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Tips for Creating Accessible Documents in Microsoft Word and Google Docs

Creating Accessible Documents in Microsoft Word

Taken from https://support.microsoft.com/en-us/office/make-your-word-documents-accessible-to-people-with-disabilities-d9bf3683-87ac-47ea-b91a-78dcacb3c66d

Microsoft Word and Google Docs are widely used applications for creating text documents. The text within documents can be read with screen readers, making it more accessible for individuals with disabilities.

Windows/MacOS

1. Check accessibility while you work in Word
2. Avoid using tables
3. Use built-in title, subtitle, and heading styles
4. Create paragraph banners
5. Add alt text to visuals
6. Add accessible hyperlink text and ScreenTips
7. Use accessible font format and color
8. Create accessible lists
9. Adjust space between sentences and paragraphs
10. Test accessibility with Immersive Reader

Run the Accessibility Checker

The MS Word Accessibility Checker will check the document for common accessibility issues. The Accessibility Checker provides suggestions about how to fix any issues found in your document.

MS Word Accessibility Checker (link is external)

Use heading styles

Heading styles make it easier for assistive technology (AT) users to navigate your documents. Each heading style represents a different level in the content hierarchy and communicates the structure of your document to AT users.

Apply MS Word Heading Styles:

- Windows heading styles (link is external)
- Mac OS heading styles (link is external)
Use alternative text for images

Alternative text is a short description of an image in your document. The “alt-text” will be read by users of assistive technology who would not otherwise know the content of the image.

Add MS Word Alternative Text:

- Windows alt text (link is external)
- Mac OS alt text (link is external)

Avoid using tables

In general, avoid tables if possible and present the data another way, like paragraphs with headings and banners. Tables with fixed width might prove difficult to read for people who use Magnifier, because such tables force the content to a specific size. This makes the font very small, which forces Magnifier users to scroll horizontally, especially on mobile devices.

If you have to use tables, use the following guidelines to make sure your table is as accessible as possible:

- Avoid fixed width tables.
- Make sure the tables render properly on all devices, including phones and tablets.
- If you have hyperlinks in your table, edit the link texts, so they make sense and don’t break mid-sentence.
- Make sure the document is easily read with Magnifier. Send the document draft to yourself and view it on a mobile device to make sure people won’t need to horizontally scroll the document on a phone, for example.

Use table headers

Ideally, headings explain what a document section is about. Use the built-in heading styles and create descriptive heading texts to make it easier for screen reader users to determine the structure of the document and navigate the headings.

Each heading style represents a different level in the content hierarchy and communicates the structure of your document to AT users.

Use MS Word Table Headers:

- Windows table headers (link is external)
- Mac OS table headers (link is external)

Create paragraph banners

In addition to using headings to organize the content in your document, you can also create paragraph banners. In a paragraph banner, the background color block extends across the width of the document and highlights the text within the banner. This is a great alternative to tables to organize and separate content.

For instructions on how to create paragraph banners, go to Apply shading to words or paragraphs.
**Add accessible hyperlink text and ScreenTips**

People who use screen readers sometimes scan a list of links. Links should convey clear and accurate information about the destination.

For example, avoid using link texts such as "Click here," "See this page," Go here," or "Learn more." Instead include the full title of the destination page. You can also add ScreenTips that appear when your cursor hovers over text or images that include a hyperlink.

For the step-by-step instructions on how to create accessible hyperlinks and ScreenTips, go to [Create accessible links in Word](#) and [Create or edit a hyperlink](#).

**Use accessible font format and color**

*Use accessible font format*

Here are some ideas to consider:

- To reduce the reading load, select familiar sans serif fonts such as Arial or Calibri. Avoid using all capital letters and excessive italics or underlines.

- A person with a vision disability might miss out on the meaning conveyed by particular colors. For example, add an underline to color-coded hyperlink text so that people who are colorblind know that the text is linked even if they can’t see the color.

- For headings, consider adding bold or using a larger font.

- Add shapes if color is used to indicate status. For example, add a checkmark symbol ![Green Checkmark](#) if green is used to indicate “pass” and an uppercase X ![Red X](#) if red indicates “fail.”

*Use the color contrast analyzer*

The text in your document should be readable in a high contrast mode. For example, use bright colors or high-contrast color schemes on opposite ends of the color spectrum. White and black schemes make it easier for people who are colorblind to distinguish text and shapes.

To ensure that text displays well in a high contrast mode, use the Automatic setting for font colors. For instructions on how to change the font color in Word, go to [Change the font color](#).

Sufficient color contrast makes text more accessible to individuals with color blindness. Ensure that the contrast ratio between the foreground and background colors meets the [contrast requirements of WCAG 2.0](#).

*Color Contrast Analyser (link is external)*

**Create accessible lists**

To make it easier for screen readers to read your document, organize the information in your document into small chunks such as bulleted or numbered lists.

Design lists so that you do not need to add a plain paragraph without a bullet or number to the middle of a list. If your list is broken up by a plain paragraph, some screen readers might announce the number of list items wrong. Also, the user might hear in the middle of the list that they are leaving the list.
Adjust space between sentences and paragraphs

People who have dyslexia describe seeing text “swim together” on a page (the compressing of one line of text into the line below). They often see text merge or distort. To reduce the reading load, you can increase white space between sentences and paragraphs.

For the step-by-step instructions on adjusting the spacing, go to Adjust indents and spacing in Word.

Test accessibility with Immersive Reader

Try reading the document with Immersive Reader to check how it sounds like.

1. In your document, select View > Immersive Reader.
2. On the Immersive Reader tab, select Read Aloud.
3. To exit Immersive Reader, select Close Immersive Reader.

Creating Accessible Documents in Google Docs

Taken from https://support.google.com/docs/answer/6199477?hl=en

1. Use headings to organize your document
2. Include alt text
3. Check for high color contrast
4. Use numbered and bulleted lists
5. Include navigation landmarks in your document
6. Use informative link text
7. Use text size and alignment
8. Use text to support formatting
9. Use tables for data, not for layout
10. Use Comments and Suggestions
11. Present slides with captions
12. Share a link to the HTML view of your presentation
13. Use “Publish to the Web” Function

When you create a document or presentation, follow the tips below to make it more readable by everyone, including people with disabilities.

Use headings to organize your document

Headings divide your document into sections, making it easier for people to jump to a section (especially if they’re using keyboard shortcuts). You can use the default heading styles or create your own. Learn how to add and customize headings.
Include alt text

Alternative text for images, drawings, and other graphics provides screen reader users with an audio description of what’s on screen. Otherwise, a user only hears the word “image” and could miss any relevant visual details.

Always provide alt text for any visual data if there are no other text annotations. Some images automatically include alt text. It's a good idea to verify that the automatic alt text is correct.

Add or edit alt text

1. Select an image, drawing, or graphic.
2. Use one of the following options:
   1. Right click and select Alt text.
   2. For Mac: Press ⌘ + Option + y.
   3. For all other platforms: Press Ctrl + Alt + y.
3. Enter a title and description
4. Click Ok.

Check for high color contrast

High color contrast makes text and images easier to read and comprehend. Web Content Accessibility Guidelines (WCAG) 2.0 recommend a minimum ratio of 4.5:1 for large text and 7:1 for other text and images. For example, avoid light gray text on a white background.

To check contrast, use one of these tools:

- WebAIM contrast checker: This is a website that allows you to enter Pantone and font data to get a pass/fail rating based on WCAG 2.1 compliance.
- Accessible Web Color Contrast Checker: This is a website that allows you to enter color values to check contrast.

Use numbered and bulleted lists

Google Docs and Google Slides automatically detect and format some lists for accessibility. For example, if you start a new line in your document by typing the number 1 followed by a period, the new line automatically becomes the first item in a numbered list. Learn how to format bulleted and numbered lists.

Include navigation landmarks in your document

Landmarks like headers, footers, page numbers, and page counts help your readers find where they are in your document. To maximize accessibility, especially in long documents, include one or more of these landmarks (available in the Insert menu).
Use informative link text

Screen readers can scan for links, so informative link text is helpful. It's best to use the title of the page as the linked text. For example, if you link to your profile page, the linked text should say "my profile," not "click here."

Check text size and alignment

To make your document or presentation easy to read, use large, left-aligned text when possible. Justified text is more difficult to read because of extra space between the words. To change the alignment, press Ctrl + Shift + L (Windows or Chrome OS) or ⌘ + Shift + L (Mac).

Use text to support formatting

It's best not to rely on visual formatting alone to communicate meaning. Screen readers might not announce formatting changes, such as boldface or highlighting.

For example, to mark an important section of text, add the word "Important."

Use tables for data

Use tables to present data, not to change the visual layout of the page. In the table, include a heading row rather than start with data in the first row.

Use comments and suggestions

Use the commenting and suggesting features instead of writing notes within the text of your document or presentation. Screen reader users can jump to comments using keyboard shortcuts rather than hunting through your file. The file owner can also receive email notifications or review comment threads.

Using Google Slides

Present slides with captions

When you present with Google Slides, you can turn on automatic captions to display the speaker's words in real time at the bottom of the screen. Learn how to present slides with captions.

Share a link to the HTML view of your presentation

The Google Slides HTML view displays your entire presentation in a single, scrollable HTML page, instead of one slide at a time. For some screen reader users, HTML pages can be easier to navigate.

To share a link to the HTML view of your presentation:

1. Use the keyboard shortcut Ctrl + Alt + Shift + p (Windows or Chrome OS) or ³ + Option + Shift + p (Mac).
2. Copy and paste the URL from your browser.

Publish to the web
When a document, spreadsheet, or presentation is published to the web, the published content is viewable as a single, scrollable HTML page. Screen reader users often find the HTML version easier to read.

Based on your account’s settings, when you publish a file, you can make it visible to:

- Everyone on the web
- Everyone in your organization
- A group of people in your organization

Learn how to publish to the web.
Tips for Creating Accessible PDF Documents

https://webaccess.berkeley.edu/resources/tips/pdfs

- It is recommended to use Microsoft Word or Adobe InDesign to create your PDF documents, as these programs allow you to save your original document to an accessible PDF format. Creating PDFs with these programs will also save you a lot of time, compared to editing your PDF directly in a PDF editing program like Adobe Acrobat Pro.
- To ensure best practices for accessibility in documents created in Google Docs (bDrive (link is external)), a tool called Grackle Docs (link is external) is available.
- Before proceeding with the following tips, please review the tips for creating accessible Word documents earlier in this document.

Creating Accessible PDFs from Documents

From https://www.highline.edu/accessibility/documents/pdf-acrobat/

Exporting from Microsoft Office

Microsoft Office (Word, Excel, PowerPoint) has several options for creating PDF files; the exact options available depend on your platform (Windows, macOS, Android/Chrome) and computer configuration.

The recommended and easiest method is to choose File > Save as Adobe PDF. Other methods (such as printing to PDF) do not properly include all the information necessary for a fully accessible document.

Exporting from Google Docs

While Google Docs (including Sheets and Slides) allows you to download a PDF version of a document, the generated PDF frequently fails several accessibility checks. The recommended method for getting an accessible PDF from a Google Docs document is to download the document in Office format (File > Download > Microsoft [Word (.docx) / Excel (.xlsx) / PowerPoint (.pptx)]) and use Office to create the PDF file.

Creating a PDF File

First, you will want to make sure to follow the best practices for authoring accessible MS Word and Adobe InDesign documents.

- Creating Accessible MS Word Documents
- Creating Accessible PDFs from Adobe InDesign (link is external)

Using Optical Character Recognition (OCR) Software

If the original MS Word or InDesign document is not available, you may want to use a scanner or software program that includes optical character recognition (OCR).

Checking the Accessibility of PDF Documents in Adobe Acrobat (Pro)

To check the accessibility of your PDF document, we recommend using the following tools that your readers will use. Even if you do not have access to those tools, Adobe Acrobat provides an automated way to check the accessibility of a PDF file. The **Full Check/Accessibility Check** feature in Acrobat checks a PDF for many of the characteristics of accessible PDFs. You can choose which accessibility problems to look for and how you want the results reported.

1. Choose Tools > Accessibility. The Accessibility toolset is displayed in the secondary toolbar.
2. In the secondary toolbar, click Full Check/Accessibility Check. The Accessibility Checker Options dialog box is displayed.
3. In the **Report Options** section, select options for how you want to view the results. You can save the results as an HTML file on your system, or attach the results file to the document itself.
4. Select a page range if you prefer to check individual page.
5. Select one or more of the **Checking Options**.
6. Click Start Checking. The results are displayed in the Accessibility Checker panel on the left, which also has helpful links and hints for repairing issues. If you created a report in step 2, the results are available in the selected folder. Because the Full Check/Accessibility Check feature cannot distinguish between essential and nonessential content types, some issues it reports don’t affect readability. It's a good idea to review all issues to determine which ones require correction.

The report displays one of the following statuses for each rule check:

- **Passed**: The item is accessible.
- **Skipped By User**: Rule was not checked because it wasn't selected in the Accessibility Checker Options dialog box.
- **Needs Manual Check**: The Full Check/Accessibility Check feature couldn't check the item automatically. Verify the item manually.
- **Failed**: The item didn't pass the accessibility check.

Note: These steps pertain to features found in Adobe Acrobat DC, not Adobe Reader.

1. **Run the Make Accessible Action Wizard**
2. **Add text to your document**
3. **Use a document title**
4. **Set the document language**
5. **Add alternative text for images**
6. **Add a tag structure**
7. **Recognize form fields, add tooltips to form fields, and add tags to form fields**
8. **Use table headers**
9. **Check the reading order**
10. **Check for appropriate color contrast**

1. Run the Make Accessible Action Wizard

The Make Accessible Action Wizard in Adobe Acrobat DC will guide you through the steps of making your PDF accessible. Each step will prompt you to add accessibility information that may have been missing from your PDF. At the end of the process, Acrobat DC will run a full
accessibility check of your document and will recommend further steps you can take to remediate your PDF.

Adobe Acrobat Pro Action Wizard(link is external)

2. Add Text to Your Document

Not all PDFs actually contain text in them. If your PDF is a text-based or a searchable PDF, you will be able to select text in the document. If you cannot select text in your document, you have an image-based PDF and must use OCR tools to recognize the text in your PDF.

Adding Text to Your PDF Documents(link is external)

3. Use a Document Title

The document title is important so that users of assistive technology can hear the name of the document when opening the file and when switching between multiple tabs within a PDF program.

Setting the Document Title in PDF Documents (link is external)

4. Set the Document Language

The document language determines which speech synthesizer is used by assistive technology programs.

Setting the Language of PDF Documents(link is external)

5. Add Alternate Text for Images

Any images or figures that convey important information in your document must have alternate text. Alternate text is a short description of the image that will be read out loud to assistive technology users. Keep your alternate text to 1-2 sentences long.

Adding Alternate Text in PDF Documents(link is external)

6. Add a Tag Structure

- Accessible PDFs must have tags. Paragraphs must have paragraph tags, lists must have list tags, images must have image tags, tables must have table tags etc. These tags can be accessed by assistive technologies and make it possible for AT users to jump quickly to a desired section or item in the document.
- When using headings tags, your tags should follow an orderly heading sequence, such as Heading 1-Heading 2-Heading 3, not Heading 1-Heading 3-Heading 2.

Adding / Repairing Tags in PDF Documents(link is external)

7. Recognize Form Fields, Add Tooltips to Form Fields, and Add Tags to Form Fields

If your PDF will be used as a form, make sure all of the form fields are recognized and are given an appropriate tooltip. A tooltip provides a description of the form field and is read out loud by AT users. Form fields also should have a form tag and appear in the correct order within the tags panel.
8. Use Table Headers

To ensure that tabular data are read logically by assistive technologies, use table header tags for column headers, row headers, or both.

Adding Table Headers to Tables in PDF Documents (link is external)

9. Check the Reading Order

You will need to manually check that the content in your PDF follows a logical reading order. To check the reading order, open the tags panel and arrow down. Move items up or down in the tags panel to correct problems with the reading order.

10. Check for Appropriate Color Contrast

You will need to manually check that your PDF document has sufficient color contrast. We recommend using the free Color Contrast Analyser tool, which is available for MacOS and PC. If there are contrast issues in your PDF, you will need to return to the authoring program and adjust the colors there.

NOTE: Any color contrast issues that are found will likely need to be addressed in the source document (e.g., Microsoft Word.) If you find color contrast issues in a PDF, and re-export the PDF, you will need to re-do all the tagging and reading order work from the above tips.

Color Contrast Analyser (link is external)