

Creating Accessible PDFs

Using Word to Create Accessible PDF Documents

This documentation is designed to be a tool for students, faculty and staff. When authoring electronic documents, it is important to follow a few basic steps to ensure your document is readable by individuals with disabilities. You should always author the original source document with accessibility in mind.

For this documentation, we will be using Microsoft Word to produce an accessible PDF. The core principles outlined here apply to all document types, but the individual steps may vary depending on which tool you are using to create your document.

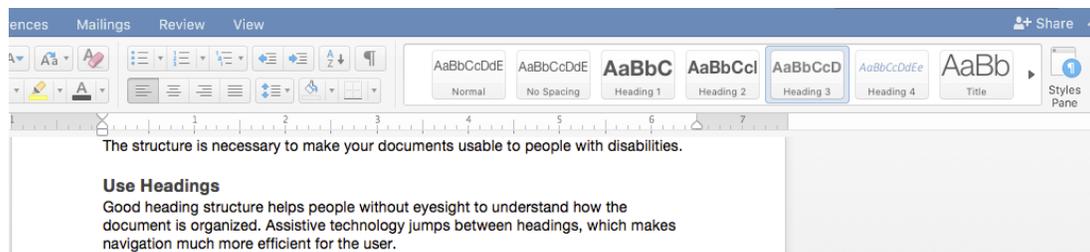
Document Structure

When designing a document, it is important to use styles to ensure correct structuring. The structure is necessary to make your documents usable to people with disabilities.

Use Headings

Good heading structure helps people without eyesight to understand how the document is organized. Assistive technology jumps between headings, which makes navigation much more efficient for the user.

Making text larger and bold does not make a heading, you need to use text Styles. In Microsoft Word, use the heading styles such as “Heading 1” and “Heading 2,” available under the *Styles* pane in the *Home* tab. For versions of Word earlier than 2010, this menu is available under *Format > Styles and Formatting*.



Headings should be used in a logical manner. “Heading 1” should be the main heading in your document and only used once. “Heading 2” is for subheadings. If there are additional levels of headings within the document, continue in this pattern with “Heading 3,” “Heading 4,” etc.

Use Lists

When a list is needed in a document, they should be created using Word's built-in tools for ordered (numbered) and unordered (bulleted) lists. If you do not use these tools than your list will not display as a list to assistive technology, making it more difficult for those users to understand. These tools are located in Word's Ribbon under the *Home* tab.

Use Columns

If you need a columned layout, do not use tabs or spaces to create the correct look. Also avoid using text boxes or tables to place text correctly.

Word comes with a built-in Column layout feature which will correctly mark the layout to ensure assistive technology reads the content in a logical order. To access the Columns panel, navigate to *Columns* under the *Layout* tab. For versions of Word older than 2010, this can be found under *Format > Columns*.

Use Tables Wisely

Similarly, do not use tabs or spaces to create a table effect. Use Word's table editor instead. Word has some limitations when creating accessible tables. Unless they include markup which explicitly defines the relationships between all the parts, tables can be difficult for assistive technology users to understand.

For simple tables with a single row of column headers and no nested rows or columns, using Word tables is just fine. For anything more complex, they can only be made accessible using HTML or Adobe Acrobat Pro which can add accessible table markup to the document.

Most often, complex tables can be simplified by breaking them down into multiple tables so take a look at your data before you decide to make a complex table.

When creating a simple table, the only necessary step for accessibility purposes is to identify the header row. To do so in Word, highlight that row then right click the row and select "Table Properties" which will bring up the *Table Properties* dialog. Navigate to the *Row* tab and check the checkbox that says "Repeat as header row at the top of each page."

If you don't do this, or if you don't want the header row to be repeated in a multipage table, you will need to change the table cell tag in the header row from <TD> to <TH> using the Acrobat Pro Tags Panel.

Writing Accessible Elements

Links

When adding links to a document, use Word's hyperlink dialog. Word hyperlinks are automatically converted into PDF hyperlinks.

It is important to remember that when inserting links into a document, the display text for the link needs to be descriptive of what the link will lead to. "Click Here," does not tell the user where you are sending them and is unhelpful without more context. "Go to St. Lawrence's Homepage," is much better as it describes the destination of the link.

Select the *Insert* tab, *Links > Hyperlink* to display the *Insert Hyperlink* dialog.

Images & Graphics

All graphics and images in a document should be provided with alternative text descriptions. Alternative Text, or Alt Text, refers to the text that can be read by assistive technology to describe graphics and images that visually impaired users may not be able to see otherwise.

When creating alt text for an image or graphic keep in mind that it needs to be meaningful and concise. Aim for 125 characters or less, similar to a social media Tweet.



For the above image, if we want to write meaningful alt text we need to take into consideration the context in which the image is placed. If this appeared in an article about Professor John Doe our alt text might be something like "Professor Doe instructs students during an experiment in the Biology labs." If the surrounding text was about statistics of students who go on to work in a field of science then "Biology students work with a professor to measure out samples during lab" might be better.

In this document, my alt text for that image is “Sample image to help illustrate proper alt text usage” because in this context that is what is important about the image.

To add Alt Text to an image in Word, click on the image and open the “Styles Pane” found in the upper right. Under the “Layout and Properties” tab (the box with arrows along the height and length in icon form), there will be a section for “Alt Text.”

If you don’t see the button for the “Styles Pane” you can Right-click on the image itself and choose “Format Picture” to bring up the pane. In older versions of Word the option in the Right-click menu might read “Properties” and open a pop up instead.

In newer versions of Word there will be two boxes, one for the Title and one for the Description. Only the Description is needed though if you need a long description to properly explain the image, the Title section can be used as a synopsis area. Screen readers will read out the Title text to help a user determine if they would like to hear the longer description of the content.

PDF Settings for Accessibility

Identify the Document Language

In order to ensure that assistive technology will read a document in the appropriate language, the document must identify its language. To set the document language in Word go to *Tools > Language* and make sure the correct language is selected.

Use the Word Accessibility Checker (Word 2010 and higher & Word for Mac)

Word 2010 and later comes with a “Check for Issues” option that includes an accessibility checker. This tool will allow you to check your document for content that a person with disability might find difficult to read. Checking your source document before converting it to a PDF is good practice that will identify potential issues before they become a problem for one of your users.

To run an Accessibility check on your Word document, go to the *File* tab, select *Info* and click on the *Check for Issues* button in the “Prepare for Sharing” section. In the dropdown select “Check Accessibility” which will pop up a panel that steps through your document and identifies error or warnings and offers suggestions for fixing each issue.

In Word for Mac, this checker can be located under the *Review* tab by clicking the *Check Accessibility* button.

Add Document Title Metadata

To add a title to the document properties, go to *File > Properties > Summary* and fill in the title field. When exported this title will display as the PDF title in the document metadata.

It is important to note that using the “Title” text Style is not the same as adding the Document Title metadata. The metadata is required for accessibility, using the “Title” Style is not.

Save as a tagged PDF

When you go to save your Word document as a PDF, you want to make sure that you are saving it with the correct settings. This differs from version to version in Word.

Word 2013 and Word 2010

- Go to *File > Save As...* and select PDF as the format.
- When saving, select *Options* and be sure that “Document structure tags for accessibility” is checked.
- If you select “Minimize Size” to reduce the size of your PDF, be sure to repeat the above step as this option might uncheck the “Document structure tags for accessibility” checkbox.

Word for Mac (2016)

- Go to *File > Save As...* and select PDF as the format.
- Check the radio button for “Best for electronic distribution and accessibility” before hitting Save.

Older Versions of Word

- In Office 2007 and 2003, exporting to PDF requires a plug-in. The Adobe PDFMarker Plugin ships with Adobe Acrobat Pro and it appears as an Adobe toolbar and menu item in Word when installed. Using the plugin to Save As PDF by default will produce a PDF that preserves your Word document’s accessibility features.
- On a Mac, Word did not include accessibility features at all until Office 2011 and did not support tagged PDFs until Office 2016. In Office 2011 for Mac, you can create an accessible Word document, but in order to get a tagged PDF you will have to export it from Word to PDF using Word for Windows or you will need to tag it after the fact using Adobe Acrobat Pro.