Accessibility in Adobe PDF

PDF files are created as a stable format, and as such are not the easiest or most intuitive to edit. Whenever possible, make files accessible in their original format (Word, PowerPoint, etc.). Adobe Acrobat has a tool called the Accessibility Checker to check documents and edit them so that they are accessible. The tool will identify errors in several categories. This guide will show you how to run the Accessibility Checker and give an overview of the categories required to make a document accessible. For more information on specific steps to fix each error, please see additional instructions on the Document Accessibility Guide.

You must have access to Adobe Acrobat to use this guide. If the program you are using says Adobe Acrobat Reader at the top of the screen you will not be able to follow these steps. Adobe Acrobat Reader is a free program that only allows you to read PDFs. If you are a CSUSM student, staff or faculty member, you can download the full Adobe Creative Suite from Instructional & Information Technology Services (IITS).

Accessibility Tool

Open Adobe Acrobat and open any PDF document. On the left-hand side of your screen, a menu labeled "All tools" shows the list of tools for various operations and specialized tasks within Adobe. Click on the "Prepare for accessibility" tool to open the Accessibility Checker.



1) On the left side of the screen a menu will appear with the following list of options:



- a. The option "Automatically tag PDF" has Adobe automatically attempt to make the file accessible by supplying "tags" to the file. These "tags" are labels that allow Adobe to process the document. "Automatically tag PDF" will almost never create a perfectly accessible document, but if you have converted an image to a PDF or have a document that has absolutely *no* tags in it, starting with "Automatically tag PDF" can be a good first step.
- b. "Fix reading order" this option is particularly useful in editing PDFs as it opens the "Reading Order" menu which shows the tags that Adobe uses to define and label the document. It is a good idea to always open the "Reading Order" menu by clicking "Fix reading order" when editing PDF documents.
- c. The remaining options in the "Prepare for accessibility" list, fall outside of this document, they can be useful, but are less immediately necessary. As a note "Automatically tag form fields" should appear greyed out in the list unless your document contains form fields.
- d. "Check for accessibility" runs the Accessibility Checker and identifies errors within the PDF file. When you click the "Check for accessibility" button the "Accessibility Checker Options" menu will pop up. Do not change any of the settings and click "Start Checking" to run the Accessibility Checker.

Accessibility Checker Options	×
Report Options Create accessibility report Folder: C:\Users\acarpenter\AppData\Roaming\Adobe\Acrobat\DC\AccReports Attach report to document	
Page Range • All pages in document • Pages from 1 to	
Checking Options (32 of 32 in all categories) Category: Document	
 Accessibility permission flag is set Document is not image-only PDF Document is tagged RDF 	
 Document is tagged PDF Document structure provides a logical reading order Text language is specified 	
 Document title is showing in title bar Bookmarks are present in large documents Document has appropriate color contract 	
Select All Clear All	
Show this dialog when the Checker starts Help Cancel Cancel	

Using the Accessibility Checker

1) Once you have run the Accessibility Checker, the Accessibility Checker results will appear as a short list of categories on the right-hand side of the screen. Below is a list of all of the categories along with a screenshot of the Accessibility Checker results of a document with several common errors.



There are six main categories listed in the Accessibility Checker. If there is an error, the Main Category title will be bold and the number of issues in that group will appear in parenthesis to the right. The number of issues can be deceiving as some Main Categories have sub categories within them. The number of issues shown only relates to the **number** of sub categories with errors not the total number of issues. Open each sub-section to see how many errors are in the document. If there are a significant number of errors related to a certain page or element, it can help you determine how to correct the error.

For additional information on any category or sub-category, right click on the text and select "Explain" from the drop down menu. This will open Adobe's <u>Create and verify PDF accessibility</u> page, which gives specific information regarding accessibility.

Explain
<u>C</u> heck Again
Show <u>R</u> eport
<u>O</u> ptions

2) Document: This category deals with the overall document accessibility. To expand the sub-categories, click the ">" icon. In a normal document there will usually be 3 to 4 issues "Logical Reading Order", "Primary language", "Title", and "Color contrast". Both "Logical Reading Order" and "Color contrast" appear with a question mark beside them with a blue background. This means that the document requires a manual

check by a human being as Adobe cannot check it automatically. Logical Reading Order simply asks if the document is laid out in logical order, and the Color Contrast is a reminder to ensure you have sufficient color contrast between your test and background. Black text on a white background will always have sufficient contrast. If you have used colorful backgrounds or changed the color of your text you will need to confirm you have used sufficient color contrast.

~	Document (3 issues)
	Accessibility permission flag - Passed
	Image-only PDF - Passed
	Tagged PDF - Passed
	👔 Logical Reading Order - Needs manual check
	Primary language - Passed
	🔞 Title - Failed
	Bookmarks - Passed
	👔 Color contrast - Needs manual check

- a. To correct the "Primary langue" error, right click on the text "Primary language" and select "Fix" from the drop down menu. A menu will pop up with various languages. Select the language that the majority of the document is written in and click "Ok".
- b. To correct the "Title" error, right click on the text "Title" and select "Fix" from the drop-down menu.



c. The Description Menu will pop up. Uncheck the box labeled "Leave as is" under the field "Title" and type the title of the document. You can also uncheck the box under the Author field and enter the author's name.

Descrip	otion		>
	Title:	How to Add Headings in Adobe Acrobat	
	Subject:	Leave As Is	
	Author:	Amy Dyess	
	Keywords:	🗸 Leave As Is	
		OK Cancel	

3) Page Content: If there are errors within this section your file probably has some significant accessibility issues or has no 'tags' at all. Try selecting the "Automatically tag PDF" option and run the Accessibility Checker again to see if any of the errors are corrected.

~		Page Content (Sissues)
	>	🔯 Tagged content - Failed
	>	Tagged annotations - Failed
	>	🔯 Tab order - Failed
	>	🔞 Character encoding - Failed
		Tagged multimedia - Passed
		Screen flicker - Passed
		Scripts - Passed
		Timed responses - Passed
		Navigation links - Needs manual check

- a. You can correct a "Tab Order" error by right clicking on the text "Tab order" and selecting "Fix" from the drop down menu.
- b. The "Character Encoding" error often cannot be fixed at all. It means that Adobe has detected a character that it cannot translate or understand and may not have an ASCII equivalent. This can often happen with mathematical equations, specialized fonts, or unique characters. You can sometimes mark the character as an image and describe the image with alternate text. However, the "Character encoding" error often remains.

- 4) Forms: This category falls outside the scope of this document. Know that if you create a form in Adobe there are special rules and regulations for making all of the fillable elements accessible.
- 5) Alternate Text: This category checks all images within the document and ensures that they have alternate text which is a brief sentence or two that describes the image. For step by step instructions please see the Images section on the <u>Document Accessibility</u> <u>Guide</u>. A brief overview of some of the most common errors are listed below.
 - a. Figures alternate text- Failed: this section will often have the most errors and can be corrected by supplying alternate text
 - b. Nested alternate text: This error can occur with complex charts where images and text overlay each other, or if there is an embedded link within the image. SmartArt graphs also create this error. Adobe cannot determine which part of the image is text versus an image, and it cannot differentiate between alternate text and the imbedded link. These errors will often have to be simplified by removing the link or finding a way to make the figure either all text or just an image.
 - c. Other elements alternate text: These elements are often images or need alternate text, but they fall outside of Adobe's recognition of "image". Elements like this can include regular images, logos, or sometimes graphs that get deconstructed i.e. each line or point shows up as a different figure.
- 6) Tables: this category ensures that all tables within the PDF file have been properly formatted. For step by step instructions on how to correct table formatting errors please see the "Table" section in the <u>Document Accessibility Guide.</u>
 - a. Headers: assistive technology, and especially screen readers require a Table Header Row to properly identify a Table and render the information in the correct order. To prevent errors every table needs a Header row identified, even if the table is only used to organize information.
 - b. Regularity: to be accessible all tables should have the same number of rows in each column so that the information can be correctly processed by assistive technology. If you get this error go back to your source document and edit your tables to be simple and consistent.

c. Summary: this section serves similarly to the alternate text field and gives a general overview of the table and its purpose. To correct this error, left click on the table. It will turn light blue to show it has been selected. Right click and select "Edit table summary" from the drop down list.

~	Sho <u>w</u> reading order panel	
	Show page content groups	•
~	Display like elements in a single box	
~	Show table c <u>e</u> lls	
~	Show tables and figures	
	Run Form Field Recognition	
	Ta <u>b</u> le Editor	
	Edit Table Summary	
	Delete Selected Item Structure	
	Clear page str <u>u</u> cture	

d. The Table Summary menu will pop up. Enter a general description of the table or its purpose in the file, i.e. what was important enough about the table that it was included in the file. Then click "Ok"

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- 7) Lists: this category checks all lists within the PDF file. There is an order that must be preserved for lists to function correctly. For better understanding of this topic please see the "Tag Tree" section in the <u>Document Accessibility Guide</u>.
- 8) Headings: this category checks the structure of the document. This check ensures that there are organized Headings that do not skip any levels so that assistive technology can easily navigate through the document and that users can easily make sense of the document structure. For step by step instructions please see the "Document Structure" section of the <u>Document Accessibility Guide</u>.