

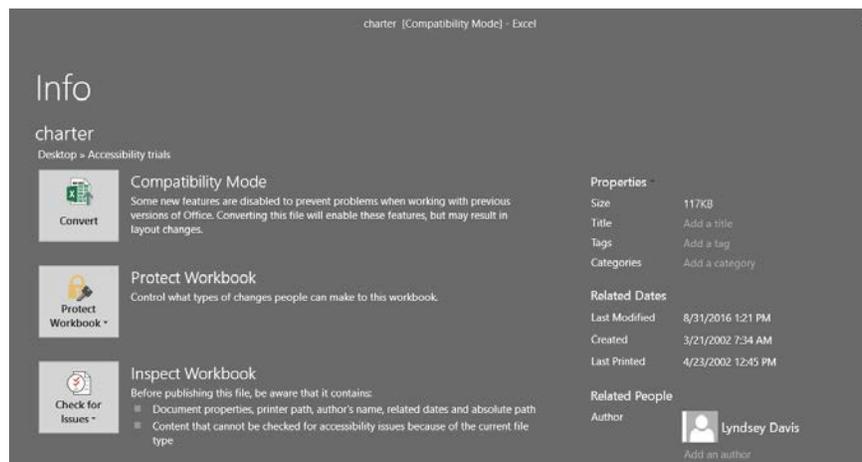
Creating Accessible Documents

Background

Creating an accessible document is not about not completely changing how information is presented. It is augmenting the presentation. Colors, graphs, charts and images can still be used and should be used. There are just additional items that must be included to make the document accessible.

Source Documents

Creating an accessible document starts with a source document. The source document is the original document. It can be a Word, Excel, or PowerPoint. Accessibility techniques can also be applied to Outlook. Always work with the most recent version of the software available. An accessibility check cannot be completed on older versions of the software.



This document covers starting from a Word document and moving it through accessibility, saving it as a PDF and completing the accessibility in Adobe for publishing to the web. Some Excel and PowerPoint tips are also covered.

Fonts

- Fonts should be chosen for their ease of readability and should be a minimum of size 11.
 - Sans Serif recommended fonts (all fonts listed in font style and size 11)
 - Calibri
 - Tahoma
 - Verdana
 - Arial
 - Serif recommended fonts (all fonts listed in font style and size 11)
 - Times New Roman
 - Georgia
 - Palatino Linotype
- Document creators should use as few fonts as possible for the document. Best practice is to limit the number of fonts to two. Different font styles slow screen readers and are difficult for those with low vision.
- Font color should display well in High Contrast Mode, for example black text on white background.

Headings

Use Styles, Bullet Points and Ordered Lists to organize the document in a logical reading order

- Title
- Headings
- Paragraphs

- Bullet Points
- Ordered Lists (1, 2, 3...)

Alternative Text

Alternative text is used on images, smart art, tables, charts, etc. to provide screen readers information about the item to read aloud. Alternative text is not visible on the document and is added in the format picture dialogue box.

- Use Alternative Text on all Images including Smart Art and Charts
 - Any images used must be well-defined in the adjacent text or well-defined in the alternative text for the image.



Tables

Tag all Tables for ease of readability.

Table Title

Column Heading	Column Heading	Column Heading	Column Heading
TD	TD	TD	TD
TD	TD	TD	TD
TD	TD	TD	TD

- Highlight table by clicking on the plus sign (+) sign on the upper left hand corner of the table.
- Put your cursor at the beginning of the row that is to be the table header. This should be the row containing column headings.
- Right click and choose Table Properties
- Choose the Row tab and check the box for Repeat as header row at the top of each page.
- Next choose the Alt Text tab. Type in a description of the table. The description should be a short summary of what the table is intended to communicate.
- Avoid Merged or Split cells.

Hyperlinks

- Use descriptive text for Hyperlinks
 - Avoid "Click here," "Learn More," or other generic hyperlink text.
 - Use descriptive text, don't just list the URL
 - Add a Screen Tip to the Hyperlink. This provides a summary of the linked page that a screen reader can use. Screen Tips can be added in the Insert Hyperlink or Edit Hyperlink dialogue box.

Color and Contrast

- Ensure that color is not the only means of conveying information.
 - For example, a hyperlink that is only set apart from the rest of the text by a different color. Color can be used as long as another means of identifying the link is used alongside, such as underlining.
- Use sufficient contrast for text and background colors.

Excel sheets

Excel files must meet W3C accessibility ([W3C.org](http://www.w3.org)) requirements to ensure the information contained in Worksheets is accessible by assistive technology.

- Name all sheet tabs in an Excel workbook. Use a brief, unique name.
- Delete blank sheets
- Use simple table formats. Avoid nested tables, merged cells, split cells and limit blank cells.
- Complete document properties by identifying pertinent information under "Summary" and "Custom" tabs.
- All images must include alternative descriptive text or be indicated as a spacer image if appropriate.
- Do not use color to convey important information. Use textual annotations instead.
- Label row headers and column headers to enhance accessibility. Make sure row and column headers are clear and self-explanatory. Avoid ambiguous headers.
- Indicate blank cells which may be used for formatting purposes, by using the "hidden word" technique.
 - Select the cell or cells to be hidden
 - Open the Number dialogue box
 - In the Category box, click Custom
 - In the Type box select the existing code and then type ;;; (3 semicolons)
 - Click ok.
 - The information will show in the formula bar but the cell will appear empty.
- Place charts and graphs on separate worksheets and include axis information.

Helpful Tips for Posting Excel Documents on the Internet

When worksheets are developed to present a data set, the Excel file should be presented on the web as a Comma Separated Value (**CSV**) file and not as an **XLS** file. (The CSV ("Comma Separated Value") file format is often used to exchange data between disparate applications). The file format, as it is used in Microsoft Excel, has become a pseudo standard throughout the industry, even among non-Microsoft platforms. The CSV link must clearly state that the CSV is a raw data set. A separate data definition document must accompany all CSV files. Workbooks posted as .XLS only must include a link to an Excel viewer (<http://office.microsoft.com/en-us/downloads/HA010449811033.aspx>).

An Excel data set that would be presented as a CSV has the following characteristics:

- A single row of headings in the first row.
- The data set contains no formulas.

PowerPoint

- The page layout options automatically set up the reading order.
- Each slide must have a unique title – Slide titles can be hidden – invisible on slide but still voiced
- Reading order is from the bottom up
- Color contrast will be more important. Use appropriate designs
 - The Office Theme is designed for accessible colors, contrasts and fonts and for screen readers to easily read content. This is not a required theme. Use it as a resource.
- Use larger font size – 18pt or larger

Check the document for ease of accessibility.

- Click on File
- Choose the Info menu item
- Look for the box labeled "Check for Issues"
- Click on the drop-down arrow in this box
- Click on Check Accessibility
- The Accessibility Checker dialog box will open showing any errors or warnings for the document.

- Additional Information is provided at the bottom of the Accessibility Checker that will assist in correcting the errors.

Save the document. Next, save the document again as a PDF document. Open the PDF with Adobe Acrobat Pro DC.

PDF

Check the PDF for accessibility.

- Under tools, click on Accessibility. If Accessibility is not in the main tool list, click on Tools, scroll through the tools shown and click “open” on the drop down under Accessibility. This will add it to the main tools list.
- Once the Accessibility menu is open, click on Full Check.
- The Accessibility Checker Options dialogue box will open. There are many options to choose that will customize the accessibility check. Use the default options.
- Click Start Checking

Review the full check results.

- When the full check is complete the Accessibility Checker review pane will open.
- Items that need to be reviewed will be listed in bold and have a number and the word “issues” in parenthesis.
- Click on the open square next to the bolded word to open the list of checked items.
- Items with a white X in a red square failed the accessibility check and will need to be corrected.
 - Right click on the failed items and a menu will open.
 - Choose the menu item “Fix” and a dialogue box will open with instructions on how to correct the issue.
- Items with a blue check mark need to be checked manually.
 - To correct Color Contrast
 - click on Edit, go to the bottom of the Edit menu and choose Preferences. The Preferences dialogue box will open. Choose Accessibility in the Categories menu. When the Accessibility screen opens, check the radial button “Use High-Contrast colors” and choose Black text on white in the drop down box.
 - Click OK. The box will close.
 - Next, right click on Color Contract and click Pass.
 - To correct Logical Reading Order
 - Click on Reading Order in the Accessibility tools menu.
 - The Touch-up Reading Order dialogue box will open
 - Also open the reading order in the review panel by clicking the icon that looks like a fat Z with an inner thin Z.
 - Both options will be used to verify the reading order.
 - Start on the first page and verify that the Reading Order is correct for the full document.
 - Clear/delete all blank items – PDF will assign a reading order to white spaces.
 - Ensure the numbering of the items on the page follow the order they should be read.
 - Using the Z icon is easiest to rearrange items out of order. If the document has been set up correctly in the source document, this goes very quickly.
 - Once the Reading Order has been reviewed and is correct, click on the Accessibility review icon, a circle with a person and a check mark.
 - Right click on Logical Reading Order and click Pass.
 - Any item marked with the blue check mark that requires a manual review have the right click menu.
 - Pass
 - Fail
 - Skip
 - Explain
 - Check Again

- Show Report
- Options
- Pass and Fail are self-explanatory.
- Skip will skip over this rule and will not check it.
- Clicking Explain will open a web browser to an Adobe help page with further information on that item.
- Check again will recheck the document.
- Show Report will open the Accessibility Report in the review pane. This report will detail the rules checked and the status.
- Options reopens the Accessibility Checker Options dialogue box.

Once all of the issues have been resolved, the document is complete and can be posted to the web.

Non-Source Documents

If you do not have access to the source document, you can do minor accessibility adjustments to a PDF. These adjustments work best on simple documents. Complex documents are more difficult to adjust. It will be easier, less time consuming to recreate the document in a Word or Excel format and adjust for accessibility in this new source document.

An example of a complex document would be a document with:

- a plethora of images that are not explained adequately in the surrounding text and do not have alternate text.
- tables that have merged cells for the heading/title of the table.
- tables that are not explained in the surrounding text and do not have alternate text.
- charts that are not explained in the surrounding text and do not have alternate text.
- images used in place of text.
- color used to convey meaning with no assistive text.

A simple document would be a basic text document that is ordered with headings, paragraphs, bullet points, and ordered lists. An example of a simple document would be an agenda for a meeting or meeting minutes.

To check accessibility of the PDF non-source document, follow the PDF Accessibility steps listed under Source Documents.

Links

[Alternative Text](#)

[Make your Word documents accessible](#)

[Make your Excel Documents Accessible](#)

[Make Your Outlook Email Accessible](#)

[Use Accessibility Checker Rules](#)

[Make your PowerPoint Presentations Accessible](#)

[Make A PDF Document Accessible from Microsoft Word](#)

[Make a PDF Document Accessible from Adobe Indesign and Acrobat Pro](#)

[Acrobat and Accessibility](#)

[Accessible Forms in Acrobat XI](#)