

## Creating an Accessible PDF

### Introduction

An accessible document is a document that is readable by any individual. Many individuals who are blind or visually impaired use screen readers to maneuver through a document and understand the contents. Below is a checklist of basic properties and tools that can be utilized to create a PDF that is accessible to an individual using a screen reader. More specific information and instructions for creating a PDF using Microsoft Word and Adobe Acrobat Pro are listed on the pages that follow.

### Checklist

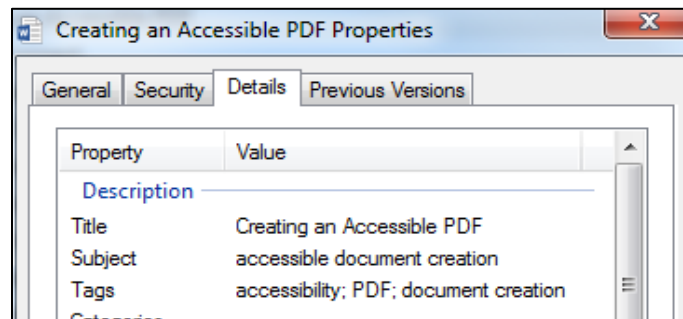
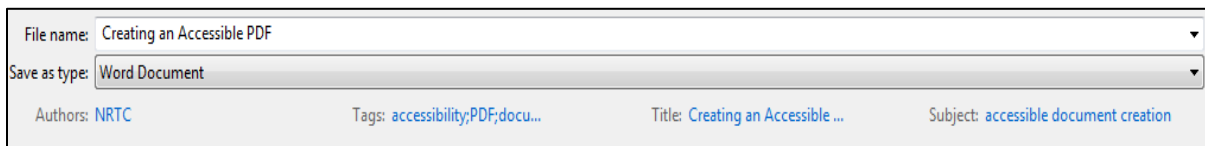
- **Update Document Properties**  
Properties identify the title, author(s), tags, title, and subject of the document. The properties can be included when saving the document or updated from the file folder location.
- **Avoid Blank Spaces and Lines**  
Page layout tools, such as paragraph spacing, and table properties, such as cell padding and spacing, should be used to update formatting. Blank lines, spaces, and table cells can be difficult for a screen reader to identify and may cause the screen reader to repeat unnecessary formatting commands or descriptions.
- **Use Styles and Headings**  
Use styles in Word or identify reading order headings in Adobe to allow for easier identification of document sections and document navigation.
- **Include Hyperlink Descriptions**  
Hyperlinks are a common addition to documents. A meaningful description or Screen Tip will clearly identify the purpose and destination of the link.
- **Simplify Tables**  
Table formatting should be simple, include alt text for the title and description, and identify row titles and column headers.
- **Add Alternative Text**  
Alternative text, or alt text, provides a brief description for non-text items that would otherwise not be read by a screen reader, including images, photos, charts, tables, form fields, video and audio clips, etc.
- **Use Accessibility Checker Tools**  
Before finalizing or publishing a document, use available tools to inspect, identify, and correct any accessibility issues. Use the Adobe Acrobat Pro accessibility report to view a bulleted list of errors, or use free screen reader demo software or an online assessment to test the document. Additional accessibility resources are linked at the conclusion of this document.

## Creating an Accessible PDF with Microsoft Word 2016

The following information is for Microsoft Word 2016. Other versions of Word have similar accessibility features that may appear in a different format or location.

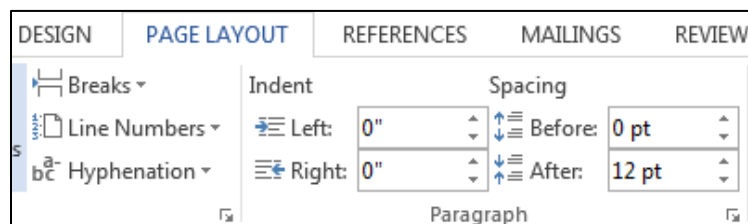
- **Update Document Properties**

When saving a document, include as much detail as possible under the headings below the file name and document type (sample image 1 below). To update an existing document, right-click on the file name and select properties (sample image 2 below). Document properties, such as authors, keyword tags, title, and subject allow an individual to quickly and easily find and understand the contents of any document.



- **Avoid Blank Spaces and Lines**

Select the PAGE LAYOUT tab to navigate to the paragraph editing toolbar, or right-click on a line of text and select paragraph, to update spacing options. To create equal spacing following a paragraph or non-text item, adjust the spacing instead of hitting enter multiple times. To move text to a new page, add a page break instead of hitting enter multiple times. If you are utilizing styles options from the HOME toolbar, right-click on the style being used to update all text with the new spacing. If your document includes a table, avoid leaving cells empty, as this may cause a break in understanding the contents. Below is an image of the PAGE LAYOUT toolbar, including breaks, indent, and spacing buttons:



- **Use Styles and Headings**

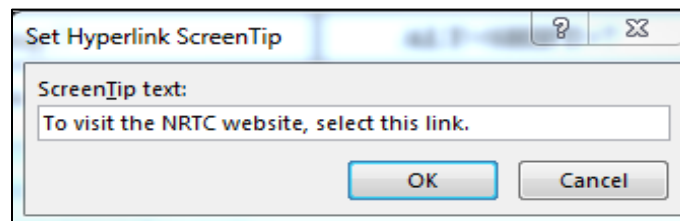
Select the HOME tab to navigate to the general editing toolbar and select the styles option relevant to the selected text. Styles include title, subtitle, heading 1, heading 2, normal, etc. Styles allow for quick formatting of text for easier document review, because screen reader users can use specific commands to navigate to headings, sections, paragraphs, and other document properties.

Simply changing the font to make headings appear bold or prominent is not enough. Text needs to be formatted using styles to ensure navigation with a screen reader. Below is an image of the styles buttons on the HOME toolbar:



- **Include Hyperlink Descriptions**

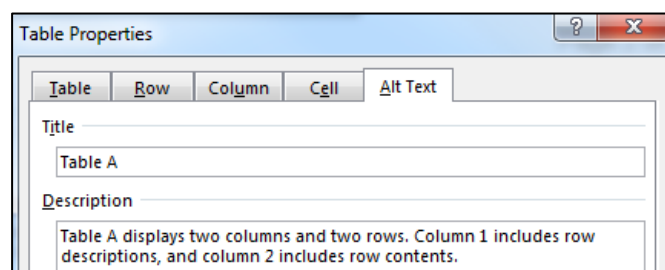
To edit an existing hyperlink, right-click and select Edit Hyperlink. Select the ScreenTip button located to the right of the text to display box, and add a description that will be read aloud by the screen reader. The description should clearly state the action or purpose of the destination link (e.g., instead of “to visit our website, click here,” use the phrase “to visit the NRTC website, select this link”). Below is an image of the ScreenTip dialog box:



- **Simplify Tables**

Right-click anywhere in a table and select Table Properties. Add a title and description under the Alt Text tab. Ensure that your table has clearly defined column and row headers, so an individual using a screen reader will hear an accurate description of the contents. Below is an image of a sample table and an image of the Table Properties dialog box:

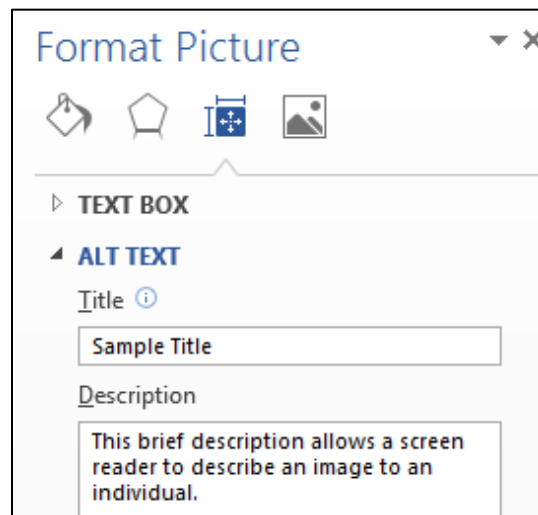
Column Header 1	Column Header 2
Row 2 description	Row 2, content 1



- **Add Alternative Text**

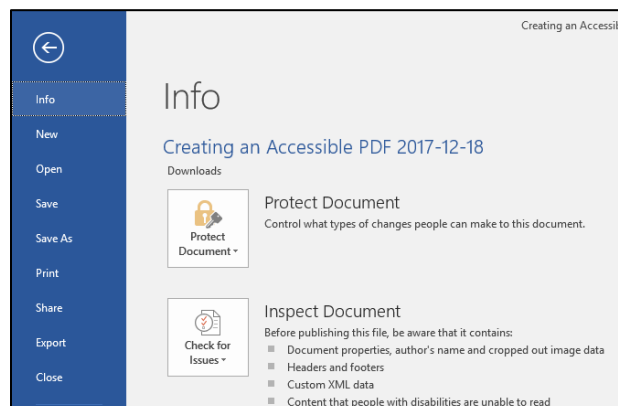
Right-click on non-text items and select either the format or properties option (options vary depending on item type). Alt text can be included in the properties for that item by providing a short title and a brief description of the non-text item. The description should help the individual to understand what an image is showing and why it is relevant to the document. More information about including alt text is available from the additional accessibility resources linked at the conclusion of this document.

Below is an image of the alt text dialog box that appears when editing picture properties:



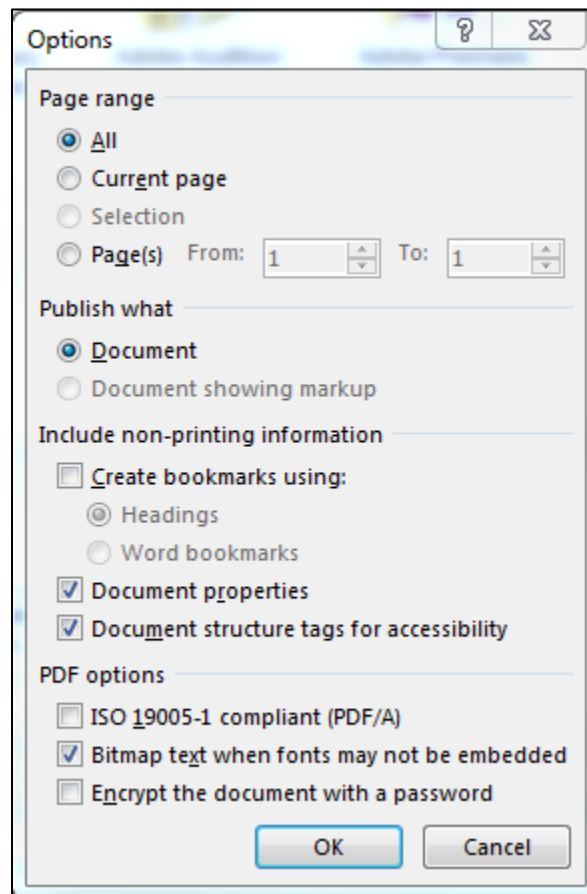
- **Use Accessibility Checker Tools**

Select the FILE tab, then select Info to view document options. Select the Check for Issues button, then select the Check Accessibility option to inspect the document. Inspection results will be available in a side tab next to the document view. Results will include warnings. When selected, additional information on why and how to fix the warnings is shown below the results. Further information about making documents accessible is also linked at the bottom of the results. Below is an image of the Info menu on the FILE tab:



- **Saving the Document**

When document creation is complete, select the FILE tab, and then select Save As. In the Save As dialog box, select PDF as the Save As Type. Then click Options to ensure that the Document Structure Tags for Accessibility checkbox is selected under the non-printing information heading. Then, click OK and save the document.



## Checking PDF Accessibility with Adobe Acrobat Reader

The following information is for Adobe Acrobat Reader. Other versions of Adobe Acrobat have accessibility features that may appear in a different format or location.

- **Use Read Out Loud Tool**

Select the VIEW tab, then select Read Out Loud from the menu options. Select Activate Read Out Loud (Shift + Ctrl + Y) to review the document. Read Out Loud options include activate/deactivate, read one or all pages, and pause or stop.

Again, select the VIEW tab, then select Read Out Loud from the menu options. Select the preferred reading option: read this page only (Ctrl + Shift + V) or read to end of document (Ctrl + Shift + B). Read Out Loud will read the document as it appears on the screen.

If any reading order errors are found, an editing version of Adobe Acrobat (not the free Adobe Acrobat Reader) will be needed to update the tags and reading order. If the document was originally created in Microsoft Word, return to Word to review the document section in question, and review the Check Accessibility results for further information and suggestions.

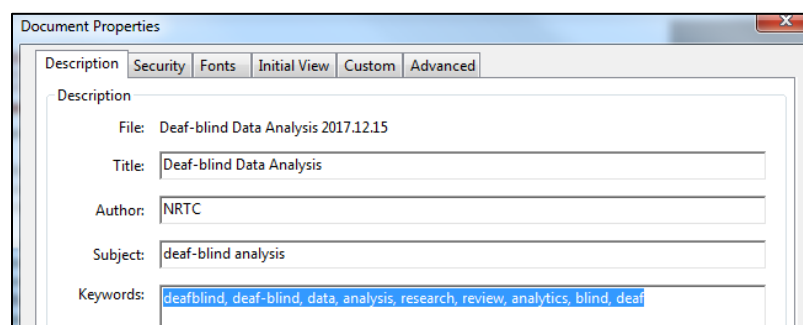
## Creating an Accessible PDF with Adobe Acrobat Pro DC

The following information is for Adobe Acrobat Pro DC. Other versions of Adobe Acrobat have similar accessibility features that may appear in a different format or location.

PDF files are typically not created in Adobe Acrobat. If accessibility errors are found, returning to the original document file to update accessibility options may save processing time.

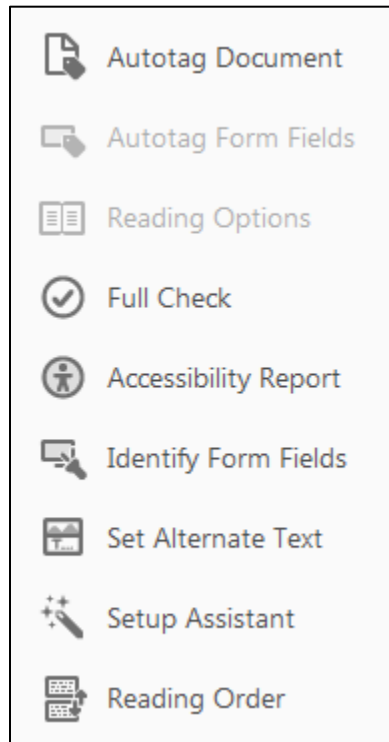
- **Update Document Properties**

Select the FILE tab, then select Properties. A Document Properties dialog box will appear, where description information can be entered, including title, author, subject, and keywords. Document properties allow an individual to quickly and easily find and understand the contents of any document. At the bottom of the description page, advanced information shows if the document is tagged for reading accessibility.

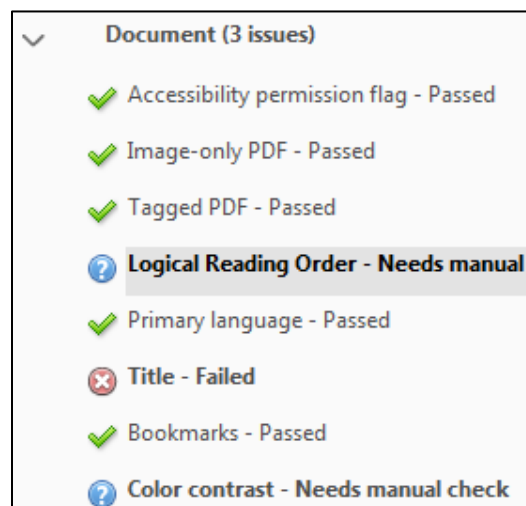


- **Use Accessibility Checker Tools**

Select the TOOLS tab, then select Accessibility listed under the Protect & Standardize section. A menu will appear on the side of the document view screen with various options, including autotag document, accessibility report, setup assistant, and reading order.

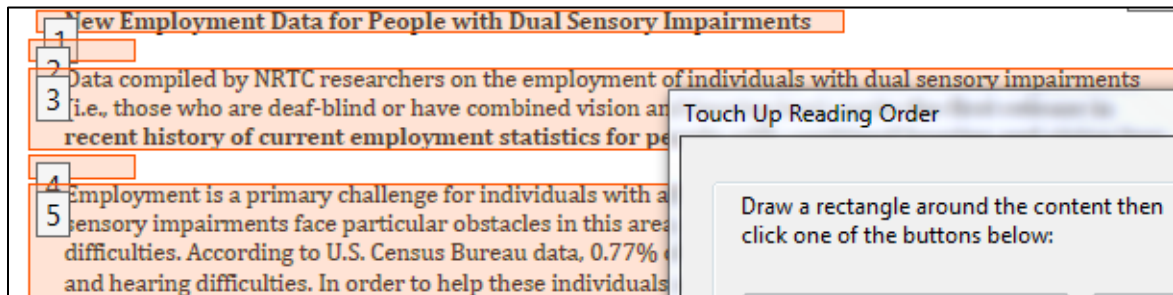


Select the Full Check option, ensure the correct options are selected in the dialog box, then select the Start Checking button. Full Check will provide a report that includes a review of all accessibility features available, such as page content, form fields, alt text, tables, lists, and headings. Any issues will be noted with a question mark icon or an X icon. Right-click on any issues listed to receive an explanation, fix the issue, or view other options.





Some items, such as Reading Order, may require a manual check or review. Return to the accessibility menu, select Reading Order, and a Touch Up Reading Order dialog box will appear. The document reading order will be highlighted, and all contents will be numbered in the order that a screen reader will read the document.



From the Touch Up Reading Order dialog box, select the Show Order Panel button located at the bottom of the box. An order menu will appear next to the document view. Review the document order tags, and note any items that need adjustment.

If the document reading order is incorrect and/or multiple errors are found, select AutoTag Document from the accessibility menu to retag the document. This option typically removes errors and provides more consistency to the document reading order.

Again, select the Reading Order option from the accessibility menu, and select the Show Order Panel button located at the bottom of the Touch Up Reading Order dialog box. Right-click on any item that needs correcting to view edit options, including moving, deleting, or tagging the selected item. If an item is in the wrong location, cut the item and paste the item into the correct location in the order list.

While in the Reading Order review, right-click on any non-text items to review the Edit Alternate Text option. Some alt text added with Word or other software may not populate, so this step of the review process is important to ensure accessibility. If alt text is missing, simply copy and paste the description from your original document and save the changes.

When all edits are complete, select the Full Check option to run a new accessibility report and ensure that all updates have been made.

## Additional Accessibility Resources

- [Microsoft Word Accessibility Website](#)
- [Adobe Accessibility Website](#)
- [GSA Section 508 Website](#)
- [JAWS Screen Reading Software \(free demo download\)](#)
- [PAVE PDF Accessibility Checker](#)