

Creating an accessible PDF using Microsoft Word.

This document is designed to provide direction in which accessible PDF's can be created in effort be compliant with the Americans with Disabilities Act.

In creating an accessible PDF document from scratch, we want to be sure of the following:

- The heading structure is correct
- All images have alternative text
- All tables have table headings
- The document (if 21 pages or more) has bookmarks
- The document has its language defined
- The document's title is assigned
- A table of contents has been put in place
- Microsoft Word's Accessibility checker has been utilized

■ Table of Contents

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Applying Headings

Headings are used to indicate sections in a document and their hierarchy. When headings are applied properly, you can easily see the outline of the document in order from Heading 1, Heading 2, Heading 3 etc. Especially when used online, headings are not for aesthetic use, but are functional for screen-readers to keep their bearings in a given document. When headings are implemented properly, a person using a screen-reader can easily navigate frontwards and backwards through the sections of a document's headings.

For proper heading implementation, no headings should ever be sequentially skipped. Just simply mirror the fundamental structure of an outline as illustrated below. Rarely will a Heading 6 or more be needed.

Title	Heading 1
I. Main Topic	I. Heading 2
a. Sub-topic	a. Heading 3
i. Detail	i. Heading 4
1. Sub-detail	1. Heading 5





Applying alternative text to all images

Why Alternative text? Alternative text with images is vital for people with visual impairment. Screen readers cannot provide information to the reader which is not provided. Provided alt text may be the only information a reader which is visually impaired receives about an image displayed on a screen. Simple descriptive text (alt text) about an image in a PDF will include a person with visual impairment, in on the intended reader experience.

Follow the steps below to apply alt text to an image.

1. Import an image into the document
2. Select the image so that the sizing handles appear.
3. Right-click the image
4. Select "Format Picture".
5. In this pane, select "Layout & Properties" (third in a row following "fill & line" and "effects").
6. Expand the "Alt Text" drop-down menu.
7. fill in the title and description for this image.

Format Picture ✕

▶ Text Box

▼ Alt Text

Title ⓘ

Description

Setting table headings

Screen-readers need to know certain information about a table so it can most effectively convey information to its user. The parts of a table needing to be identified are, identified by the screen-reader are, the header row, first column and last column.

Heading/Row Cell 1	Heading Cell 2	Heading Cell 3
Row Cell 2		
Row Cell 3		

1. Select the “Insert” tab in top ribbon
2. Click the down arrow to the right of the table icon
3. Select the desired number of columns and rows by highlighting the appropriate number of columns and rows
4. Click anywhere on the table to make the “table design” and “layout” tab appear in the top ribbon.
5. Click on “table design”
6. Make sure the boxes are checked for Header row, First column and last column.

At this point in the PDF creation process, your content can be mostly done. With this in mind, there are still some steps to be applied as the PDF is in its final stages. Before printing the PDF let’s apply the following.

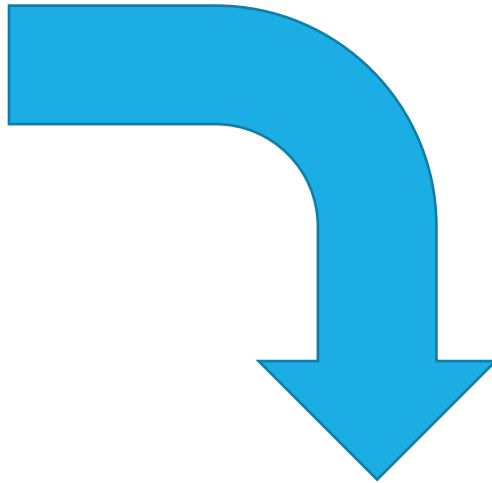
Including bookmarks

If the document has 21 or more pages, bookmarks will need to be added. Bookmarks allow for navigation to sections in the PDF with a single click of a button. They work exactly like a link to a website except, they do not navigate outside the PDF. They will consist of organized links towards the top of the document, and targets throughout the document usually being section headings. In this example below, clicking the “Federal Loan Information” bookmark link would navigate the reader to the section about Federal Loans.

JUMP TO SECTION

Federal Loans

Federal Loan Information
Federal Direct Unsubsidized Stafford
Federal Direct Grad PLUS
Loan Details



Federal Loan Information

Federal Direct loans are low-interest loans for students and parents to help pay for the cost of a college education. The lender is the U.S. Department of Education. These loans typically have low interest rates and offer attractive repayment terms, benefits, and options. Generally, repayment of a federal loan does not begin until after the student leaves school.

To create bookmark targets:

1. Place cursor in the location a user can navigate to. This should be the heading of a section in your document that covers a particular topic.
2. Click “bookmark”.
3. Fill in “bookmark name”. This should be the topic of the section in one word if possible.
4. Click add.

(Reminder: This has created a bookmark that is not yet linked to a target. The goal is to have a bookmark linked to a jump-to section located early on in your document.) Now let's create the bookmark. This will take the reader to the bookmark target we just created.

5. Highlight appropriate key word in your jump-to section near the top.
6. Click on “links”. (If the window is wide enough, you will see separate buttons for “link”, “bookmark” and “cross-reference”. In this case, click on “link” and skip step #7.)
7. Click on “link”
8. Fill in “text to display” with text you want to appear within your selected area.
9. Select appropriate bookmark
10. Click “ok”.

Setting the language definition

Setting the document language in a PDF enables screen readers to switch to the appropriate language.

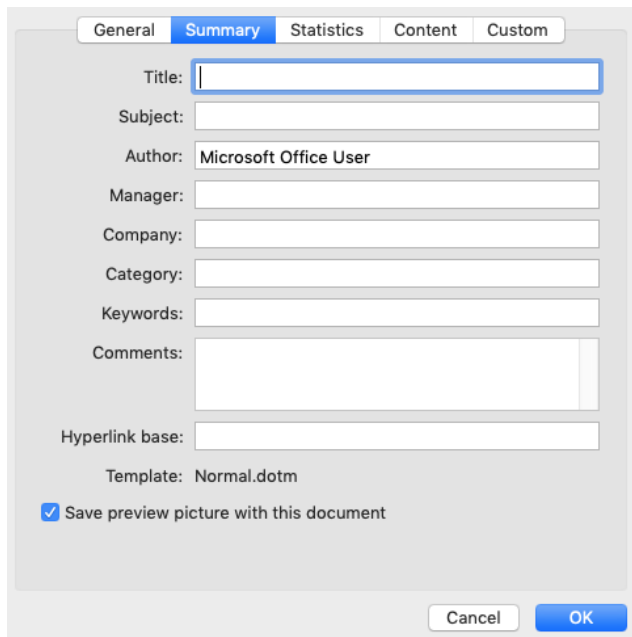
1. Click the “review” tab.
2. Click the “Language” button on the left side next to the “check accessibility” button.
3. Select the desired language your document is designed to be read in.
4. Click “ok.”

Applying the document title

This is more than making sure your document has a clear title in text at the top of your first page. This has to do with meta-data that a screen-reader is looking for.

To set the document title:

1. Click the “file” dropdown menu at the very top next to the “Word” dropdown menu.
2. Click on “Properties...”.
3. In the summary tab, fill in the Title.



The image shows a screenshot of the Microsoft Word Properties dialog box, specifically the Summary tab. The dialog box has five tabs: General, Summary (selected), Statistics, Content, and Custom. The Summary tab contains several input fields: Title (empty), Subject (empty), Author (Microsoft Office User), Manager (empty), Company (empty), Category (empty), Keywords (empty), and Comments (empty). Below these fields is a Hyperlink base field (empty) and a Template field (Normal.dotm). At the bottom left, there is a checked checkbox labeled "Save preview picture with this document". At the bottom right, there are "Cancel" and "OK" buttons.

Include a Table of Contents

Creating a table of contents for your document helps with being mindful of the document structure, keeping your headings in correct order, and providing bookmarks for sections in your document, especially when it is 21 pages or more. Please refer to the table of contents in this document as an example. It provides easy-to-use navigation along with bookmarks built in to the process.

Follow these steps to insert a table of contents in your Word document:

1. Put your cursor where you want the table of contents.
2. Click the “References” tab.
3. Choose the style of Table of Contents you wish to insert.

After this is created, it can be updated by clicking on the header of the Table of Contents and clicking “update all”.

Be sure the document is machine readable

What we're trying to avoid is image-only PDFs, where the text in the PDF is a picture of text, and not actual typed characters.

First, test for this by attempting to highlight any portion of copy. If you are unable to select individual characters or letters, then the copy is most likely an image of text.

This is understandable in cases of preserving hand-written documents, but must have the entire document typed in the alt tag of the image. Images should not be intended to read.

If the text is image-only, then it will not be accessible. The text needs to be typed in a word processor such as Microsoft Word.

Run Microsoft Word's accessibility checker

Microsoft Word has a powerful built-in accessibility checker.

1. Select the “review” tab in the top ribbon
2. Click the “check accessibility” button
3. Go through each item found in the inspection results in the right-hand pane that appears.
4. Follow the instructions to fix each accessibility problem until there are no accessibility issues found.

When the accessibility checker is showing that no accessibility issues are found, you are ready to print and share your document.

Resources

[Using acrobat Pro for accessibility](https://helpx.adobe.com/acrobat/using/create-verify-pdf-accessibility.html?trackingid=KACNN#TaggedPDF)

(<https://helpx.adobe.com/acrobat/using/create-verify-pdf-accessibility.html?trackingid=KACNN#TaggedPDF>)

[W3C](https://www.w3.org/TR/WCAG20-TECHS/pdf) (<https://www.w3.org/TR/WCAG20-TECHS/pdf>)

<https://www.agileana.com/blog/how-to-make-pdf-section-508-compliant/>

[Make an existing PDF file accessible](https://kb.iu.edu/d/bfua) (<https://kb.iu.edu/d/bfua>)

[applications for making tables accessible](https://www.w3.org/TR/WCAG20-TECHS/pdf#pdf_notes_acc-sup_files_applications) ([https://www.w3.org/TR/WCAG20-TECHS/pdf#pdf notes acc-sup files applications](https://www.w3.org/TR/WCAG20-TECHS/pdf#pdf_notes_acc-sup_files_applications))