



## Creating Accessible PDF Documents with Adobe

These directions assume that you:

- are using Adobe Acrobat Professional DC,
- created your original document with MS Word (however, the process for MS PowerPoint is nearly identical), and
- converted the document to a PDF using Save As > PDF option.

Note:

- **Scanned PDFs** can become more accessible with the help of a **Wizard**. If you have a **scanned** PDF that needs adjustment, skip to the [Adobe Acrobat DC > Action Wizards](#) section of this guide.
- These directions do not cover how to create accessible, fillable PDF forms.

## Contents

Creating Accessible PDF Documents with Adobe.....	1
Contents .....	2
Why PDF?.....	3
Standardize Documents .....	3
Save as PDF .....	3
Function Keys with Acrobat.....	3
Adobe Acrobat DC .....	4
Action Wizards .....	4
Other Ways to Add and/or Check Accessibility.....	13
Add Accessibility Panel to Shortcuts Pane .....	13
Specify Language .....	13
Specify Title.....	14
Add Security and Accessibility (Optional).....	14
Check the Tags with the Tags Panel.....	16
Check the Reading Order and Tags with TouchUp Reading Order.....	17
Check Content and Order Panels .....	22
Check Content Reflow .....	24
Listen to the Reading Order with Read Out Loud .....	25
Use the built-in accessibility check.....	26
Resources .....	28

## Why PDF?

While most of our online content is in HTML, PDF is typically the standard format for non-html documents uploaded to web pages and D2L.

- Faster downloads from D2L or web (than MS Office files)
- Platform/device neutral and free Reader software available
- Ability to add text and tags to scanned pages to improve accessibility
- Tools for creating accessible PDF forms
- Tools for editing reading order and document structure
- Security setting that allows screen readers to access text while preventing users from copying, printing, editing, and extracting text
- Text based, tagged PDFs are easier for search engines to analyze (search engine optimization)

## Standardize Documents

1. Use styles
2. Reduce dependency on tables
3. Provide meaningful text
4. Run accessibility checkers
5. Save as PDF

## Save as PDF

In Microsoft Office applications Save As > PDF. **Do not** convert to PDF by using Print to PDF – it will not be tagged correctly. In the event that you are working outside of Office, and Print to PDF is your only option, you will most likely need to treat the document as a **scanned** document.

Most of your formatting from Word (or other applications) will carry over to the PDF. However, the more complicated your document, the more likely you'll need to do a bit of remediation in PDF. The most common thing you may need to adjust is reading order.

## Function Keys with Acrobat

Here are a few useful function keys in Acrobat DC, especially if you accidentally hide your menu or toolbar.

- F1: Opens Adobe Acrobat Learn & Support in a web browser
- F4: Expands/Contracts Navigation Pane
- F5: Moves focus to document pane
- F6: Moves focus for keyboard navigation

- F7: Opens Check Spelling dialog
- F8: Reveals/Hides Toolbar
- F9: Reveals/Hides Menu bar
- F10: Moves focus to menus, showing keyboard shortcuts

These and other [keyboard shortcuts](#) are available on Adobe's website.

## Adobe Acrobat DC

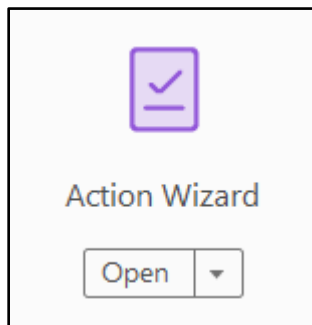
1. Run the Make Accessible Action Wizard
2. Run the Optimize for Web and Mobile Action Wizard
3. Export to other formats as needed

### Action Wizards

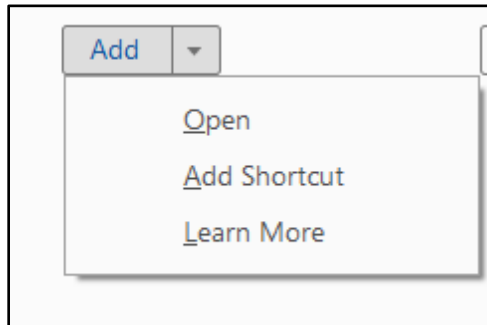
#### Run the Make Accessible Action Wizard

In Adobe Acrobat Professional DC, the easiest way to double check that your PDF is (**mostly**) accessible is to use the Make Accessible Action Wizard. This tool won't remediate all issues, but it's a great tool for making PDFs more accessible. To start the wizard:

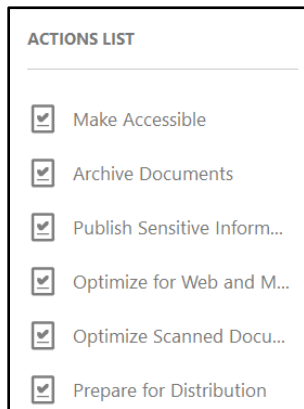
1. Go to the **Tools** menu.
2. Select **Action Wizard**.



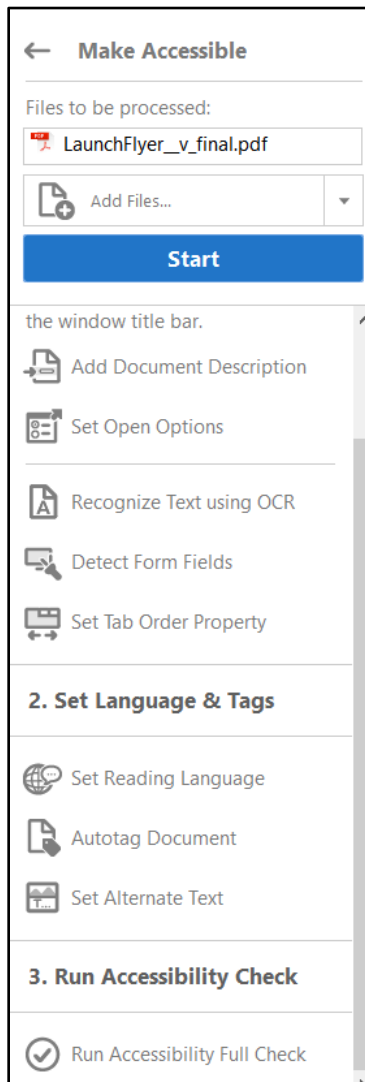
Note: If you plan on using this Wizard again, you may add it to your Shortcuts list by using the Add dropdown and selecting Add Shortcut.



3. Select **Make Accessible** from the Actions list.



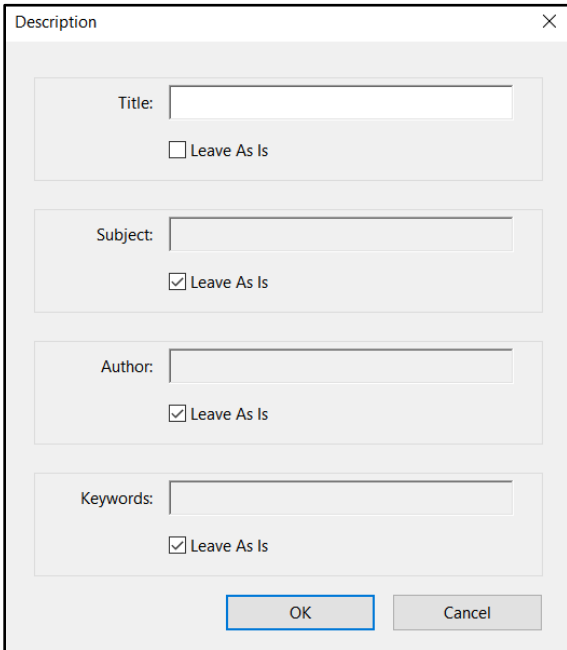
4. This will open the **Make Accessible Wizard**. Click on **Start** and the Wizard will walk you through making your PDF accessible in three main steps.



## 1. Prepare

### Add Document Description

Using the dialog box, add a **Title**, and, if applicable, add a Subject, Author and/or Keywords. To make adjustments to the existing information, uncheck the Leave As Is box.



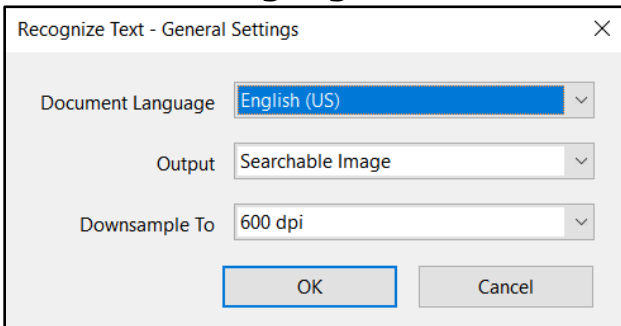
The 'Description' dialog box contains four input fields, each with a 'Leave As Is' checkbox below it. The fields are: Title (checkbox is unchecked), Subject (checkbox is checked), Author (checkbox is checked), and Keywords (checkbox is checked). At the bottom are 'OK' and 'Cancel' buttons.

### Set Open Options

This step will happen automatically.

### Recognize Text using OCR

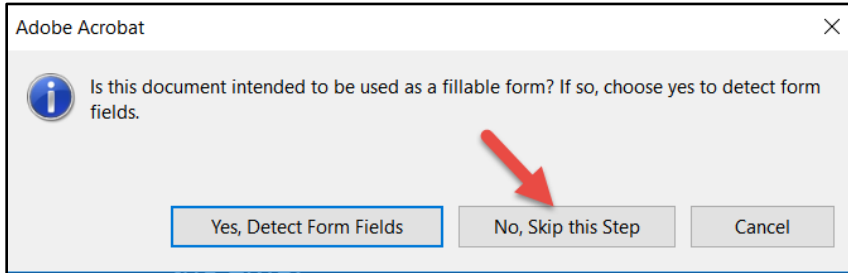
OCR stands for Optical Character Recognition. Using the dialog box, choose the **Document Language** and click **OK**.



The 'Recognize Text - General Settings' dialog box has three dropdown menus: 'Document Language' (set to English (US)), 'Output' (set to Searchable Image), and 'Downsample To' (set to 600 dpi). At the bottom are 'OK' and 'Cancel' buttons.

### Detect Form Fields

If your document is not a form, select **No, skip this step**.



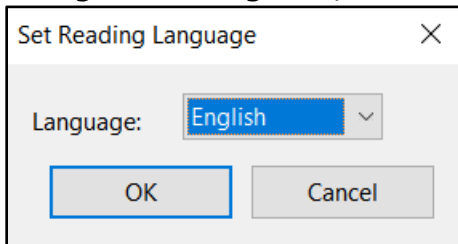
### Set Tab Order Properly

This step will happen automatically.

### 2. Set Language & Tags

#### Set Reading Language

Using the dialog box, set the **Language** appropriately and click **OK**.

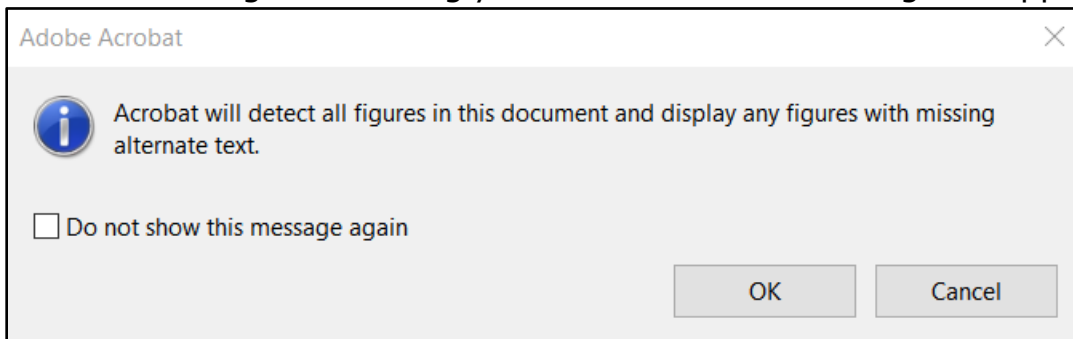


### Autotag Document

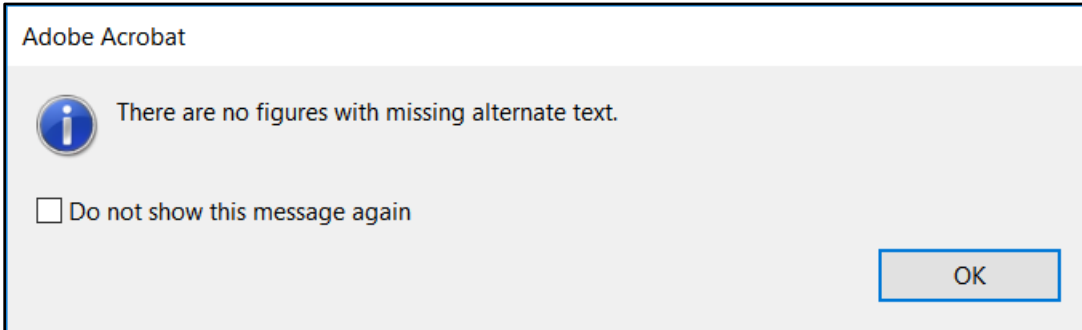
This step will happen automatically.

### Set Alternative Text

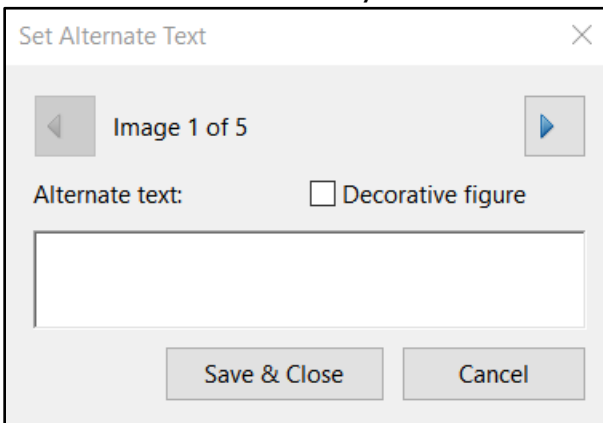
This step will walk you through adding alt text for meaningful images and/or marking decorative images accordingly. Click **OK** when the dialog box appears.



If you've already set all of your alt text in Word, you'll be able to skip this step. Acrobat will let you know there are no figures with missing alt text. You may click **OK**.



However, if you haven't set all of your alt text, Acrobat will give you the opportunity to add it. The image should be highlighted. You may either add **Alternative text** or mark the image as a **Decorative figure**. Use the forward arrow button to go to the next image, if applicable. If you accidentally skip an image, you may go back by clicking on the back arrow. Once you have finished, click **Save & Close**.













### 3. Run Accessibility Check

#### Run Accessibility Full Check

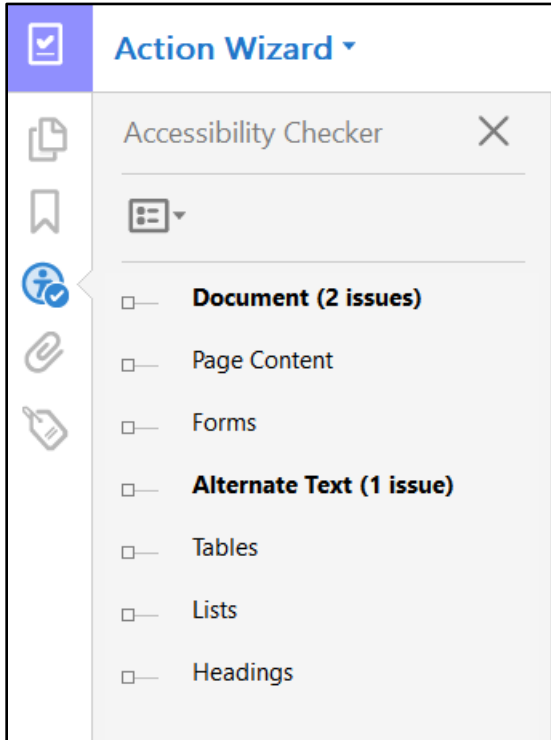
When you're ready to run the check, all of your previous categories should have a checkmark.

1. Prepare	
Set a title and ensure it displays in the window title bar.	
	Add Document Descrip... <input checked="" type="checkbox"/>
	Set Open Options <input checked="" type="checkbox"/>
<hr/>	
	Recognize Text using O... <input checked="" type="checkbox"/>
	Detect Form Fields <input checked="" type="checkbox"/>
	Set Tab Order Property <input checked="" type="checkbox"/>
2. Set Language & Tags	
	Set Reading Language <input checked="" type="checkbox"/>
	Autotag Document <input checked="" type="checkbox"/>
	Set Alternate Text <input checked="" type="checkbox"/>

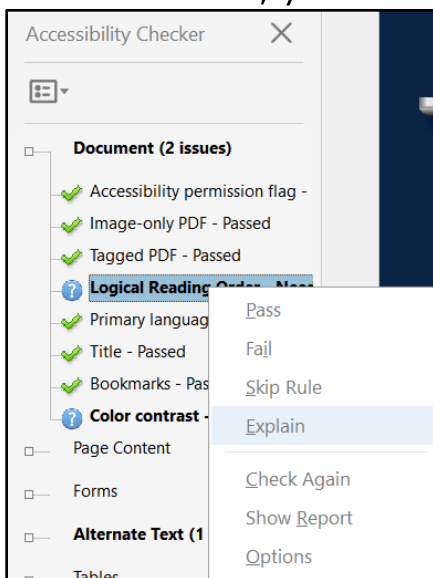
The default checked options should be fine. Choose **Start Checking**.

Accessibility Checker Options	
<b>Report Options</b>	
<input checked="" type="checkbox"/> Create accessibility report	Folder: C:\Users\eprickett\Documents <input type="button" value="Choose..."/>
<input type="checkbox"/> Attach report to document	
<b>Page Range</b>	
<input checked="" type="radio"/> All pages in document <input type="radio"/> Pages from <input type="text" value="1"/> to <input type="text" value="1"/>	
<b>Checking Options (31 of 32 in all categories)</b>	
Category: <input type="text" value="Document"/>	
<input checked="" type="checkbox"/> Accessibility permission flag is set	
<input checked="" type="checkbox"/> Document is not image-only PDF	
<input checked="" type="checkbox"/> Document is tagged PDF	
<input checked="" type="checkbox"/> Document structure provides a logical reading order	
<input checked="" type="checkbox"/> Text language is specified	
<input checked="" type="checkbox"/> Document title is showing in title bar	
<input checked="" type="checkbox"/> Bookmarks are present in large documents	
<input checked="" type="checkbox"/> Document has appropriate color contrast	
<input type="button" value="Select All"/> <input type="button" value="Clear All"/>	
<input checked="" type="checkbox"/> Show this dialog when the Checker starts	
<input type="button" value="Help"/>	<input type="button" value="Start Checking"/> <input type="button" value="Cancel"/>

Once the full check has run, you'll receive the **Accessibility Checker** report on the left side of your screen:

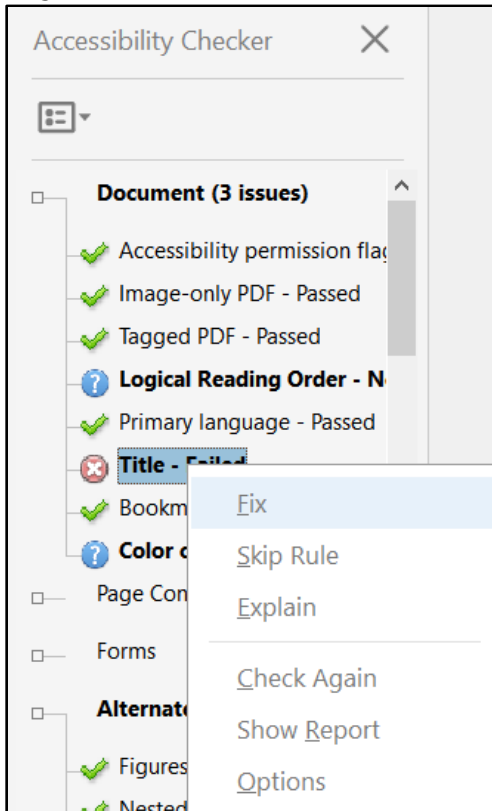


If you expand the items with issues in the report, you'll find more details. If you right click on an item, you can choose the **Explain** option to give you some assistance.



This will open a web browser with **Adobe Help's website**.

If there is an actual error, such as missing alt text, a Fix option will also appear in the right click menu. Clicking on the **Fix** option will prompt you to make the appropriate adjustment.



If you've followed all of the best practices for accessibility in your original Word document, your report may not note any errors. The only issues you may have are ones that require a manual check, such as logical reading order and/or color contrast.

Once you've finished, you may close the Make Accessible Wizard and **save your PDF**.

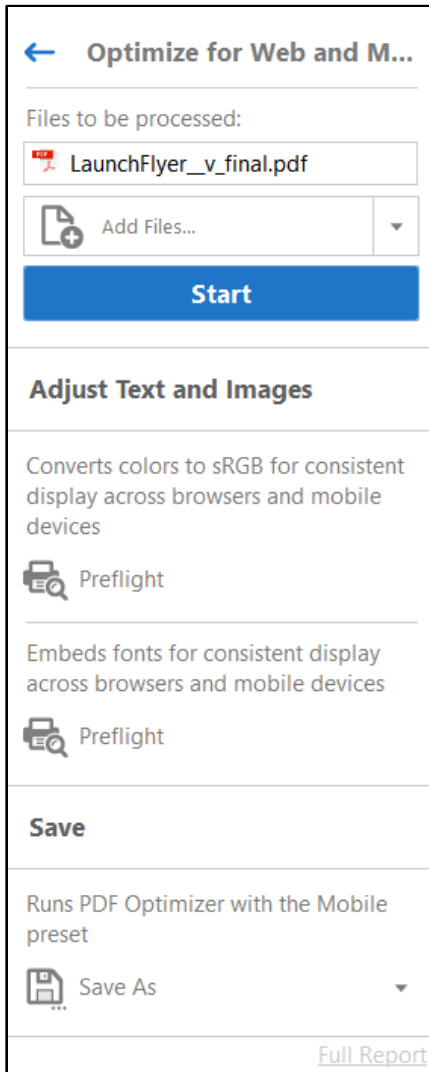
The Accessibility Full Check may also be accessed via the **Accessibility** tool. If you have a more complicated PDF or one that didn't originate as an accessible Word document, you may need to tackle accessibility a bit differently. The following steps are similar to the Wizard but take a more manual approach.

For more information about the Accessibility Checker, refer to [Adobe's Accessibility Checker Guide](#).

### Run the Optimize for Web and Mobile Action Wizard

Adobe Acrobat DC also offers a wizard for optimizing your PDF for the web and mobile devices. This converts colors and embeds fonts so that they are displayed consistently. It also reduces the file size a bit. To run this wizard:

1. Go to the **Tools** menu.
2. Select the **Action Wizard** icon.
3. Select the **Optimize for Web and Mobile** wizard from the Actions List.
4. Once the wizard is open, click **Start**.



← Optimize for Web and M...

Files to be processed:

LaunchFlyer\_\_v\_final.pdf

Add Files...

Start

**Adjust Text and Images**

Converts colors to sRGB for consistent display across browsers and mobile devices

Preflight

Embeds fonts for consistent display across browsers and mobile devices

Preflight

**Save**

Runs PDF Optimizer with the Mobile preset

Save As

Full Report

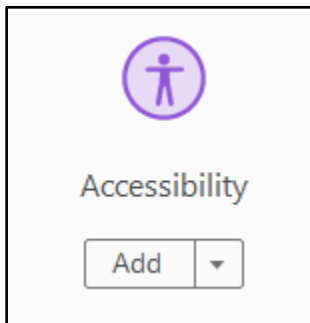
5. The Adjust Text and Images portion of the wizard will run automatically.
6. The wizard will then prompt you to **Save your PDF**. Save your PDF. (You may change the name and/or location if needed.)
7. Close the wizard.

## Other Ways to Add and/or Check Accessibility

### Add Accessibility Panel to Shortcuts Pane

To show the Accessibility Panel in the Shortcuts Pane:

1. Go to the **Tools** menu.
2. Find Accessibility and click **Add**.

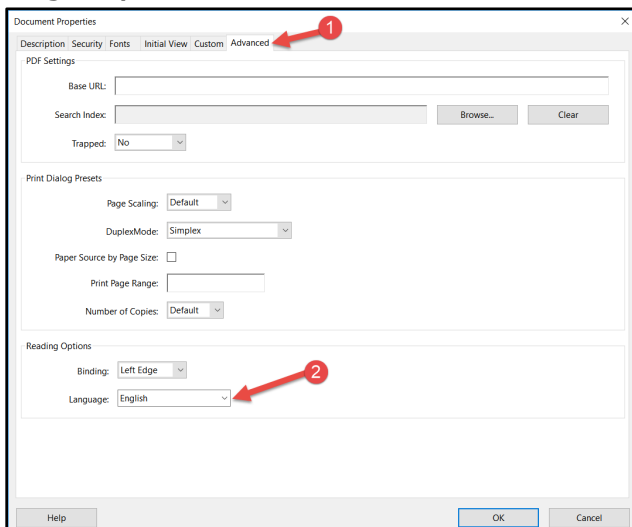


(This also adds Accessibility to Shortcuts menu.)

### Specify Language

The language you selected in Word may carry over to the PDF, but it's best to double check. Open your PDF and choose your language:

1. Go to **File**.
2. Select (Document) **Properties**.
3. Go to the **Advanced** tab.
4. In the Reading Options area, choose the **Language** for the document (i.e., English).

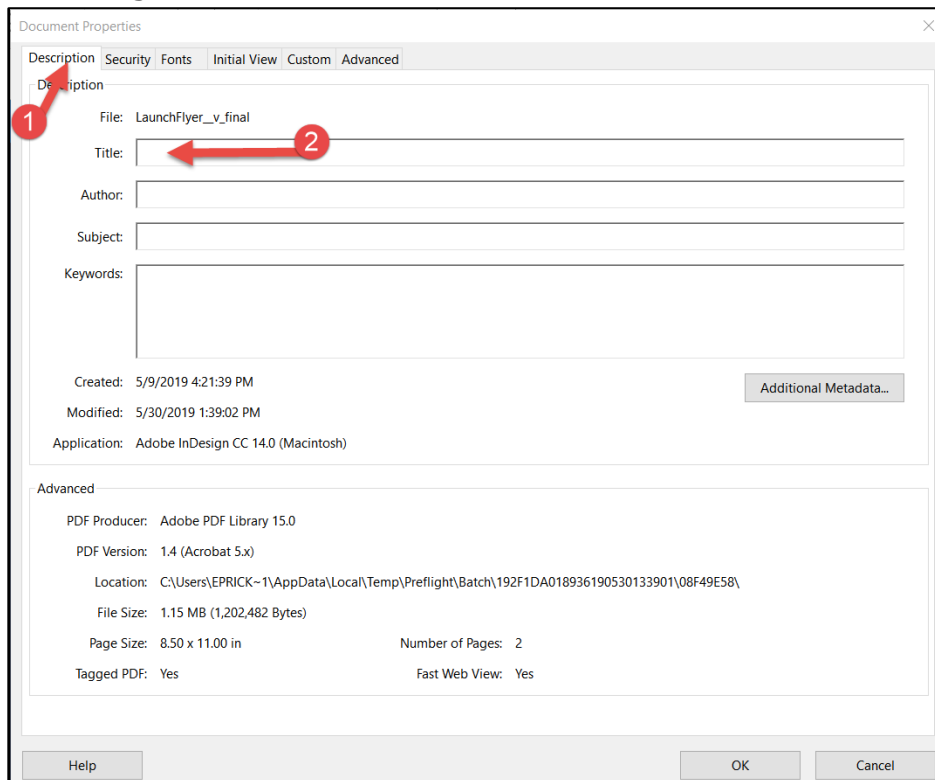


5. Click **OK**.

## Specify Title

Documents should have meaningful titles, not just file names. The Title you entered in Word may not carry over to the PDF. To double check or change the title:

1. Go to **Document Properties** by right clicking on a page of the document or go to File > (Document) Properties.
2. Go to the **Description** tab. This will give you access to the document's metadata, including the **Title**.



Note: It's a best practice to give documents meaningful file names, too. For example, Document2.pdf is going to be meaningless for most users.

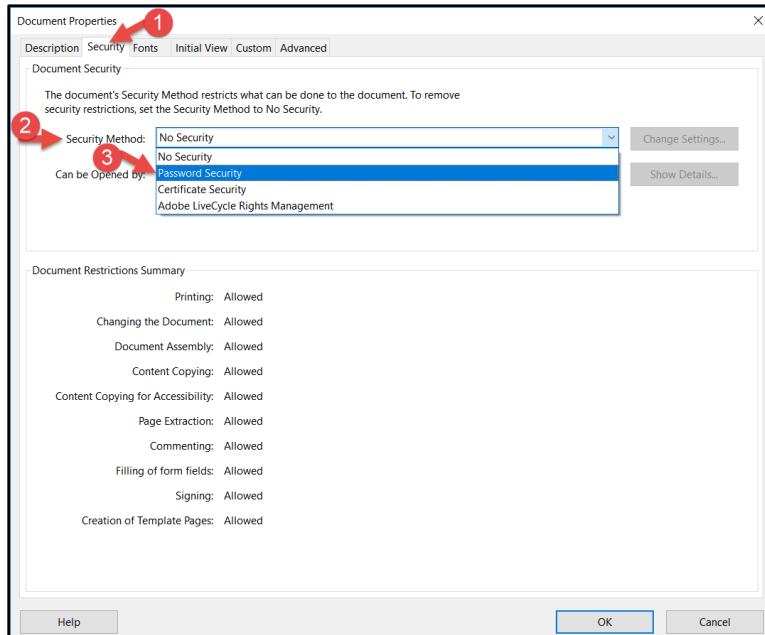
3. Click **OK**.

## Add Security and Accessibility (Optional)

If you want to add security features to the PDF, be sure to enable text access! Security options are also found in Document Properties. To access Security options:

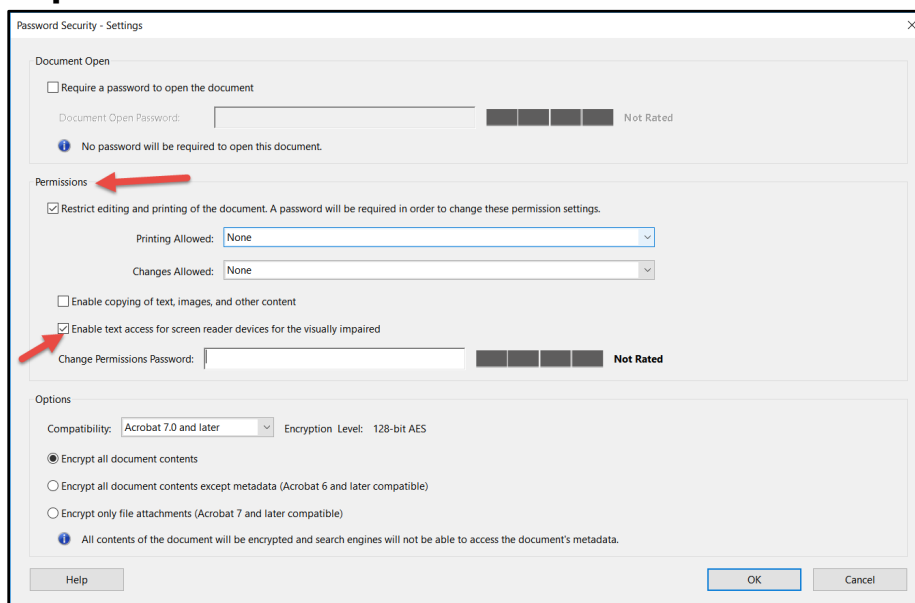
1. Go to **File**.
2. Select (Document) **Properties**.
3. Go to the **Security** tab.

4. Go to Security Method and choose **Password Security**.



5. In Password Security Settings:

- Permissions: Restrict editing and printing of the document (pick the options you desire)
- Check: **Enable text access for screen reader devices for the visually impaired**



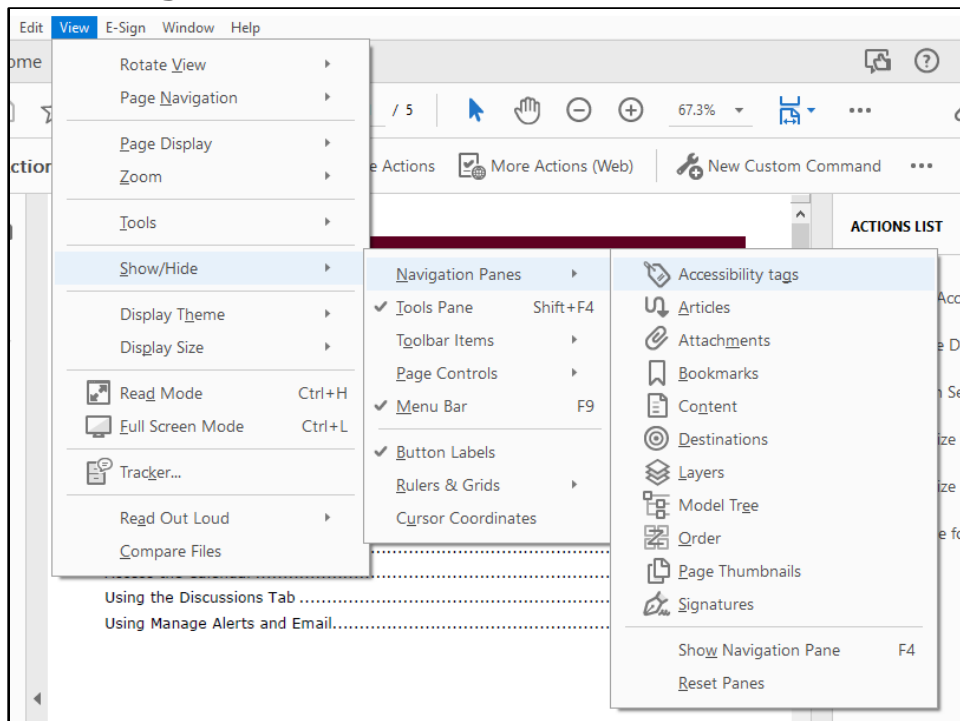
Note: If you set passwords, remember to write them down somewhere in case you forget them. Otherwise, you won't be able to print and/or edit your own PDF.

6. Click **OK**.

## Check the Tags with the Tags Panel

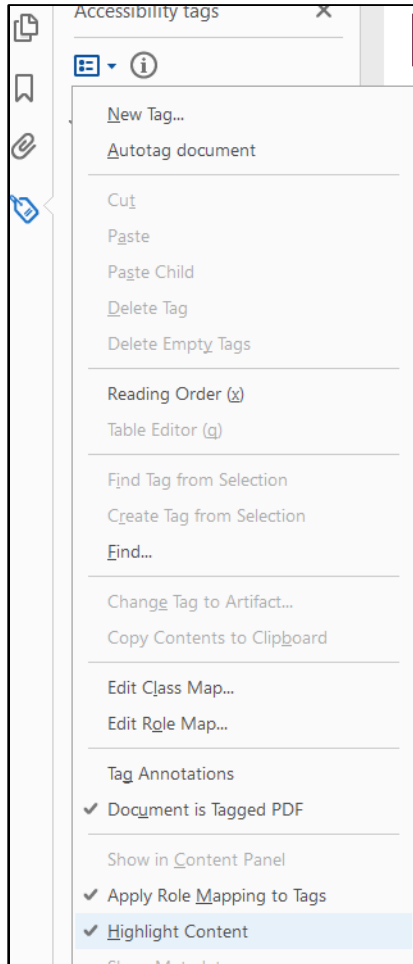
Since you created a structured document in Word, your PDF should already be tagged. Double check that the tags are correct by viewing the Tags Panel.

1. Go to **View**.
2. Select **Show/Hide**.
3. Select **Navigation Panes**.
4. Select **Tags**.





5. To make it easier to see where you are when you click on an item in the Tags Pane, click on the **Options** icon and choose **Highlight Content**.



This will highlight the part of your document that you click on in the Tags Pane. You can expand tags as needed for more information.

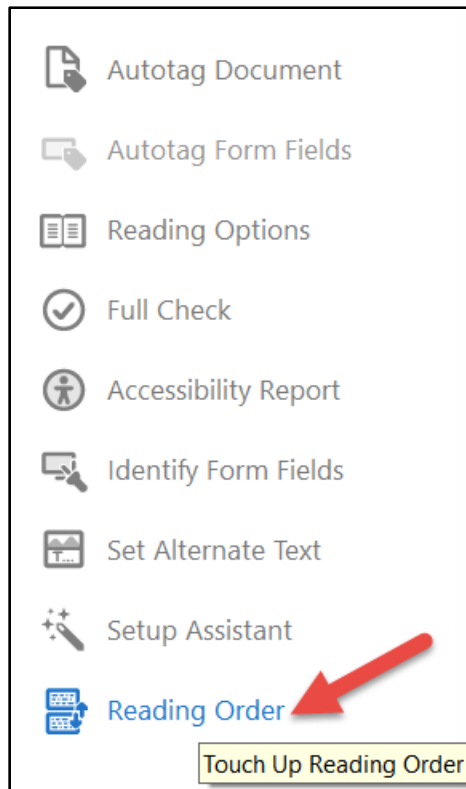
Some tags can only be adjusted by using the Tags Pane. However, if your Word document was structured properly, you may not need to adjust much in the PDF. You may be able to make your adjustments using TouchUp Reading Order.

### Check the Reading Order and Tags with TouchUp Reading Order

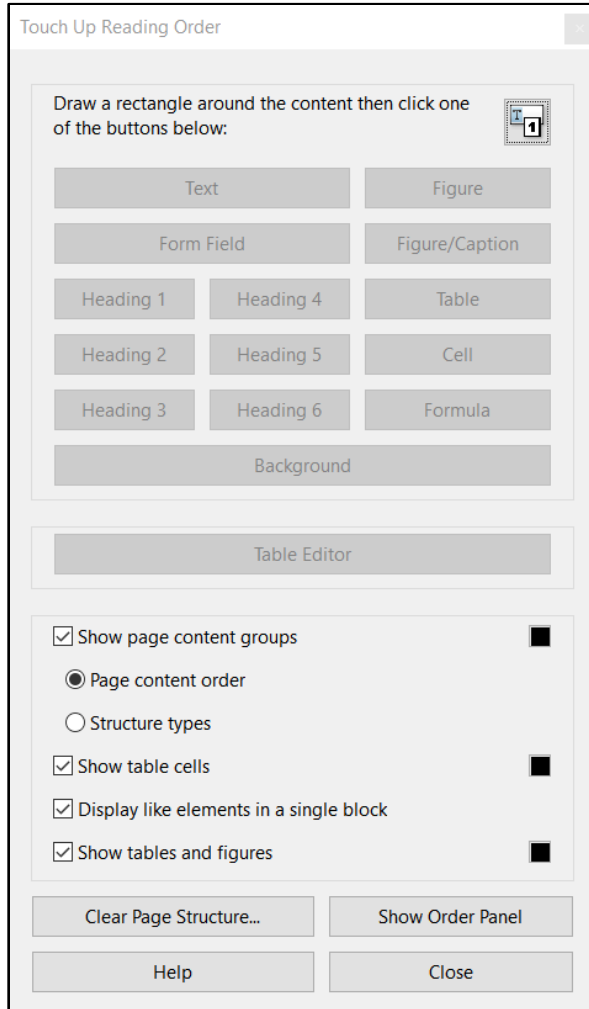
TouchUp Reading Order shows you the reading order of each item on the page. The TouchUp Reading Order dialog box gives you the opportunity to retag items as text (for paragraph text), Headings (1-6), Figure, Table, Background, etc. To access TouchUp Reading Order:

1. Go to **Tools**.
2. Select **Accessibility**. This will open the Accessibility pane.

3. Select **Reading Order**.



4. Use the **Touch Up Reading Order** dialog box to adjust the reading order as needed. (This is where you may also markup text, figures, headings, tables, etc. in the event they were not marked up properly in the original file.



**Warning: Adobe has yet to offer an undo option (i.e. no CTRL+Z) in PDF tagging, so be careful! Be sure to save any changes that you need so that if you make an error, you can at least have the option to close the document without saving the incorrect changes.)**

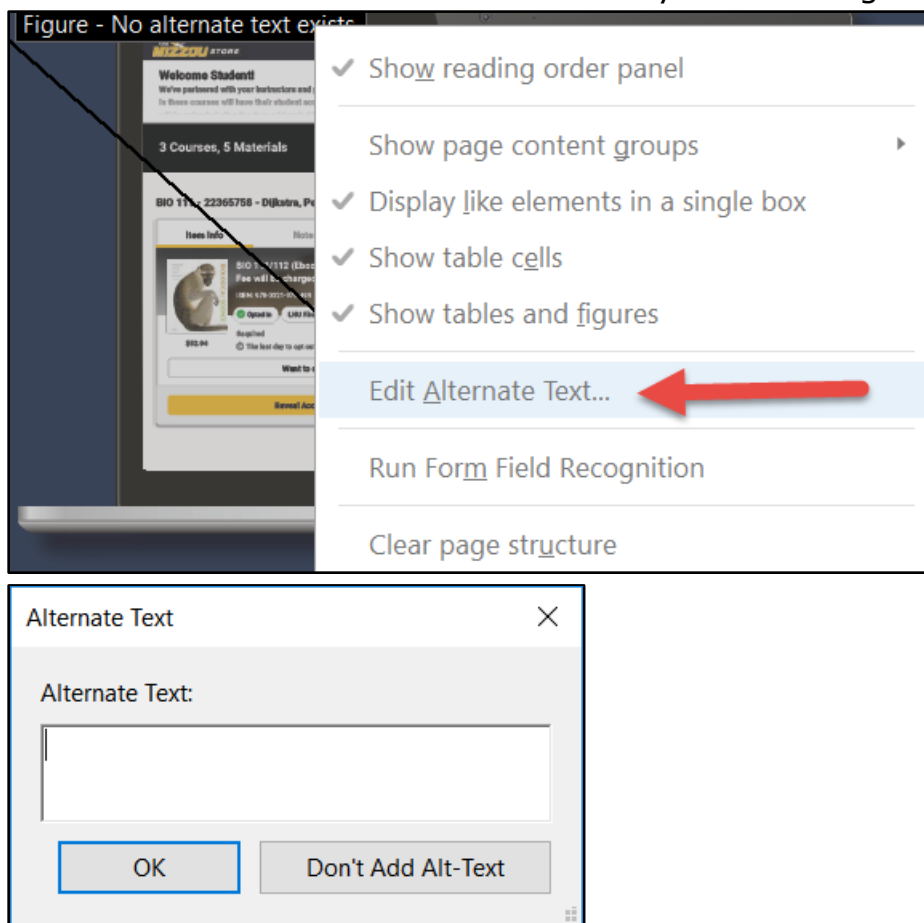
### Text

Sometimes during the conversion to PDF, paragraphs of text get broken into smaller sections in the reading order. If you just want them as a single area of text, you can draw a rectangle around the content you wish to be a single section and mark it as **Text**.

## Figure

Use the **Figure** option for images. (Or, if you want a caption with the image, you can choose Figure/Caption.)

1. Click on the item that needs to be tagged as an image. (Click on the number – the crosshairs icon will change to a hand icon.)
2. Choose the Figure option – you'll get a message that says "Figure – No alternative text exists."
3. Right click on the figure.
4. Choose **Edit Alternative Text** and add your meaningful alt text.



## Background

This is the option you choose for marking any decorative images as artifacts.

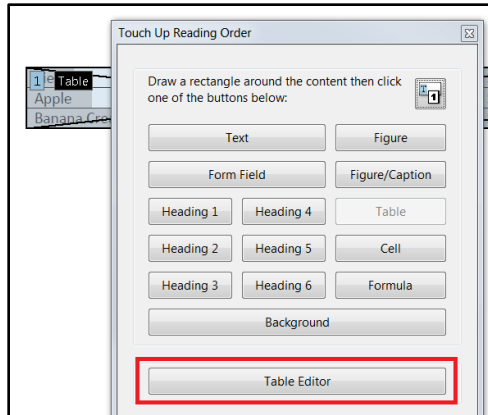
1. Click on the decorative image.
2. Select **Background** from the TouchUp Reading Order dialog box.

This removes the decorative image from the tag structure. Screen readers will now be able to skip over the image, and sighted users will still be able to view it.

## Table

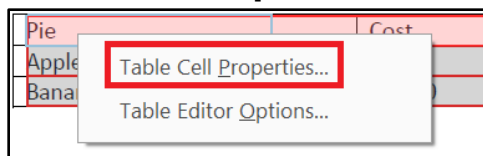
Hopefully you've added accessibility to your table in Word; however, if needed, you may still touch up a table in the PDF. All tables need to have at least one heading row/column.

1. Click on your table.
2. Choose the **Table Editor** option in the TouchUp Reading Order dialog box.

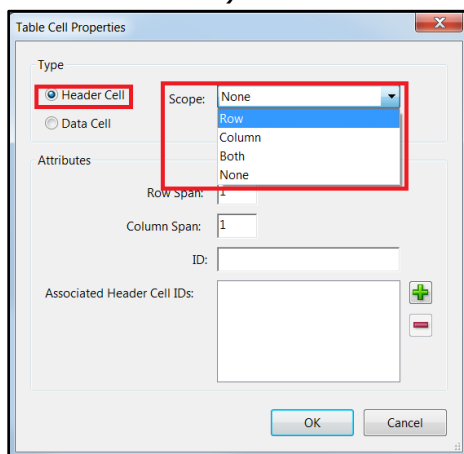


You'll notice that all of your cells will be highlighted in red.

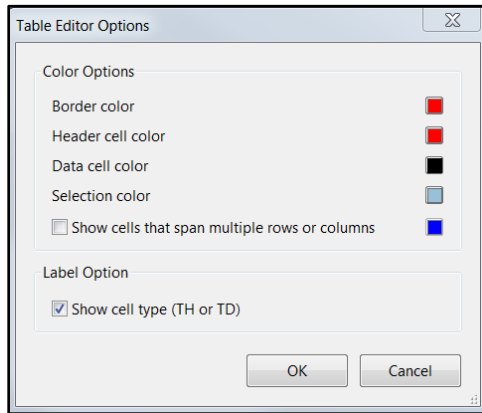
3. Right click on the cell where your column or row header should be and choose **Table Cell Properties**.



4. In the **Type** options, choose **Header Cell**.
5. Choose the appropriate **Scope** for your table (Row, Column, or Both). (If your table has headings for each **row**, choose **Column**. If your table has headings for each **column**, choose **Row**. If you have **both row and column headings**, choose **Both**.)



6. Right click on your table and choose **Table Editor Options**. This will allow you the option to show cell types – whether a cell of your table is a table header (TH) or table data (TD).



You'll notice that the cell is now labeled as a table header (TH).

TH	TH	Cost	TH	Shipping
TD	TD	\$9.00	TD	\$3.00
TD	TD	\$10.00	TD	\$3.00

7. Repeat the process for any other cells in your table(s) that are column or row header cells.

Note: More complex tables require much more work with associating IDs.

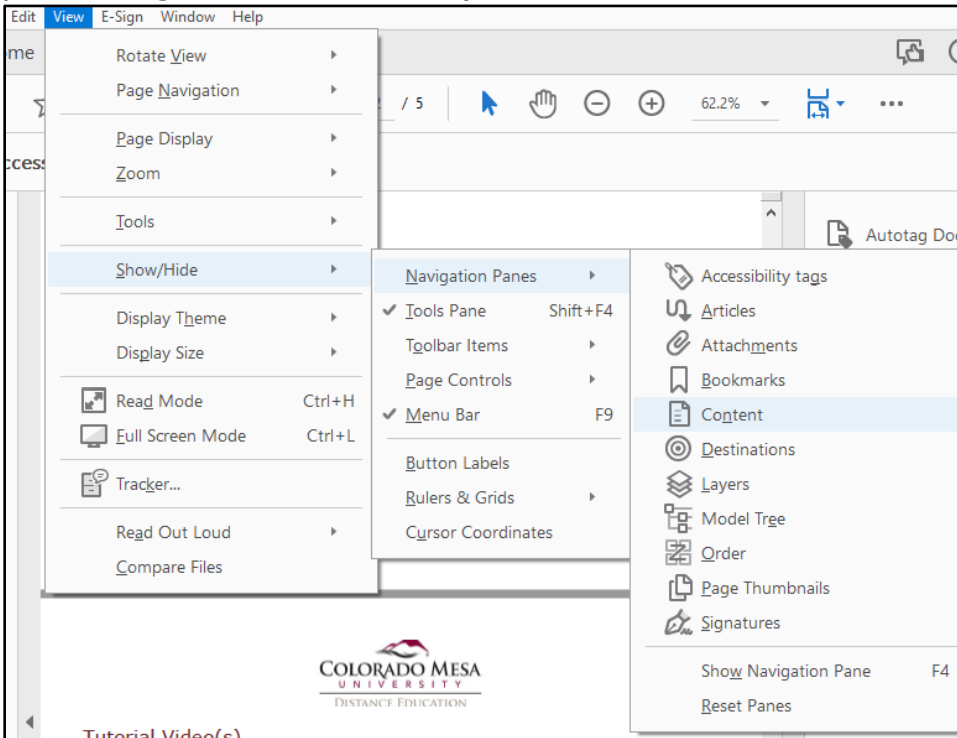
### Clear Page Structure

Please be aware that clearing the page structure will completely delete all page structure on a single page of your document. You shouldn't need to do this if you created the original document correctly in Word. However, if you need to clear a particular page and start from scratch, you may choose **Clear Page Structure**. Then, draw rectangles around the various elements on your page, and mark them correctly using the TouchUp Reading Order dialog box.

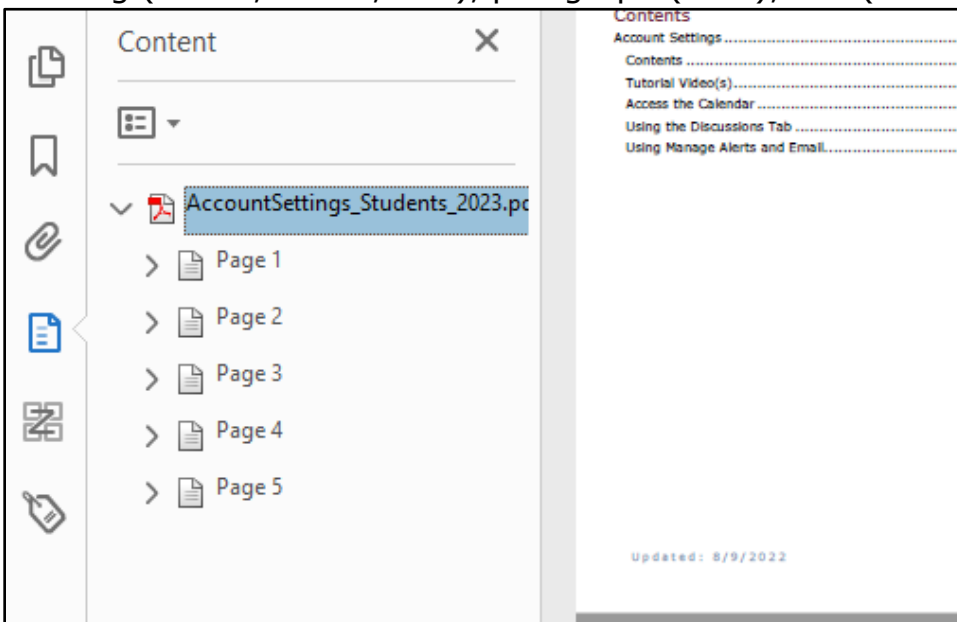
### Check Content and Order Panels

The **Content Panel** and the **Order Panel** provide hierarchical views of your document. These give you another look at the page structure and allows you to drag and drop elements to correct the reading order if it is incorrect. (Note: Adobe cautions you to be careful before editing content objects unless you're familiar with PDF structure as the document could be damaged.)

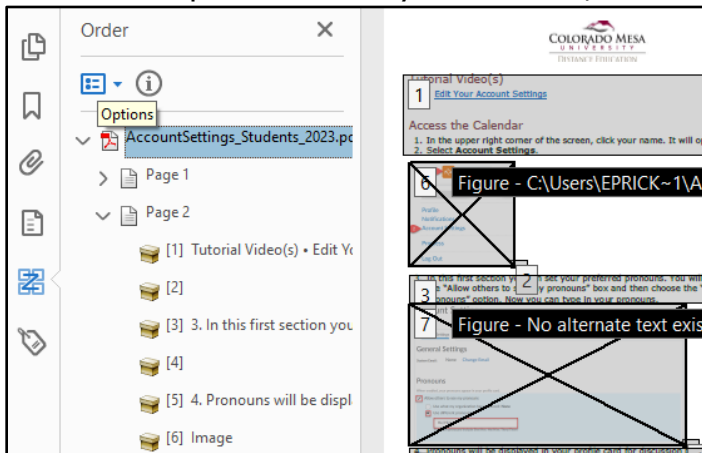
If the Content and Order icons are not already added to your Navigation Pane, go to **View > Show/Hide > Navigation Panels > Content** (You will need to go through the process again to add **Order**.)



The **Content** panel allows you to view and edit page content information, and it provides another method to correct reflow issues that you may not have been able to fix with the Touch Up Reading Order tool. Content tells you if an item is marked up as a heading (<H1>, <H2>, etc.), paragraph (<P>), link (<Link>), etc.



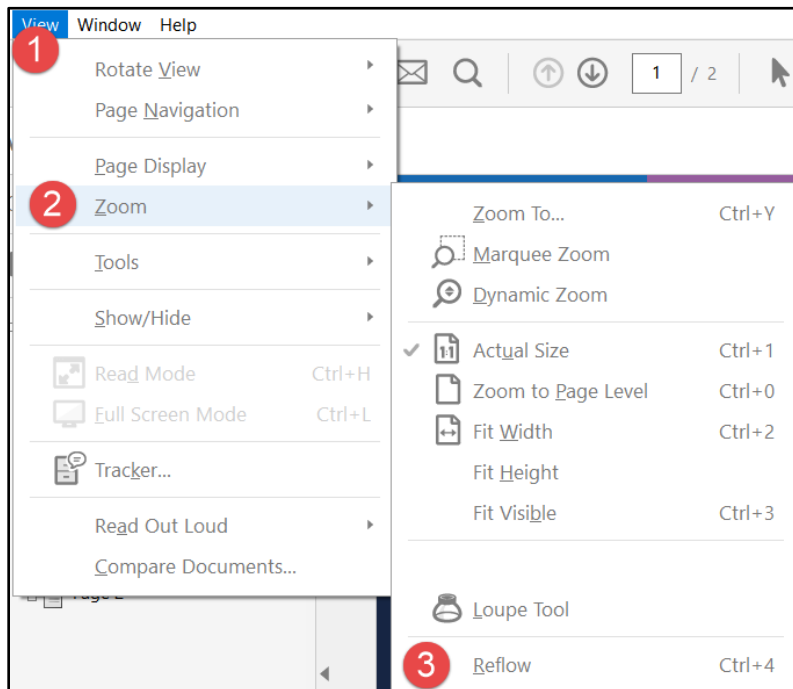
The **Order** panel allows you to view, reorder and retag structured PDF information.



## Check Content Reflow

Checking the content reflow is a quick way to find out if the visual and structural reading orders match. This is especially helpful in documents with columns. To enable reflow:

1. Go to **View**.
2. Choose **Zoom**.
3. Choose **Reflow**.



This will show you a mostly plain text view of your page in a single column, and you can double check the reading order. This also allows you to check that your text reflows properly when enlarged. (To turn off this view, go back and uncheck Reflow.)

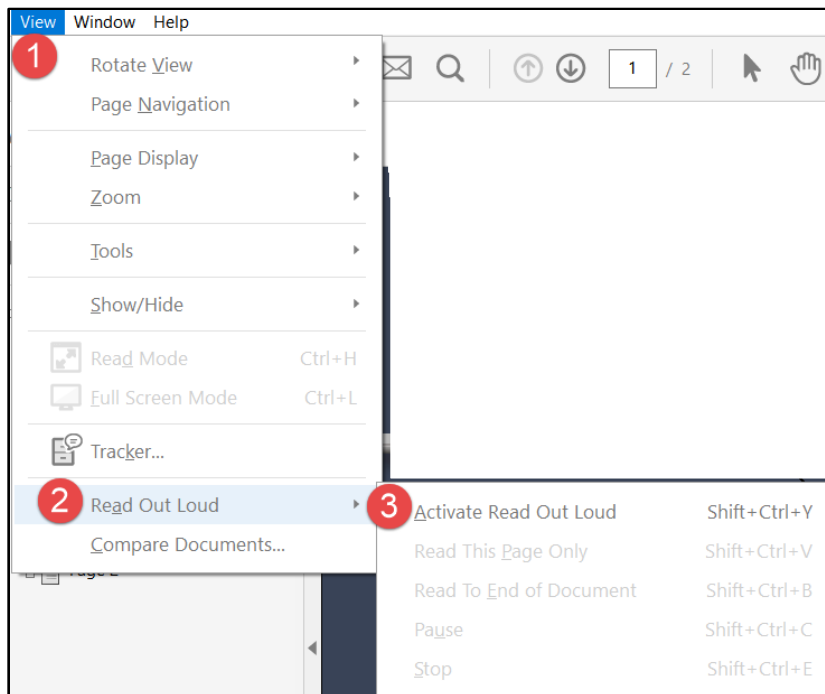


## Listen to the Reading Order with Read Out Loud

**Read Out Loud** allows you to hear the document and will give you an idea of what a screen reader will hear. Checking a document with Read Out Loud is a quick way to check the logical reading order. This gives you another way to see if the document was tagged properly. If the PDF is tagged properly, it will read all text, including alt text, in the correct order.

To activate Read Out Loud:

1. Go to **View**.
2. Choose **Read Out Loud**.
3. Choose **Activate Read Out Loud**.



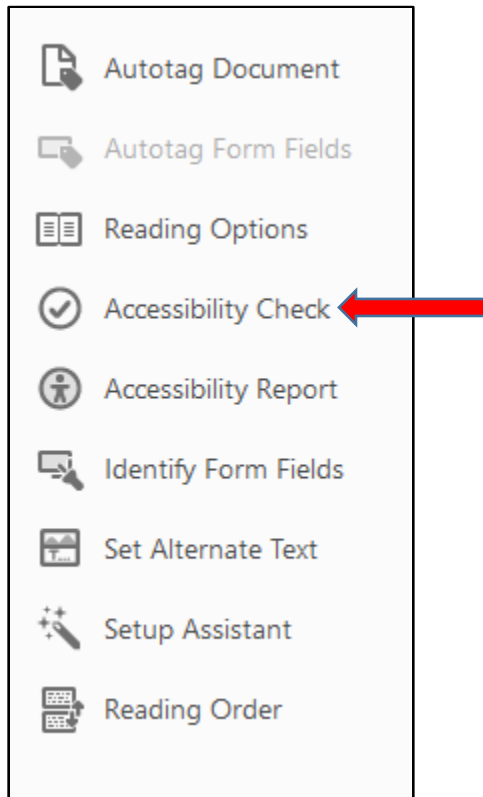
4. Go back to the menu again and choose either **Read this page only** or **Read to end of document**.

If the text reads out of order, go back to the Accessibility menu and use TouchUp Reading Order or Show Order Panel to make appropriate adjustments.

## Use the built-in accessibility check

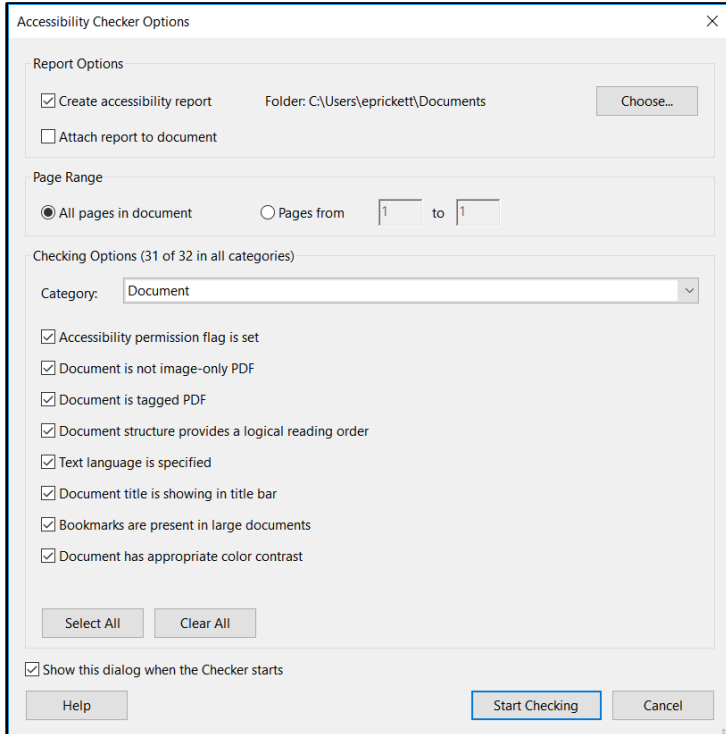
Like Word, Acrobat has a built-in accessibility check. Run this check to see if your document is accessible as a PDF.

1. Open the **Accessibility** tool.
2. Choose **Accessibility Check**.



Note: Remember, as with the built-in Accessibility Checker in Word, the Accessibility Checker in PDF can't fix the document for you. You'll need to read over the "Fix" and "Explain" options and see if you can make the corrections yourself.

3. The default checked options in the **Accessibility Checker Options** dialog box should be fine. Choose **Start Checking**.



4. You'll receive the **Accessibility Checker** report on the left side of your screen.
5. If you expand the items with issues in the report, you'll find more details. If you right click on an item, you may choose the **Explain** option to give you some assistance.
- Note: This will open a web browser with Adobe's Acrobat User Guide website.
6. If there is an actual error, such as missing alt text, a **Fix** option will also appear in the right click menu. Clicking on the Fix option will prompt you to make the appropriate adjustment.

If you've followed all of the best practices for accessibility in your original Office document, your report may not note any errors. The only issues you may have are ones that require a manual check, such as logical reading order and/or color contrast.

## Resources

- *Acrobat User Guide* – Adobe: <https://helpx.adobe.com/acrobat/user-guide.html>
- *Adobe Continues to Improve on Making PDFs Accessible* – Adobe Blogs June 13, 2017 - <https://blogs.adobe.com/documentcloud/adobe-continues-to-improve-on-making-pdfs-accessible/>
- *Alternate Media workflow strategies for PDF* – online course from the California Community Colleges:  
<https://catalog.onlinenetworkofeducators.org/browse/accessibility/courses/pdf-workflow-strategies>
- *Cheatsheets* – Project Goals – 2018 – National Center on Disability and Access to Education: <http://ncdae.org/resources/cheatsheets/>
- *Electronic Documents* – Minnesota IT Services: <https://mn.gov/mnit/about-mnit/accessibility/electronic-documents.jsp>
- *PDF Document Accessibility* – Portland Community College:  
<https://www.pcc.edu/instructional-support/accessibility/pdf/>
- *W3C's PDF Techniques for WCAG 2.0*: <http://www.w3.org/TR/WCAG20-TECHS/pdf.html>
- *PDF Accessibility* (WebAIM): <http://webaim.org/techniques/acrobat/>