

# Creating Accessible PDFs

When submitting camera-ready papers and pictorials, we ask that all authors make their submissions accessible including making sure the document follows best practices in accessibility. For more information and some assistance to fix the most common accessibility problems, please visit [Adobe's useful resources for improving accessibility](#). Adobe Acrobat Pro is the standard; however, if you search, there are a few free options that you might be able to use in lieu of Adobe.

## Testing PDF Accessibility

- **Conduct an Accessibility Check.** To conduct an accessibility check, click the 'Tools' tab and scroll down to 'Protect & Standardize' and open 'Accessibility'. On the right-hand side, click 'Accessibility Check' and fix any parts of the document that failed the check.
- **Fonts should be embedded,** or your PDF will need to be regenerated, and you may lose the accessibility that you have added. In Adobe Acrobat Pro, [here is a tutorial](#) to embed your fonts.

## Common Accessibility Errors

If using a Windows operating system, Word users can use the Adobe plugin for Word that can export accessibility features into the pdf.

If using a Mac operating system or LaTeX (for example, Overleaf) users will have to use Adobe Acrobat Pro (or another PDF program) to add in accessibility best practices.

Once you have run the accessibility checking on Adobe, here are common fails that you might come across:

- **Tagging a PDF.** If your document failed 'Tagged PDF', you can click 'Autotag Document' on the right side of Acrobat (in the accessible tool). Then you can check the tags in the navigation bar by clicking 'View' then 'Show/Hide' then 'Navigation Pans' then click 'Tags' to manually check and edit each tag.  
For a more detailed explanation, check out [Montclair State University's PDF on Tagging an Existing PDF in Adobe Acrobat Pro](#).
- **Add alternative text for figures.** Make sure the tags pane is visible (in the navigation bar by clicking 'View' then 'Show/Hide' then 'Navigation Pans' then click 'Tags') and find the image you want to see in the tag tree. Right-click the image in the tag tree and choose 'properties.'
- **Specify the document language.** Go to the 'File' menu. Select 'Properties', then the 'Advanced' tab, 'Language' field. In some versions of Acrobat, the 'Properties' option is called 'Document Properties'. In some versions the 'Language' field is in a 'Reading Options' tab.
- **Define tab order.** To check the tab order, click 'view' in the navigation bar, then 'show/hide', then 'Navigation Panes' and click 'order.'

- **Make sure tables have headings.** Make sure the tags pane is visible (in the navigation bar by clicking 'View' then 'Show/Hide' then 'Navigation Pans' then click 'Tags'). Navigate to the table cells in the tree that show the headers. Check they have the type <H1> (for subheaders, please use <H2>, etc.). If not, double click on the tab to edit it. To add new tags, please refer to the [instructions here](#).

### **Creating Accessible PDFs in Windows Word**

[If you are on a Windows operating system and using Word, please refer to how to make an accessible document from SIGACCESS.](#) Word on the Mac Operating System and Latex users (e.g. Overleaf) will have to edit accessible on Adobe Acrobat Pro.

[InDesign \(used for pictorials\) also has accessible features, please refer to the Adobe website on the required steps to make your InDesign PDF accessible.](#)

[PowerPoint \(used for pictorials\) also has accessible features, please refer to the Microsoft website for the required steps to make your PowerPoint accessible.](#)

Note, after making the document accessible, we would suggest still running the PDF through the accessibility checking on Adobe Acrobat Pro.

### **Making Accessible Figures and Tables**

- **Do not add your figures as a PDF.** The tagging of figures that are in PDF can sometimes lead to undesired effects on the visual presentation. Instead, insert the image, for example, as PNG or SVG.
- **Do not add your tables as images.** If in word, please make sure the tables are typed. If you are using latex, there are online programs and addons to help create LaTeX tables you can use in your document (for example, <https://www.tablesgenerator.com/>). For more information, please refer to the [Overleaf article on how to build tables in latex](#).
- **Give your tables line/borders.** This can facilitate the tagging of the document.

### **Colour-Accessibility for Colour-Blind Users in Figures**

- Try to use viridis or cividis colour maps
- Avoid red (especially when using green)
- If possible, go gray
- Use shapes and textures to differentiate colours
- Use a colour-blindness simulator to test our figures and drawings such as [Color Oracle](#) or [Coblis](#)

[Tips are taken from the nature article \*Colour me better: fixing figures for colour blindness\*](#)

### **Creating Accessible Video Figures**

Video figures, like papers, must be accessible. For videos to be accessible, include both audio narration (so that the contents of the video can be understood by someone with a visual impairment) as well as text captions (so that the video can be understood by someone who is deaf or hard of hearing). Text captions can be burned directly into the video as subtitles (preferred), or else closed-captioning metadata files (\*.srt, \*.ttml, \*.vtt) can be uploaded as additional supplementary material.

Please note, any Adobe instructions are for 2022 Adobe Acrobat Pro. You might have to search for instructions for alternative programs or an older version of Adobe Acrobat Pro.

This page was modified from the Accessibility document on [ASSETs 2022](#)

If you have any questions, please feel free to email the Accessibility Chairs at [accessibility\\_chairs@tei.acm.org](mailto:accessibility_chairs@tei.acm.org).