
 - Screen readers rely on the tag layer to interpret the document's structure and content.
 - Ensuring PDFs are generated correctly from the source will help ensure they are tagged.



Common Barriers: PDF

- No tags
- Images missing alt text
- Missing heading structure
- Incorrect reading order
- Some content missing tags
- Improperly tagged tables
- Scanned PDFs that are an image of text
- PDF forms without correct labeling



Screen Reader User Experience

How a Screen Reader Works

Reading a Document



How a Screen Reader Works: Reading a Document

[How a Screen Reader Works: Reading a Document\(YouTube\)](#)

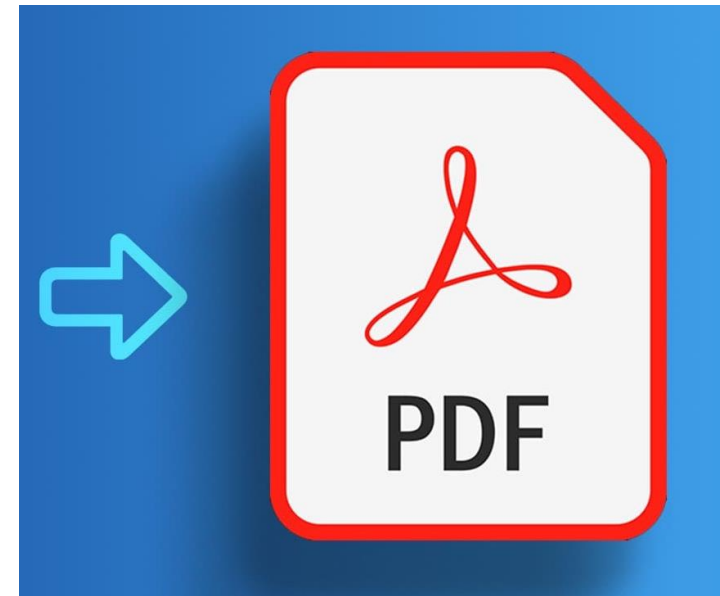
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Creating an Accessible PDF from Source Document – Microsoft Word and PowerPoint

- Follow best practices for accessibility in creating the original document
- Be sure to Save as PDF rather than Print to PDF.
- On a Mac, select the radio button that is labeled “Best for electronic distribution and accessibility”
- If you have Acrobat Pro DC, use the Create PDF Add-On.



Creating an Accessible PDF from Source Document – Other Applications

- **Adobe InDesign** can also be used to create an accessible PDF.
- **Google Docs:** File downloaded as a PDF is accessible
- **Google Slides:** Exports are untagged and therefore inaccessible.
- **Other applications:** Exporting to PDF will have mixed results.

Accessible Source Document: MS Word

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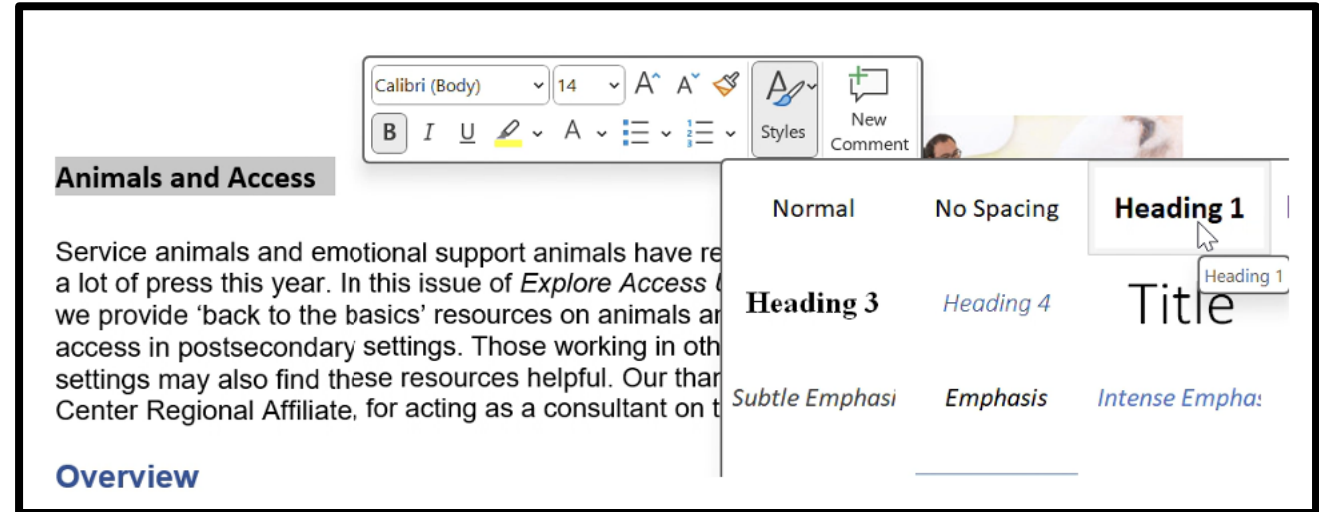
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Using Headings to Provide Structure

- Headings provide structure to your document.
- Using normal text and applying styles such as larger size, different color, or bolder text does not create a true heading.
- Don't use headings when you don't need a true heading.

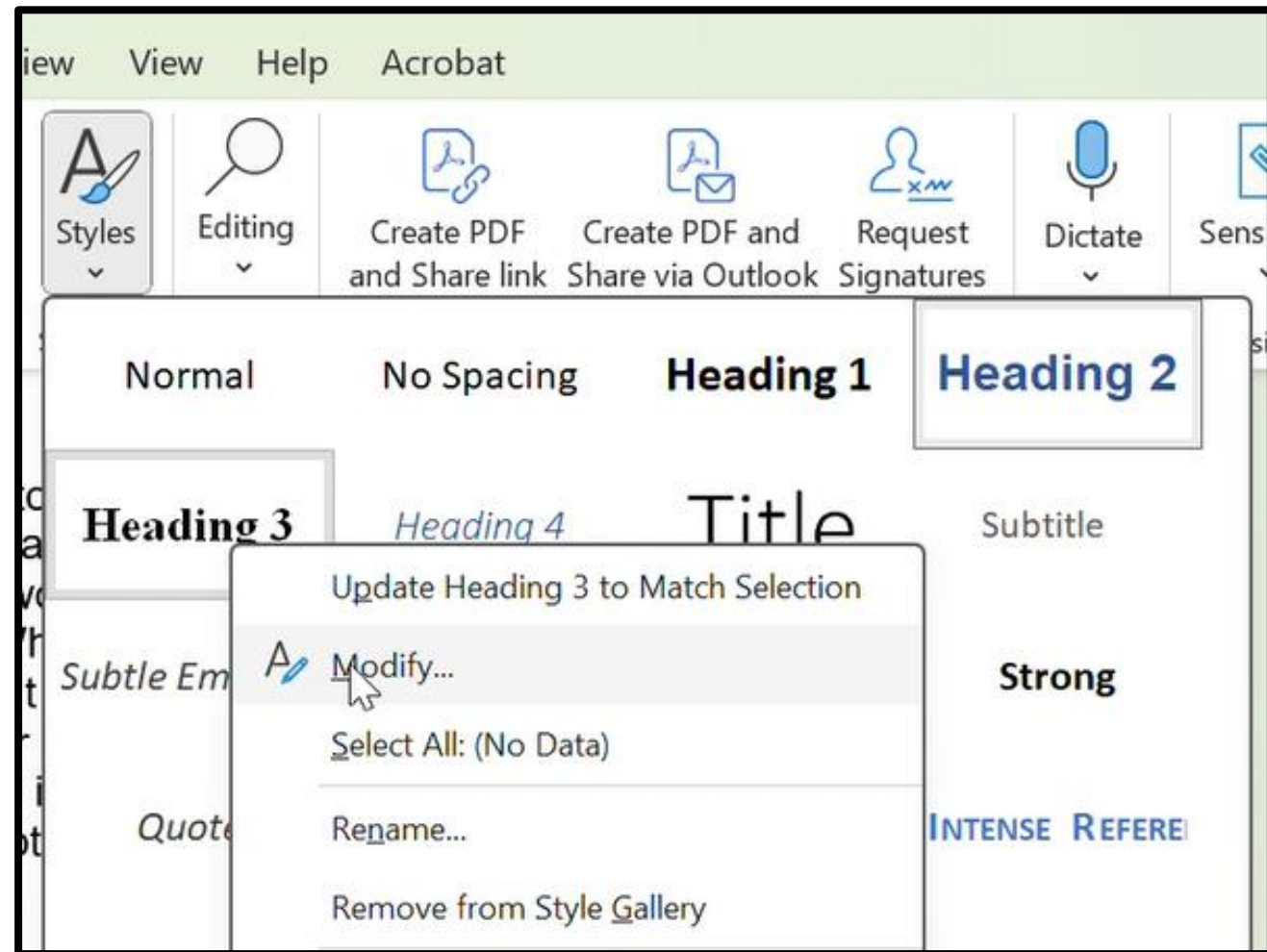
How to Add Headings

- Highlight the text
- Click on the appropriate heading
- Or use keyboard shortcuts
 - PC: Control+Alt+1
 - Mac: Command+Option+1



Modify Headings

- Modify a heading by:
 - Right clicking on the heading in the styles group and choosing modify OR
 - Change the heading in your document and choosing Update Heading to Match Selection



Alternative Text:

**a text description of an image
(or other non-text content)**

Also called:

alt text, image description

Why Use Alt Text

- Without alt text, a screen reader user will not know what an image is.
- Images often convey important information.
- The screen reader will just say “graphic”



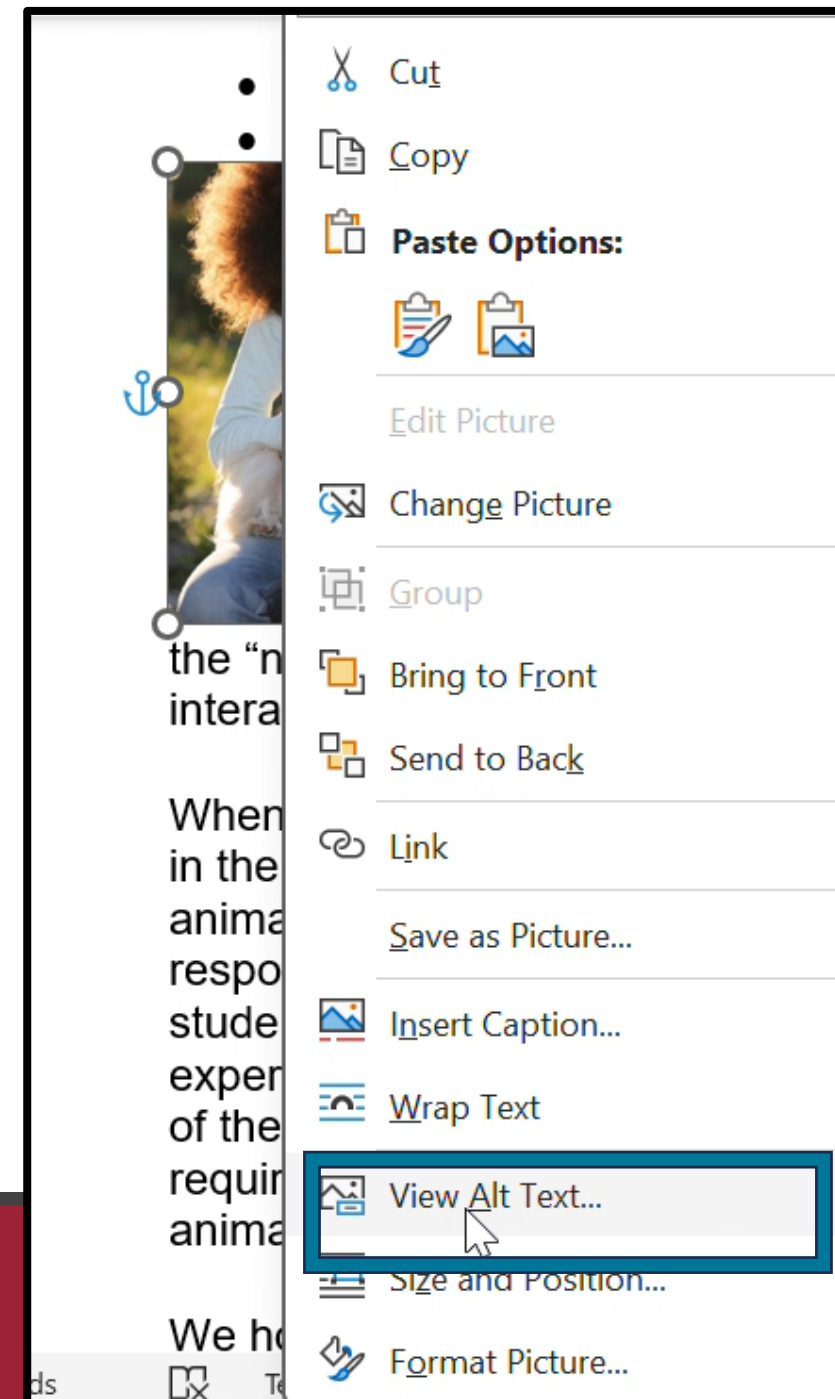
Sample Alt Text

A Pomeranian wearing glasses looks down at an open book.



How to Add Alt Text (1)

- Right click on the image
- Choose View Alt Text



How to Add Alt Text (2)

- Write the description in the box that appears to the right of the document.
- Describe what is in the image.
- No need to say “image of” or “picture of”



Alt Text

How would you describe this object and its context to someone who is blind or low vision?

- The subject(s) in detail
- The setting
- The actions or interactions
- Other relevant information

(1-2 detailed sentences recommended)

I

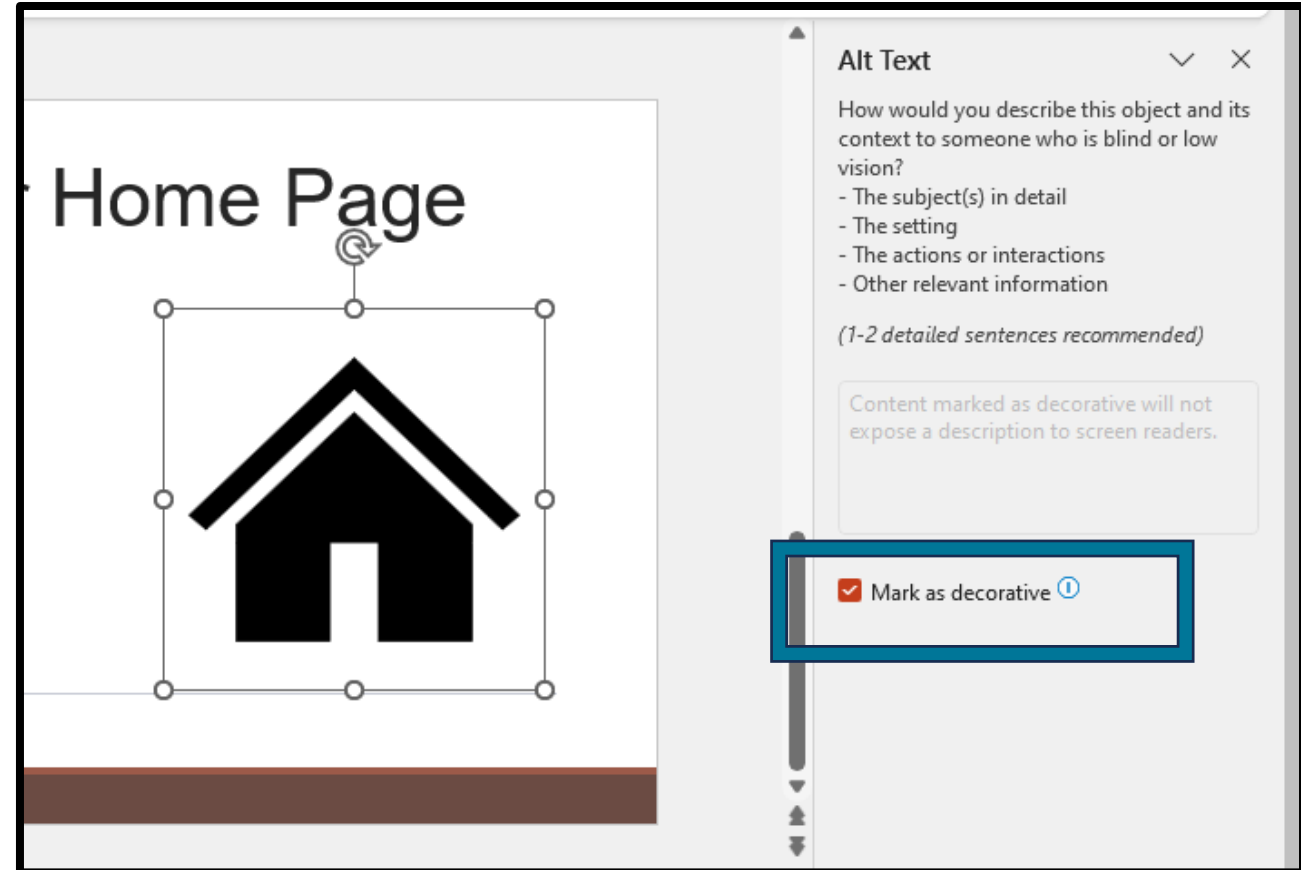
Generate alt text for me

Mark as decorative ⓘ

Powered by Office Services

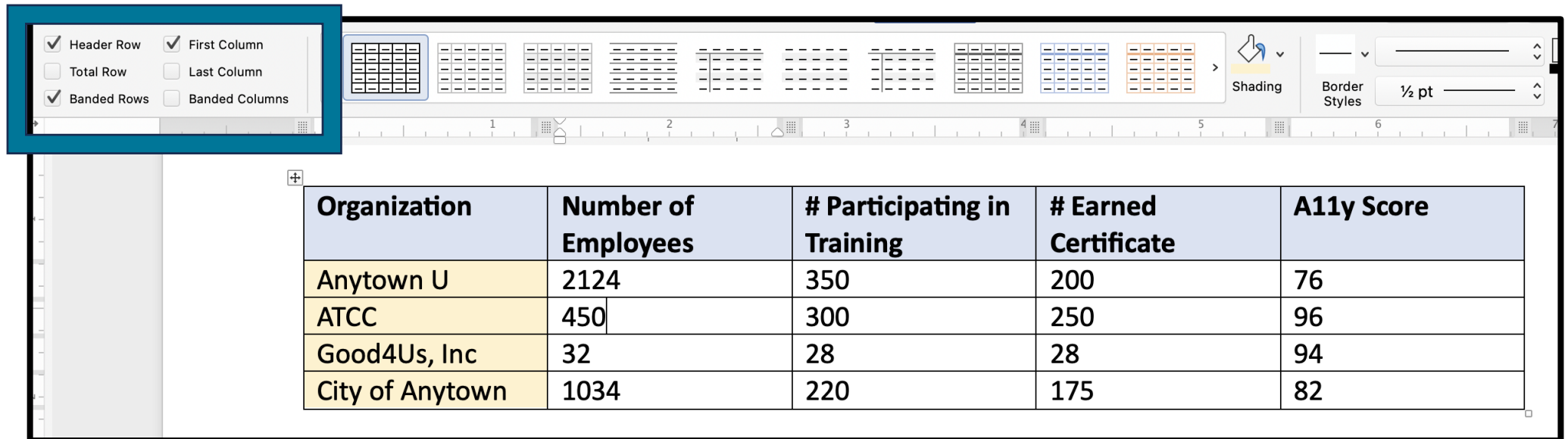
Purely Decorative Image

- Images that do not add anything to the content
- Images that are redundant to the content
- Images that are visual separators



Other Elements

- Link names should be meaningful out of context.
- Lists should use bulleted list tools within MS Word.
- Tables should have designated header rows



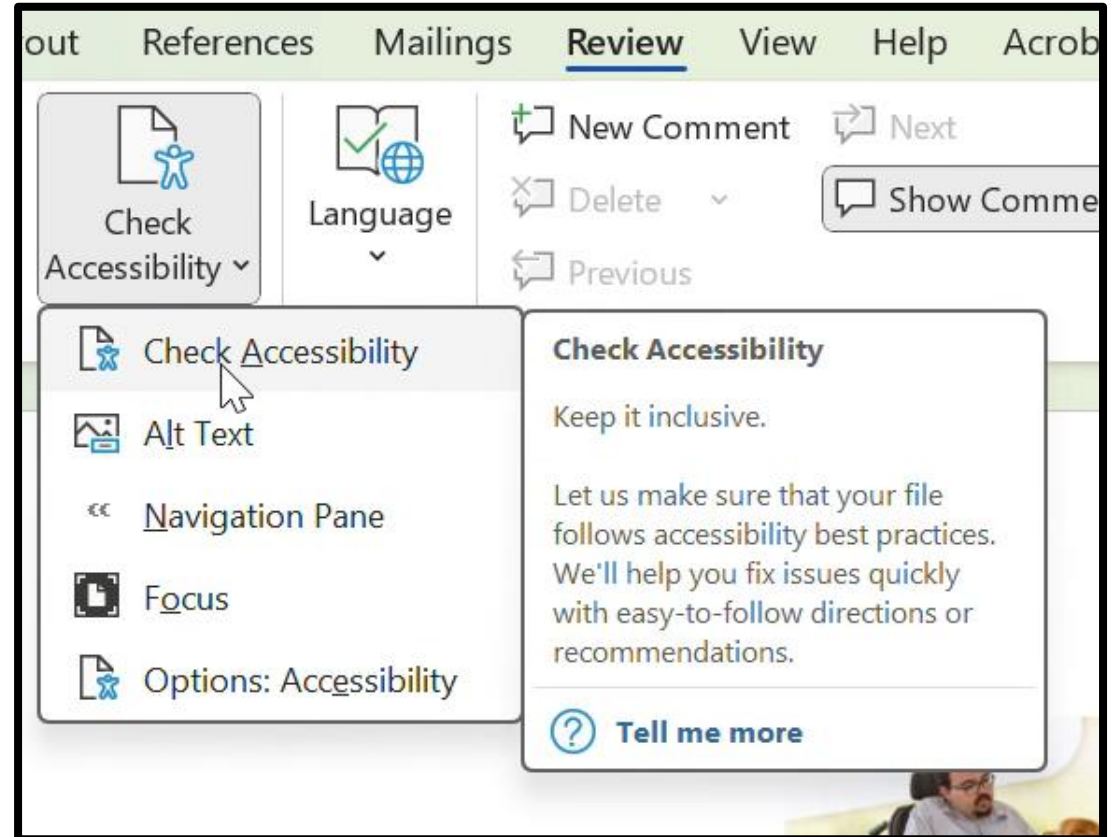
The screenshot shows the Microsoft Word interface with a table. The 'Table Tools' ribbon is visible, and the 'Table Properties' task pane is open on the left. The table has five columns: Organization, Number of Employees, # Participating in Training, # Earned Certificate, and A11y Score. The first row is highlighted in blue, indicating it is the header row. The 'Table Properties' task pane shows the following options:

- Header Row
- First Column
- Total Row
- Last Column
- Banded Rows
- Banded Columns

Organization	Number of Employees	# Participating in Training	# Earned Certificate	A11y Score
Anytown U	2124	350	200	76
ATCC	450	300	250	96
Good4Us, Inc	32	28	28	94
City of Anytown	1034	220	175	82

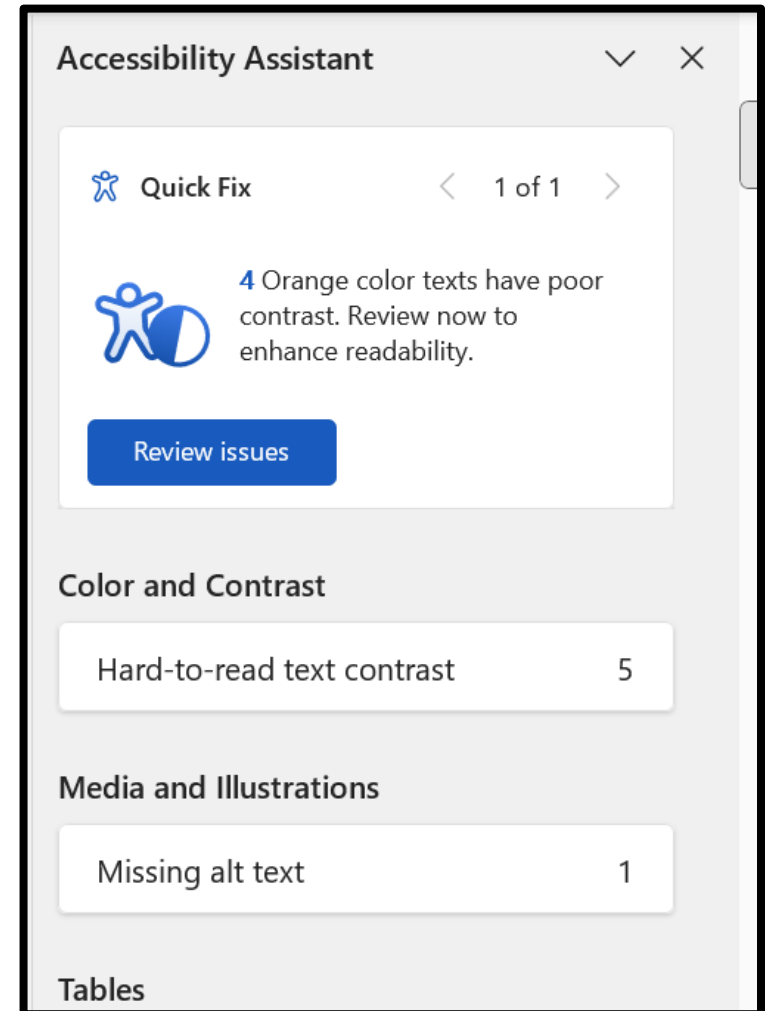
Using the Accessibility Checker (1 of 2)

- Select Review Ribbon
- Select Accessibility Checker



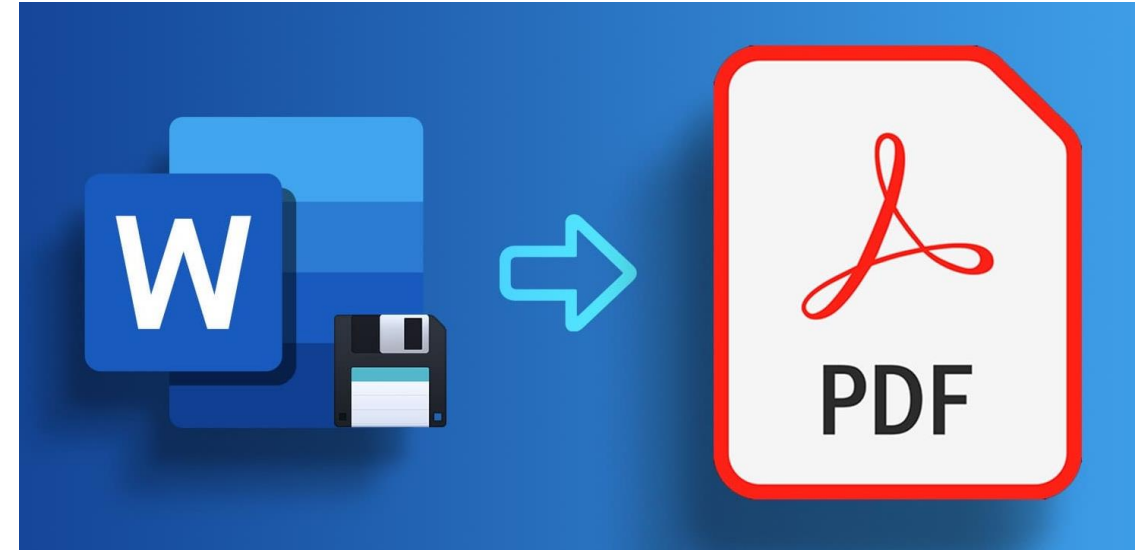
Using the Accessibility Checker (2 of 2)

- Panel opens to the right
- Identifies accessibility issues



Save as PDF

- Always “Save As” PDF instead of Printing to PDF
 - Newer versions: Save a Copy and then choose PDF from dropdown menu
- If using a Mac, also choose “Best for electronic distribution and accessibility”



Demo: MS Word to PDF

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Existing PDFs

How Do I Know It It Is Accessible

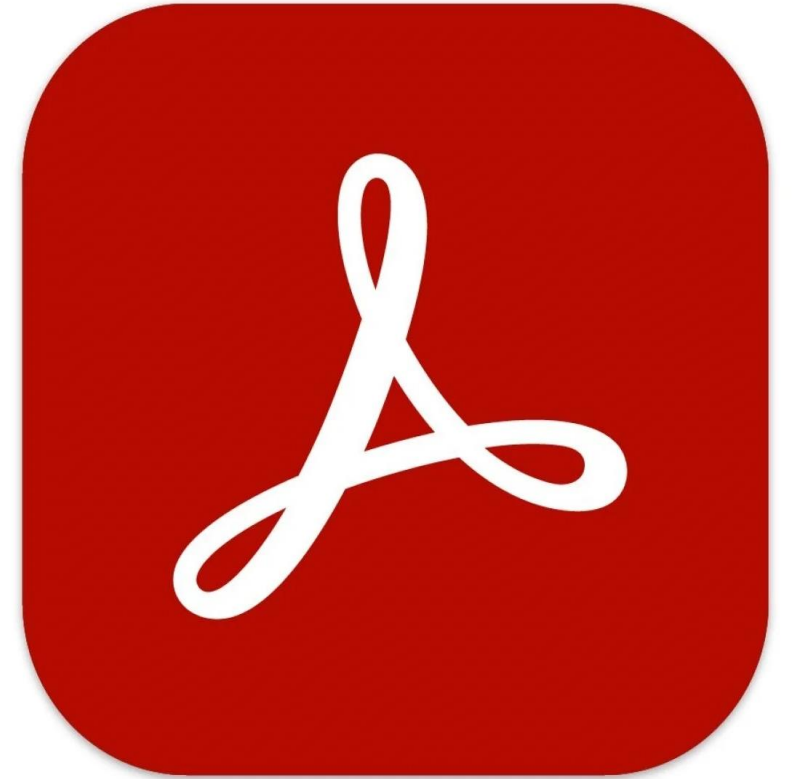
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Is the PDF Accessible?

- Is there actual text?
- Is the PDF tagged?
- Are there accessibility errors?



Demo: Checking Existing PDFs

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Free Accessibility Checkers

- [PDF Accessibility Checker \(Windows\)](#)
- [AxesCheck](#)



Fixing Inaccessible PDFs

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Got Source Document?

- Fix issues in the source document
- Resave to PDF
- Recheck for accessibility



Problem: PDF is a Scanned Image

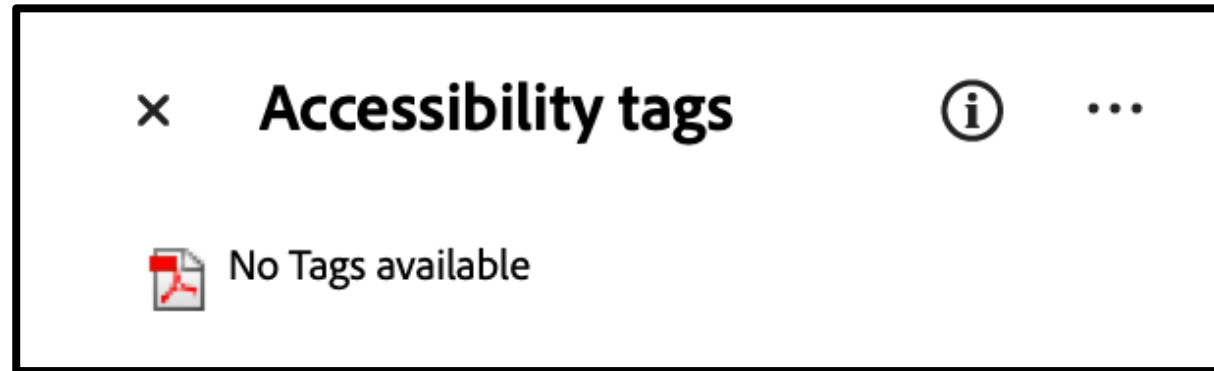
Use Optical Character Recognition (OCR) to recognize and render text.

If the scan is a quality one, you may be able to fix the problem using Acrobat Pro.

- Windows: Select View > Tools > Recognize Text
- Mac: Select Edit > Scan and OCR > Recognize Text > In File

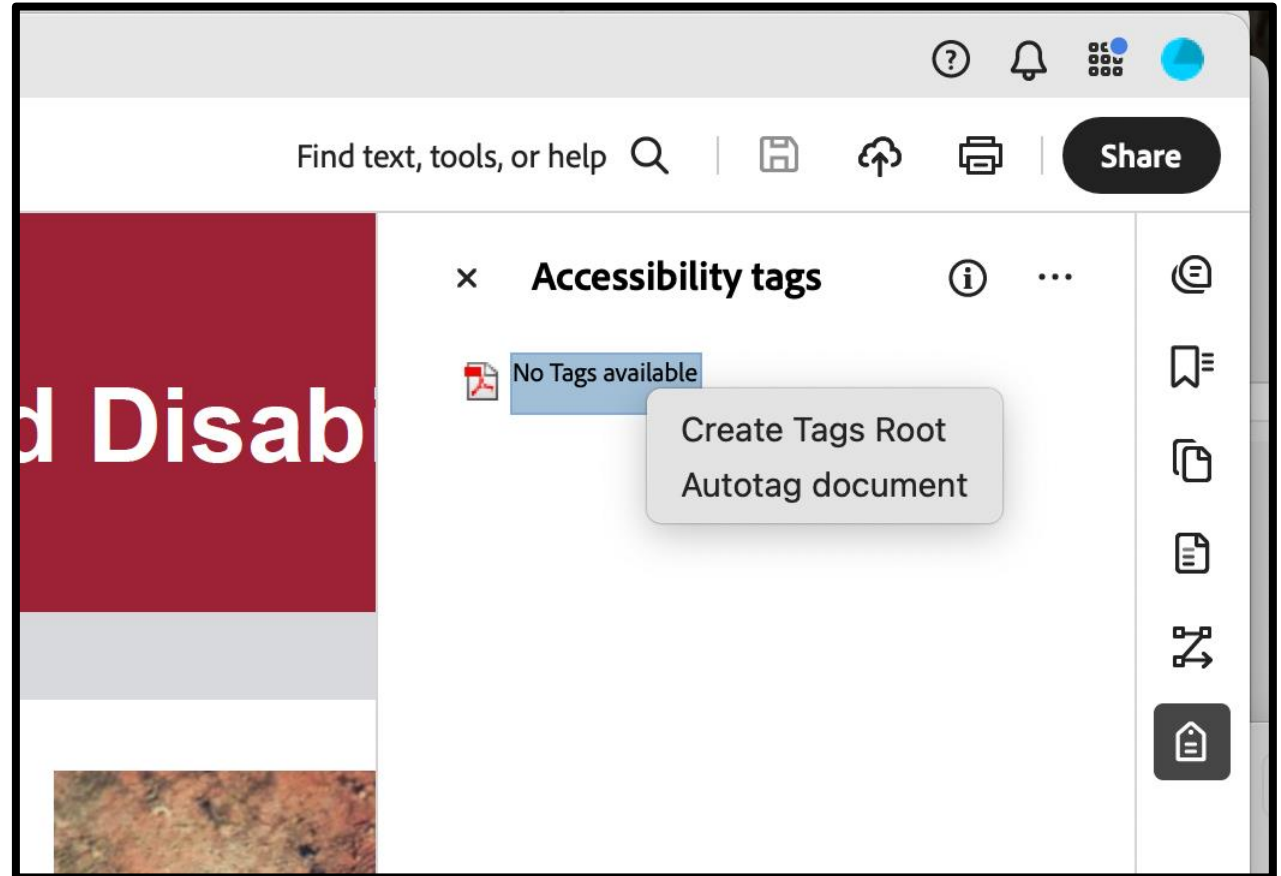
Problem: PDF is Untagged

Use Adobe Acrobat Pro to auto-generate tags.



Auto-Tagging a PDF

- Open tags panel
- Right click on No tags available
- Choose Autotag document



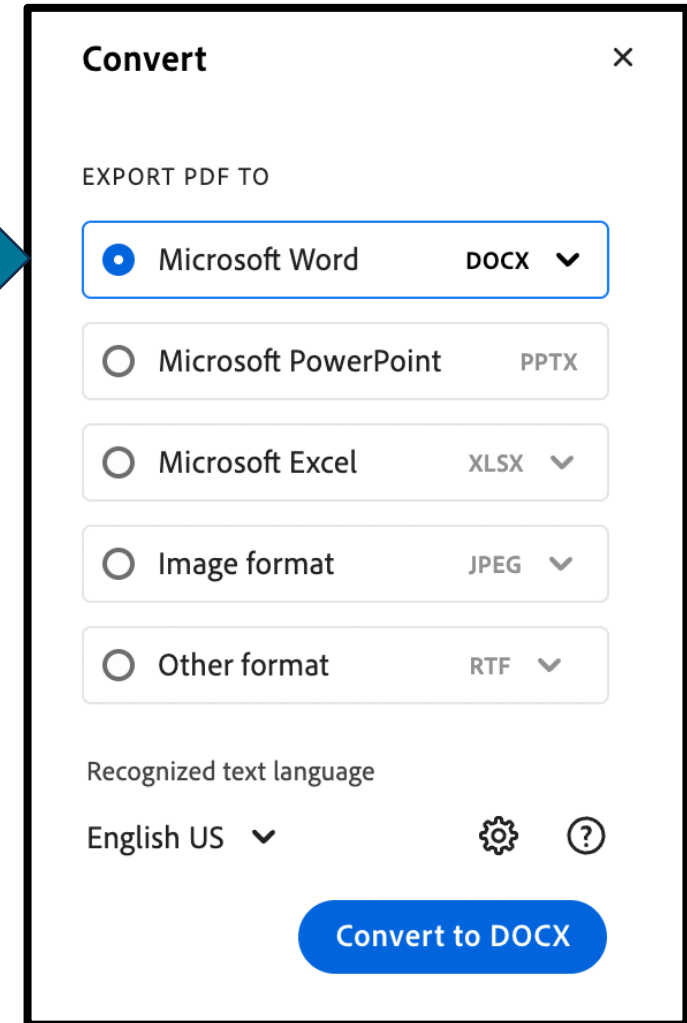
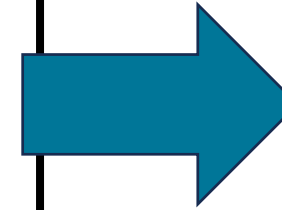
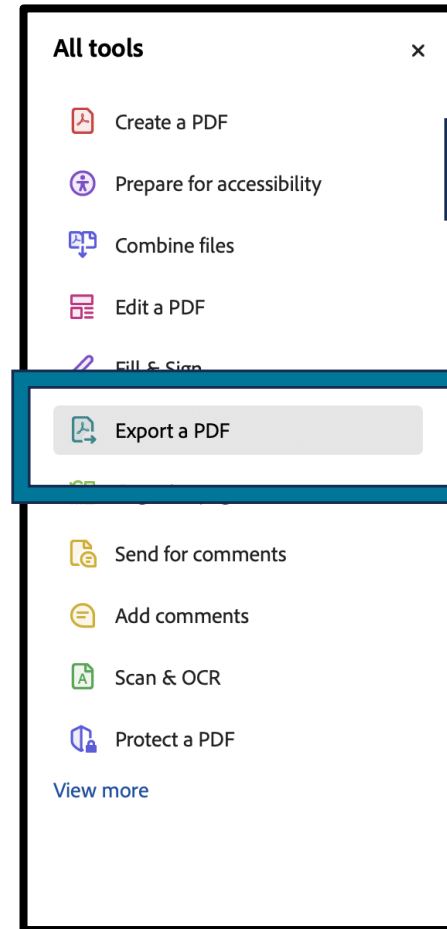
Problem: PDF is Tagged But Has Significant Accessibility Issues

Export document to MS Word (or MS PowerPoint).

- Simple documents may export well to MS Word.
- More complex documents may be better edited in MS PowerPoint.

Exporting PDF to MS Word

- Choose All Tools
- Then Export a PDF
- Then Microsoft Word (or PowerPoint)

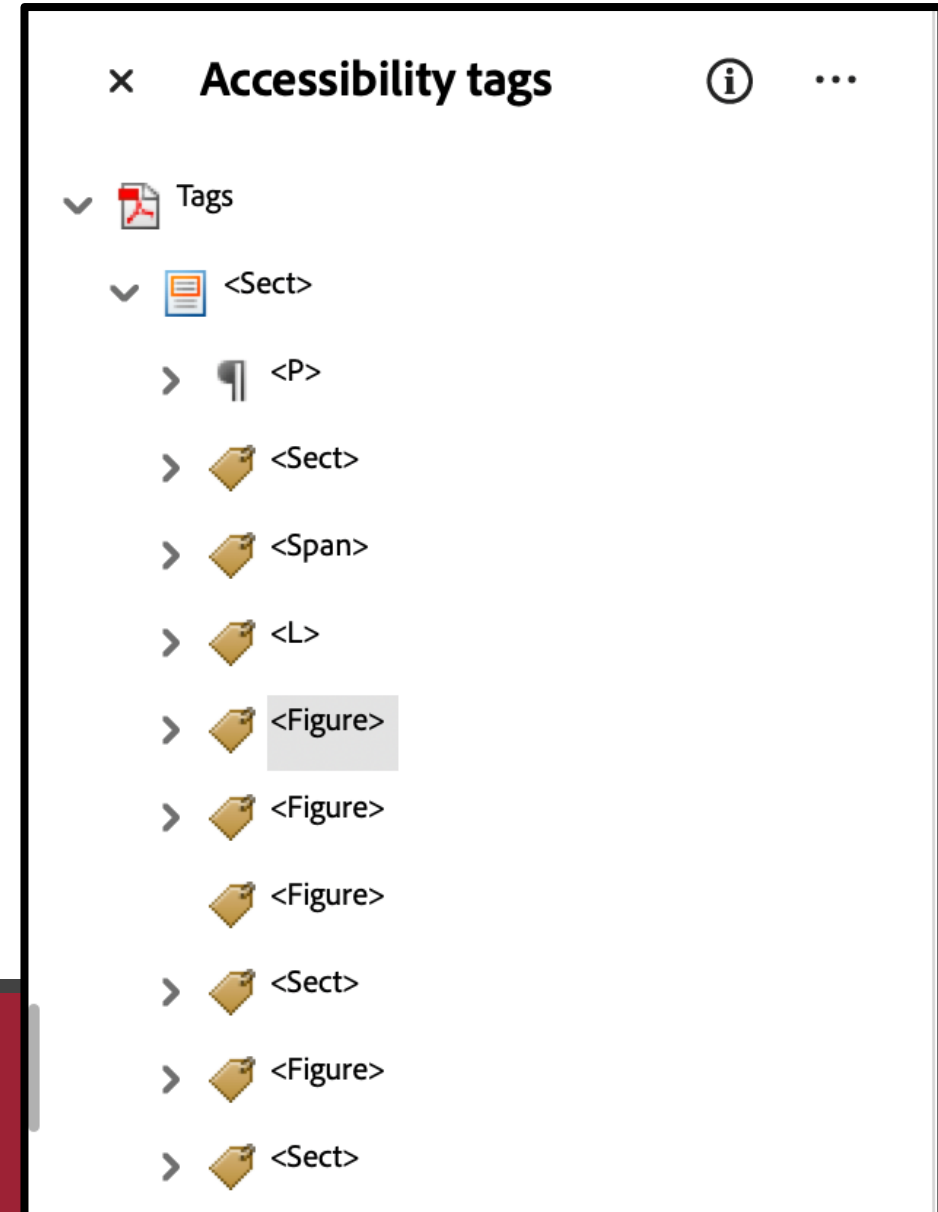


Problem: PDF is Tagged with Minor Accessibility Errors

Fix accessibility errors in tag tree or using the Reading Order tool in Acrobat Pro.

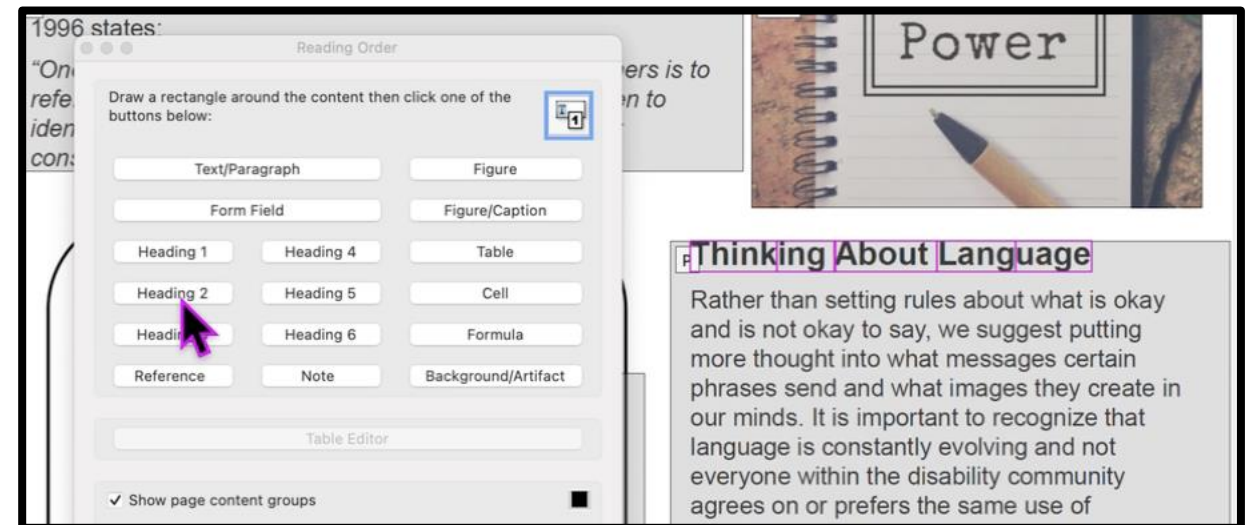
Remediating a PDF Using Tag Tree

- Those who are familiar with HTML may prefer fixing errors using the Tag Tree.
- To view the tags panel, select View > Show/Hide > Side Panel > Tags.



Remediating a PDF Using Reading Order Tool

- To access the Reading Order tool, select All Tools > Prepare for Accessibility > Fix reading order.



Demo: Fixing Existing PDFs

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Other PDF Accessibility Remediation Tools

- [AccessibilityNow Remediate \(Crawford Technologies\)](#)
- [CommonLook PDF \(Allyant\)](#)
- [Equidox PDF Accessibility Software](#)
- [Grackle PDF](#)
- [PDFix](#)
- [PREP Document Remediation Software \(Continual Engine\)](#)



PDF Accessibility Resources

- [Adobe: PDF accessibility](#)
- [Deque: 8 Step PDF Accessibility Checklist](#)
- [Deque: Quick Reference Guide: Basic PDF Accessibility \(PDF\)](#)
- [Harvard: PDF Accessibility](#)
- [University of Arizona: PDF Accessibility](#)
- [University of Colorado – Boulder: Understanding PDF Accessibility](#)
- [University of Washington: Checking PDFs for Accessibility](#)
- [WebAIM: PDF Accessibility](#)
- [W3C; PDF Techniques](#)

Other Digital Accessibility Resources

- [Explore Access: Designing an Accessible Online Course](#)
- [DOE: OCR Video Series](#)
- [WebAIM](#)
- [W3C: Web Accessibility Initiative](#)

Thanks to our funders

- iCAN (Increasing Capabilities Access Network) is the Arkansas statewide Assistive Technology program designed to make technology available and accessible for everyone who needs it.
- The Southwest ADA Center is the Southwest's leading resource on the Americans with Disabilities Act and related disability rights laws. The Center is part of the ADA National Network.



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Upcoming Webinars

- Dates to be determined:
 - Universal Design and Instruction
 - Accessible Tables and Excel Worksheets
 - Accessibility with Canva
 - Creating an Accessible Campus
- Visit: uofapartners.uark.edu/news-events



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