

Document Remediation

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DOCUMENT REMEDIATION

WHAT IS ACCESSIBILITY AND WHY IS IT IMPORTANT?

Accessibility is the extent to which anything (such as websites, documents, mobile devices, computer software, or anything with a user interface) can be used or understood by anyone, regardless of whether or not they have a disability. When we say that a document is “accessible,” we mean that the information in it can be equally accessed by anyone.

There are many reasons why we should make our public documents as accessible as possible:

- It improves the usability of the document for everyone – not just people with disabilities
- Approximately 26% of Americans have some kind of disability
- Almost everyone will experience some kind of disability at some point in their lives (e.g. injury or aging)
- It’s the law (Public universities must comply with Americans with Disabilities Act)
- It’s the right thing to do

As a public university, Rutgers must comply with Title II of the Americans with Disabilities Act (ADA), which mandates that all university web and mobile content (including documents hosted on websites) must conform to the WCAG 2.1 AA standard for accessibility (<https://www.w3.org/WAI/standards-guidelines/wcag/>).

ROLES AND RESPONSIBILITIES

- The SAS IT Services web team scans websites for accessibility issues related to web pages and documents.
- The SAS IT Services web team remediates issues related to web pages.
 - You can help reduce the number of web issues by following the guidelines from the workshop “Accessibility and Websites.”
- The SAS IT services web team sends your unit a list of documents that contain accessibility issues.
 - You have several options for dealing with these documents:
 - **Remove** documents that are no longer needed (and the links to the documents)
 - **Replace** documents with web pages (Joomla! articles) where possible
 - **Archive** documents that exist only for reference, research or recordkeeping. The SAS IT Services web team can assist with archiving documents.
 - **Remediate** documents following the guidelines in the section of this workshop titled “Remediating PDF Files.”

REMEDIATING PDF FILES

PDF files can often contain accessibility issues. For best results, resolve these issues using a combination of Adobe Acrobat and the software used to create the original document (such as Microsoft Word or PowerPoint).

For this workshop, we will use the test PDF file located at:

<https://webtraining.sas.rutgers.edu/accessibility/sample-document-to-remediate>

Also, to follow the steps in this training session, you will need the full version of Adobe Acrobat installed on your computer. Acrobat is included in Adobe Creative Cloud, which is available for Rutgers active Students, Faculty (including Emeriti), Staff, and sponsored Guests. For more information, log on with your NetID to the Rutgers Software Portal at <https://software.rutgers.edu>, then go to: <https://software.rutgers.edu/product/3735>.

STEP 1) BACK UP YOUR ORIGINAL PDF

Before proceeding, make a copy of your PDF file in case anything goes wrong during the remediation process.

STEP 2) REMEDIATE ORIGINAL DOCUMENT

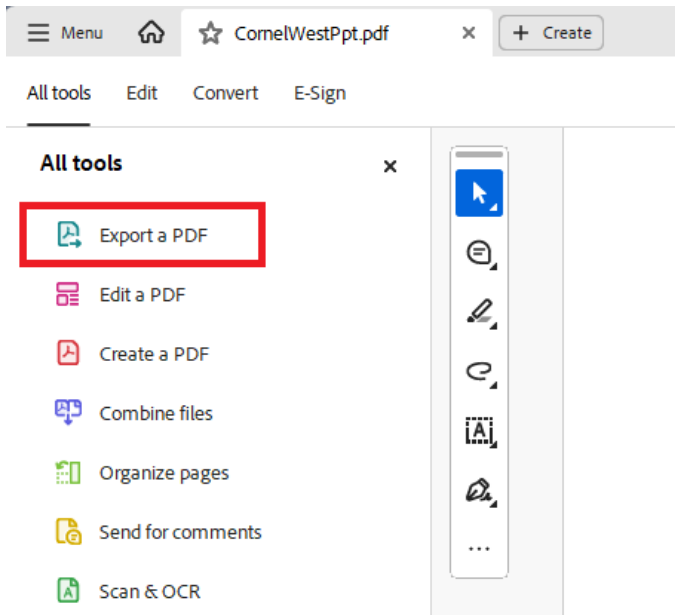
If you have the original Word document or PowerPoint presentation, follow the appropriate documentation to remediate the original file:

- [Remediating PowerPoint Presentations for Accessibility](#)
- [Remediating Word Documents for Accessibility](#)

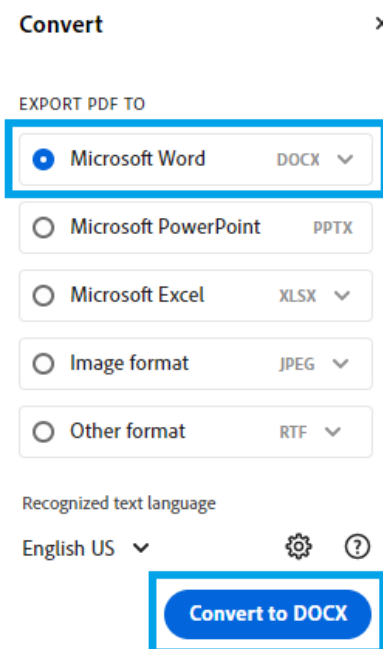
If you don't have the original Word document or PowerPoint presentation, you can export the PDF file to Word or PowerPoint as follows:

1. Open the presentation to be remediated using Adobe Acrobat.

2. Under **All tools** to the left, select **Export a PDF**:



3. If the PDF is a syllabus, CV, or similar document in portrait layout, select **Microsoft Word DOCX** under "EXPORT PDF TO" and click **Convert to DOCX**:



4. If the PDF is a flyer, presentation slide, or similar file in landscape layout, select **Microsoft PowerPoint PPTX** under "EXPORT PDF TO" and click **Convert to PPTX**:

Convert ×

EXPORT PDF TO

☐ Microsoft Word DOCX ▼

☒ Microsoft PowerPoint PPTX

☐ Microsoft Excel XLSX ▼

☐ Image format JPEG ▼

☐ Other format RTF ▼

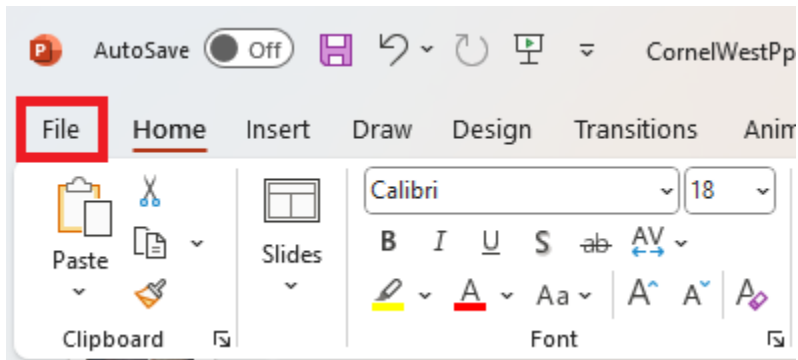
Recognized text language

English US ▼ ⚙️ ?

Convert to PPTX

5. Select a location and file name for the converted file. The converted file will then open in Word or PowerPoint.
6. Close the original PDF file in Acrobat.
7. Review the document to make sure it has been converted successfully. If the text, images, or other elements are distorted or unreadable, close the converted Word or PowerPoint file and delete it. Skip the rest of this section and remediate the original PDF file following the steps under "**Step 3) Remediate PDF file**" below.
8. Follow the appropriate documentation to remediate the Word document or PowerPoint presentation:
 - [Remediating PowerPoint Presentations for Accessibility](#)
 - [Remediating Word Documents for Accessibility](#)

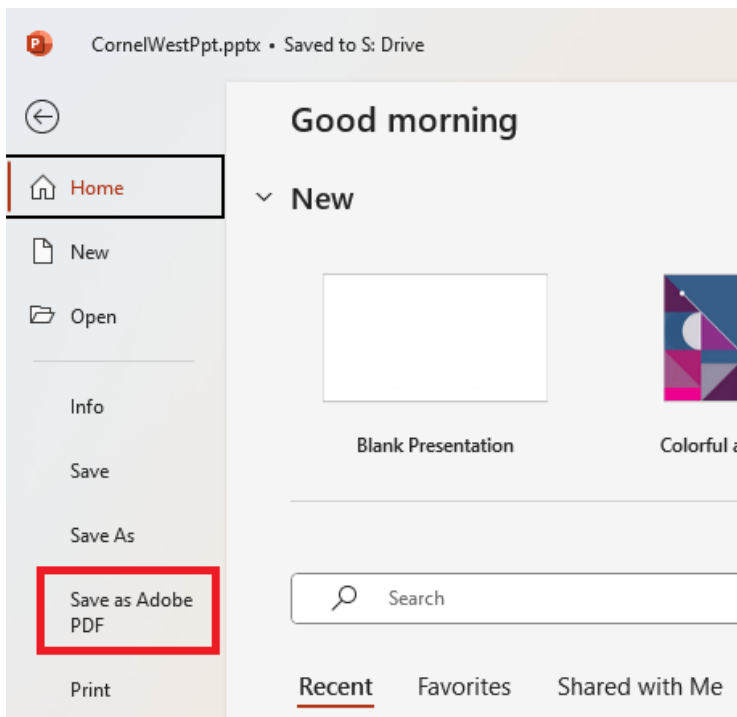
9. When all issues have been resolved, select the **File** menu:



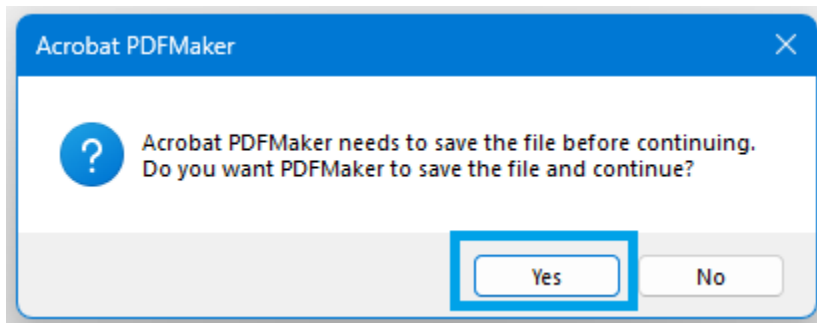
10. Select **Save** to save your changes to the file.

11. Select the **File** menu again.

12. Select **Save as Adobe PDF**:



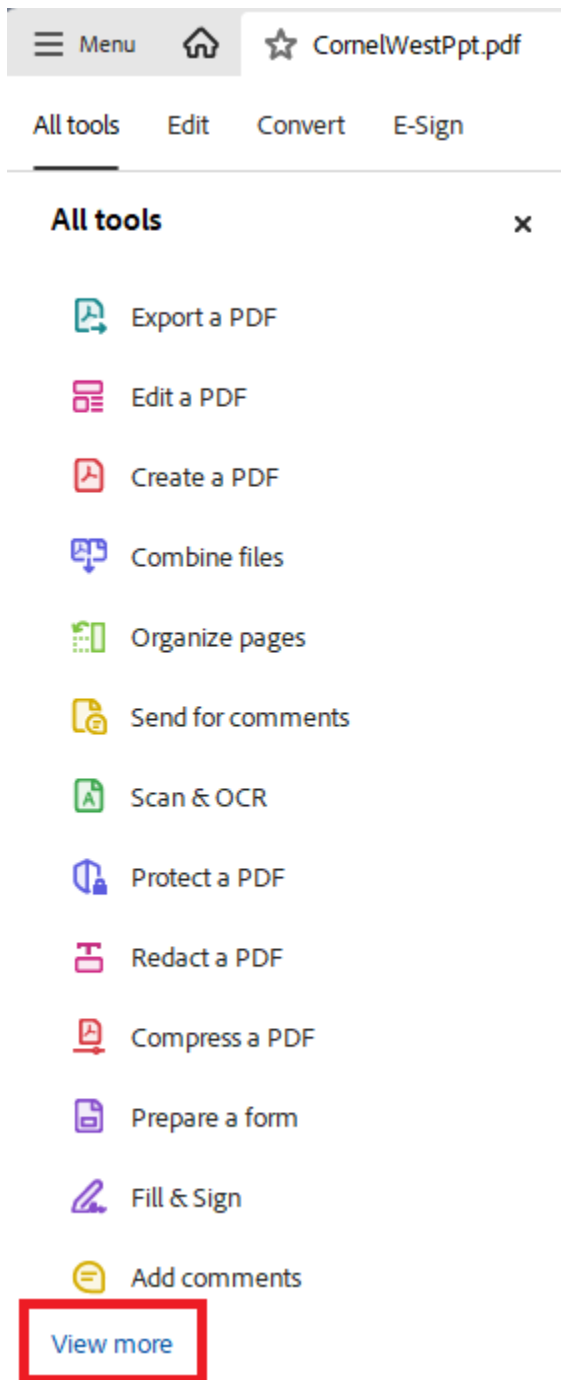
13. If asked, "Do you want PDFMaker to save the file and continue?" click **Yes**:



14. Save the Adobe PDF file to the appropriate location on your computer. The PDF will open in Acrobat.
15. Close the original Word or PowerPoint file.
16. Proceed to the next step, **Remediate PDF File**.

STEP 3) REMEDIATE PDF FILE

1. In Acrobat, under **All tools**, select **View more**:



2. Scroll down and select **Prepare for accessibility**:

All tools Edit Convert E-Sign |

All tools

x

 Compress a PDF

 Prepare a form

 Fill & Sign

 Add comments

 Convert to PDF

 Add a stamp

 Use a certificate

 Use print production

 Measure objects

 Compare files

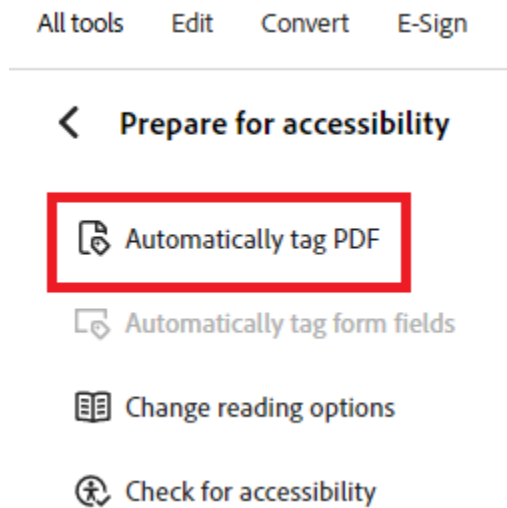
 Add rich media

 Use guided actions

 Prepare for accessibility

 Apply PDF standards

3. Select **Automatically tag PDF**:



4. Click **Confirm**:

Update accessibility tags?

This document is already tagged. Would you like to re-tag the document?

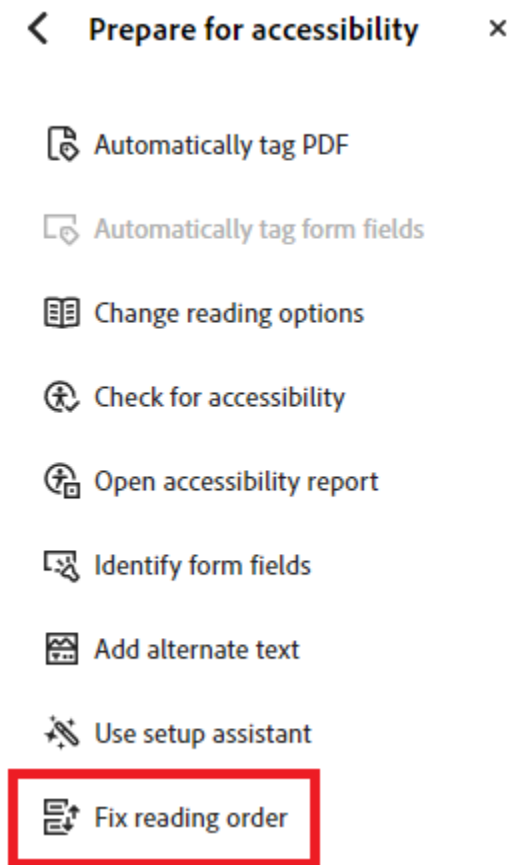
[View accessibility tags](#)

☐ Do not show this message again

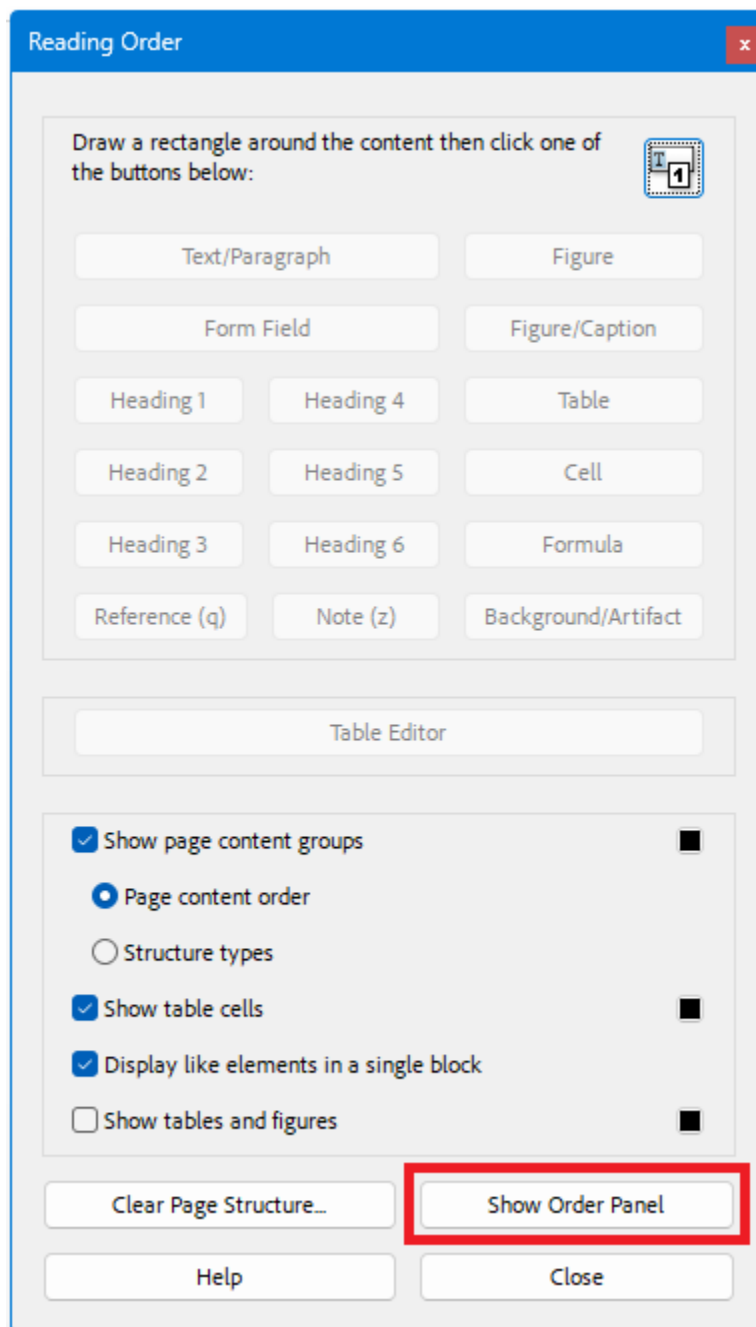


The tagging progress will be shown to the upper right under **Accessibility tags**. Wait for it to finish before proceeding to the next step.

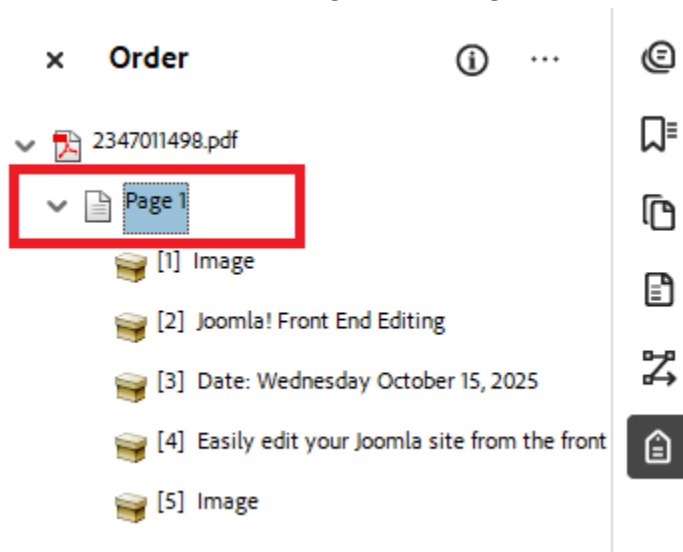
5. Under **Prepare for accessibility**, select **Fix reading order**:



6. In the "Reading Order" dialog, click **Show Order Panel**:

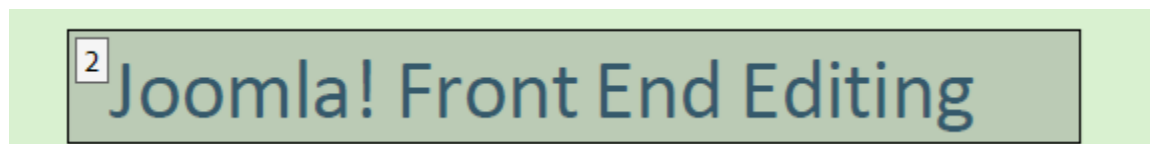


7. In the **Order** sidebar to the right, select **Page 1**:



8. Ideally, Page 1 of your document will contain the title of the document. Mark the title as “Heading 1” as follows:

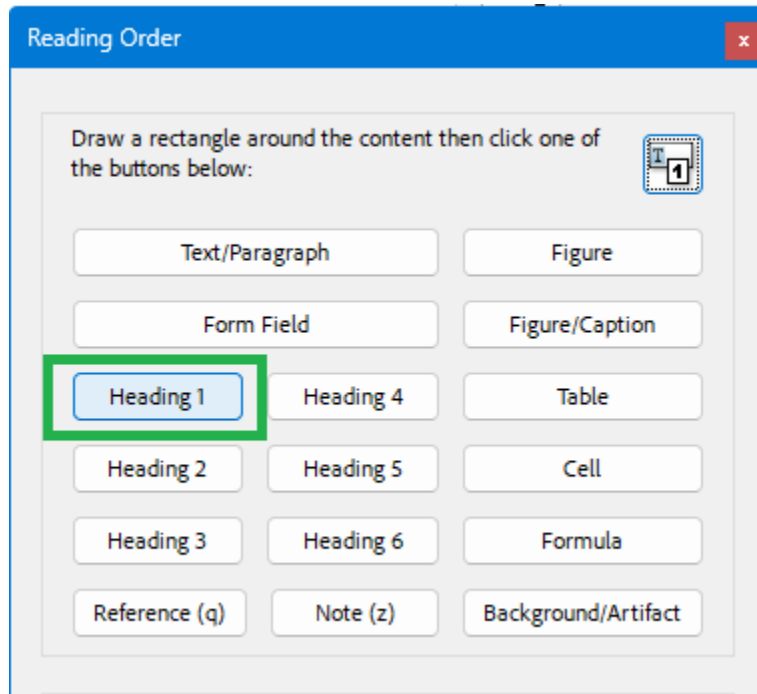
- Position the mouse cursor above and to the left of the box containing the page title:



- Click and drag so that the mouse cursor creates an additional box around the page title. Then let go of the mouse button. The title text should now be selected:



- Select the “Heading 1” button in the **Reading Order** dialog box:



- Go back to the **Reading Order** by clicking **Show Order Panel** in the **Reading Order** dialog (see step 6 above).
9. For each page in the document, drag and drop the numbered elements in the **Order** sidebar up and down until their numbered order matches the visual order of the elements (top to bottom and left to right). For example, the uppermost element in the page should be numbered "[1]", the next element to the right of (or below) element "[1]" should be numbered "[2]", and so on. In the following example, the numbering of the elements matches their visual order from top to bottom:



RUTGERS-NEW BRUNSWICK
School of Arts and Sciences

2

Joomla! Front End Editing

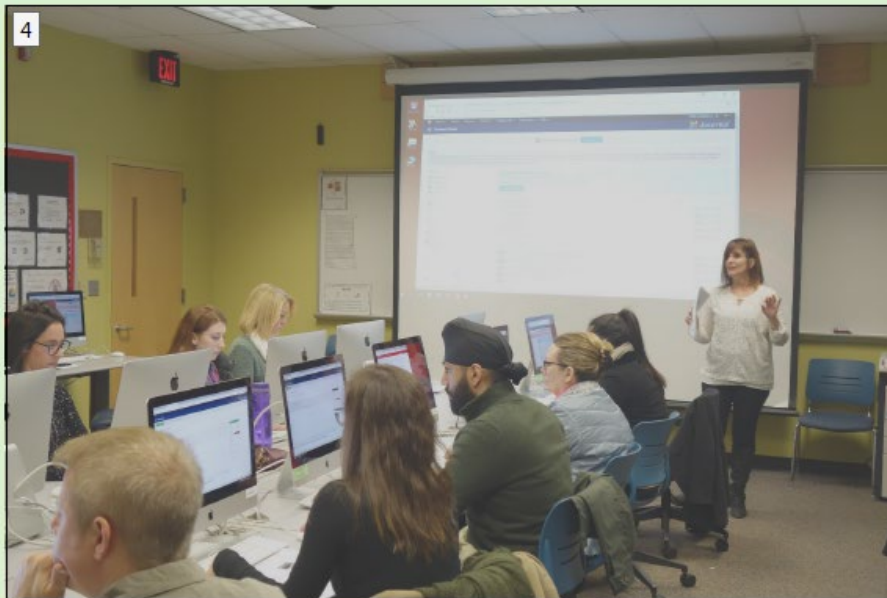
3

Date: Wednesday October 15, 2025

Time: 2:00 PM - 4:00 PM

Location: Zoom

4

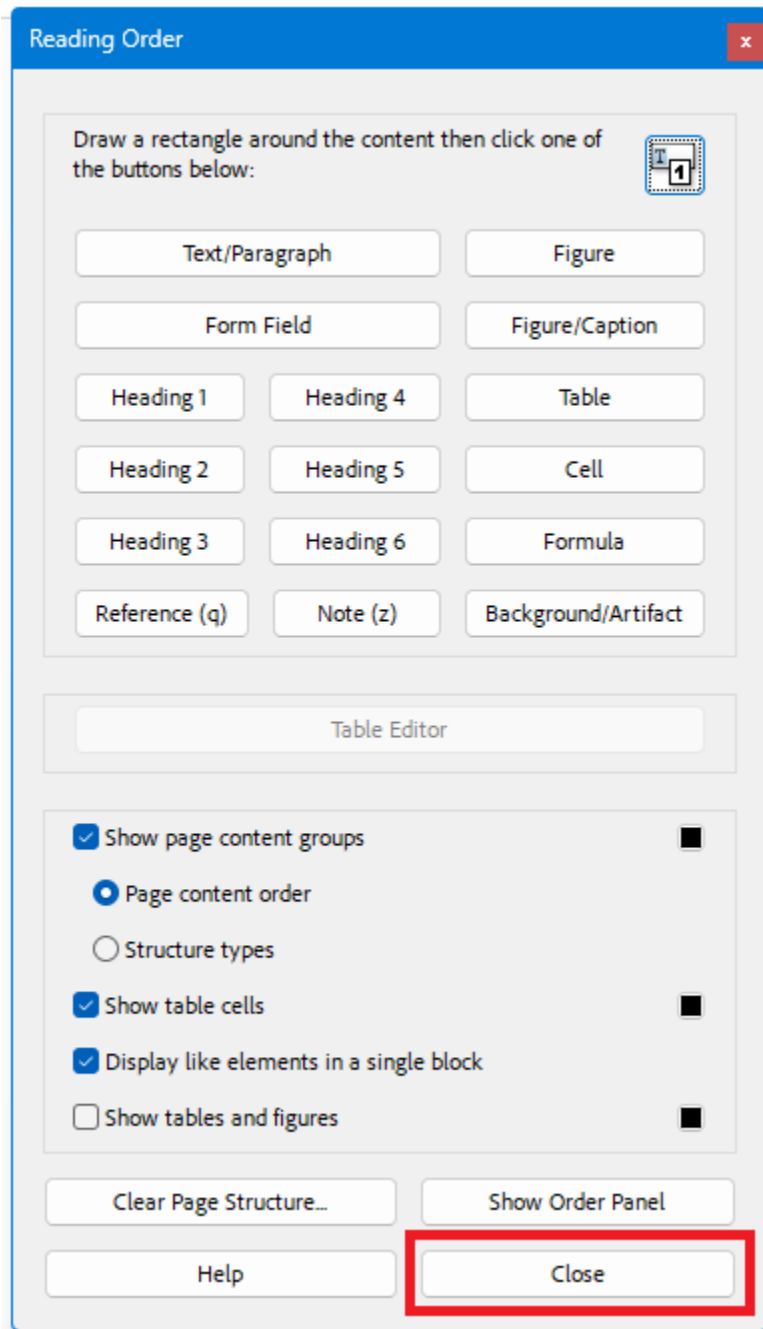


5

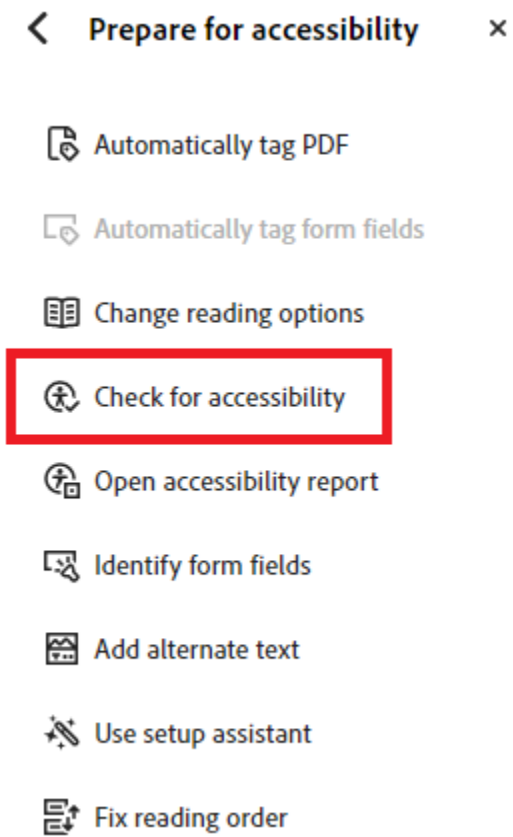
asily edit your Joomla site from the front end. You can edit 90% of your site content without having to login to the administrator panel!

[Register here!](#)

10. Close the **Reading Order** dialog:



11. Under **Prepare for accessibility**, select **Check for accessibility**

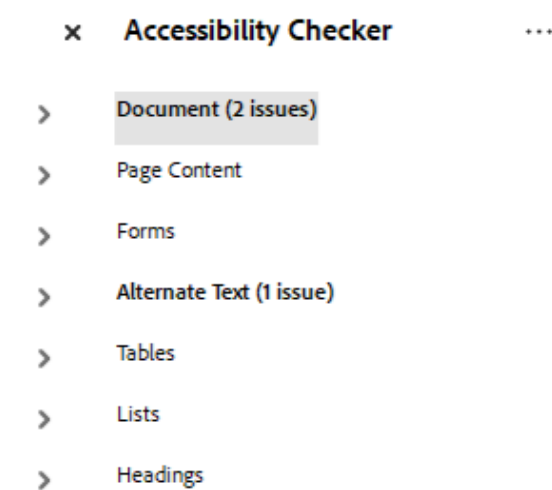


12. In the **Accessibility Checker Options** dialog, click **Start Checking**:

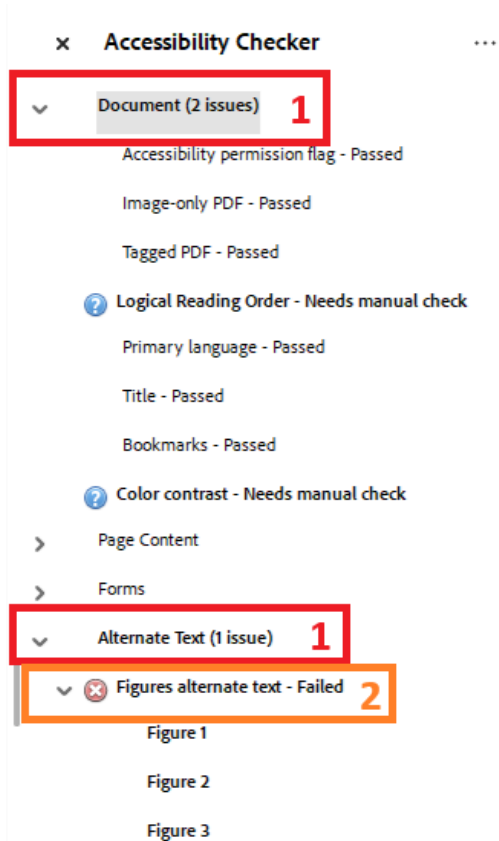
The screenshot shows the 'Accessibility Checker Options' dialog box. It has a blue title bar with a close button. The dialog is divided into several sections:

- Report Options:** Contains a checked checkbox 'Create accessibility report', a text field 'Folder: C:\Users\konczal\OneDrive - Rutgers University\Documents' with a 'Choose...' button, and an unchecked checkbox 'Attach report to document'.
- Page Range:** Contains a radio button 'All pages in document' (which is selected) and a radio button 'Pages from' followed by two input fields containing the number '1' and the word 'to'.
- Checking Options (31 of 32 in all categories):** Contains a dropdown menu 'Category:' set to 'Document'. Below it is a list of eight checked checkboxes:
 - Accessibility permission flag is set
 - Document is not image-only PDF
 - 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 contrastBelow this list are 'Select All' and 'Clear All' buttons.
- Footer:** Contains a checked checkbox 'Show this dialog when the Checker starts', a 'Help' button, a 'Start Checking' button (highlighted with a red rectangle), and a 'Cancel' button.

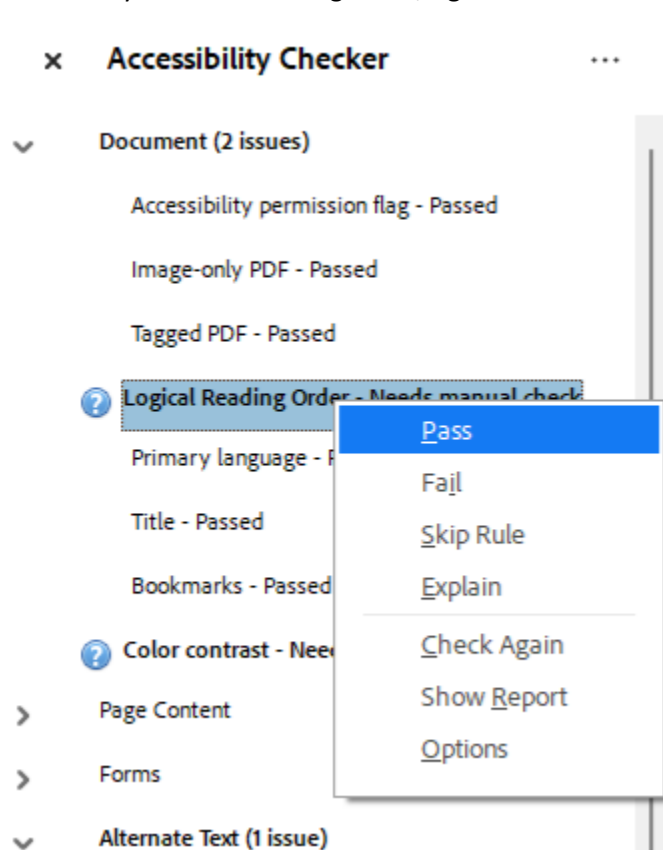
13. The results of the check will be displayed under the **Accessibility Checker** sidebar to the right:



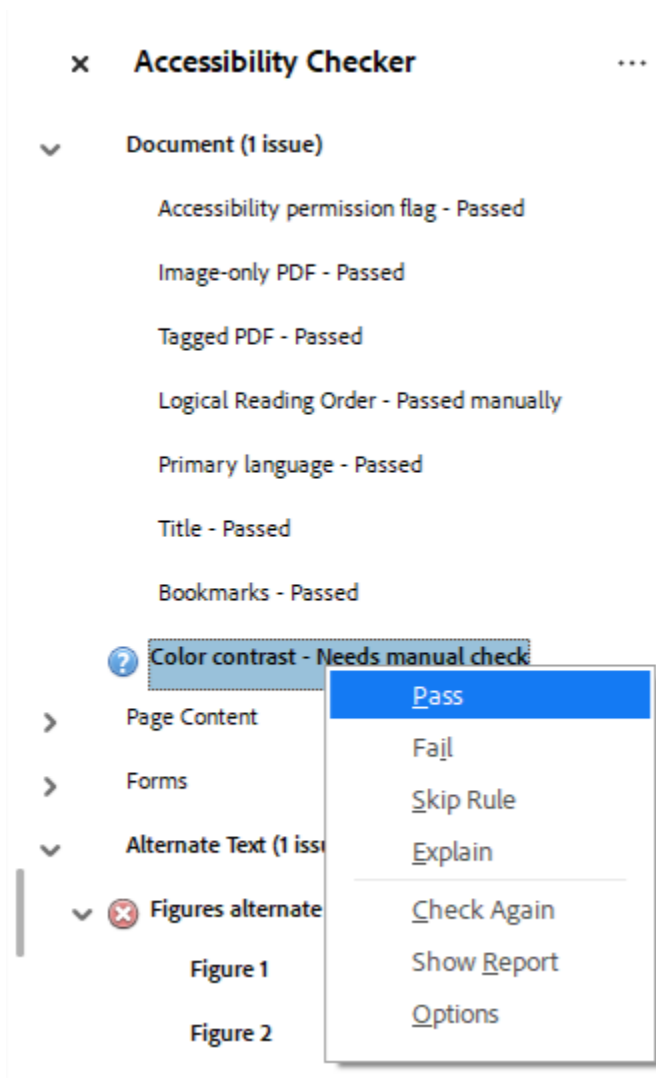
14. Use the arrows to the left to expand each category that displays the number of issues in parentheses (see #1 below). If the expanded categories have issues with sub-items, click their arrows to expand them as well (see #2 below).



15. **Logical Reading Order - Needs manual check** will always appear as an issue under **Document**. If you have already fixed the reading order, right-click on this issue and select **Pass**:



16. **Color contrast - Needs manual check** will always appear as an issue under **Document**. If you have already fixed color contrast issues in the original Word or PowerPoint file, or if there are no apparent color contrast issues, right-click on this issue and select **Pass**:

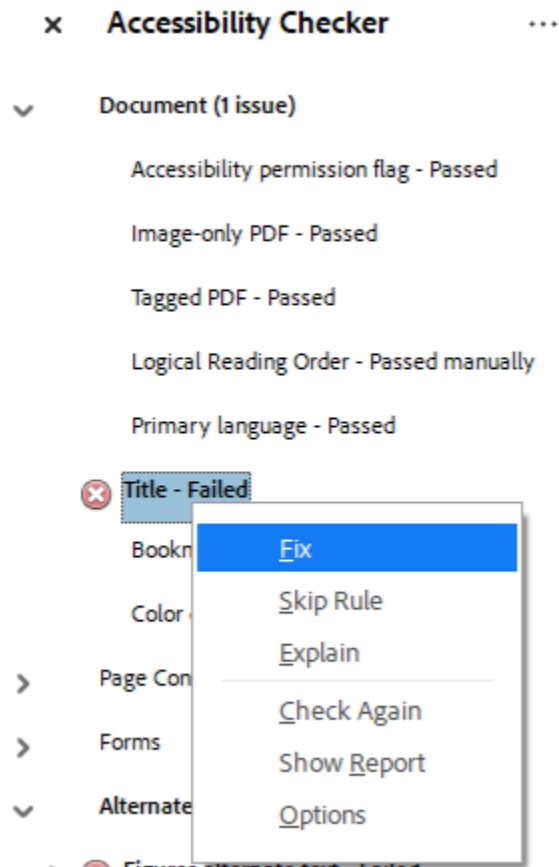


If you are unsure if there is enough color contrast between the font colors and background colors, you can refer to the [WebAIM Contrast Checker](https://webaim.org/resources/contrastchecker/) at: <https://webaim.org/resources/contrastchecker/>

We also recommend using only the colors listed at the **Rutgers Color Contrast Look Up** page at <https://it.rutgers.edu/digital-accessibility/accessible-web-content/rutgers-branding-color-compatibility-tool/>. This page includes a color contrast widget that helps you determine which combinations of foreground color and background color pass the color contrast requirements in WCAG 2.1 AA.

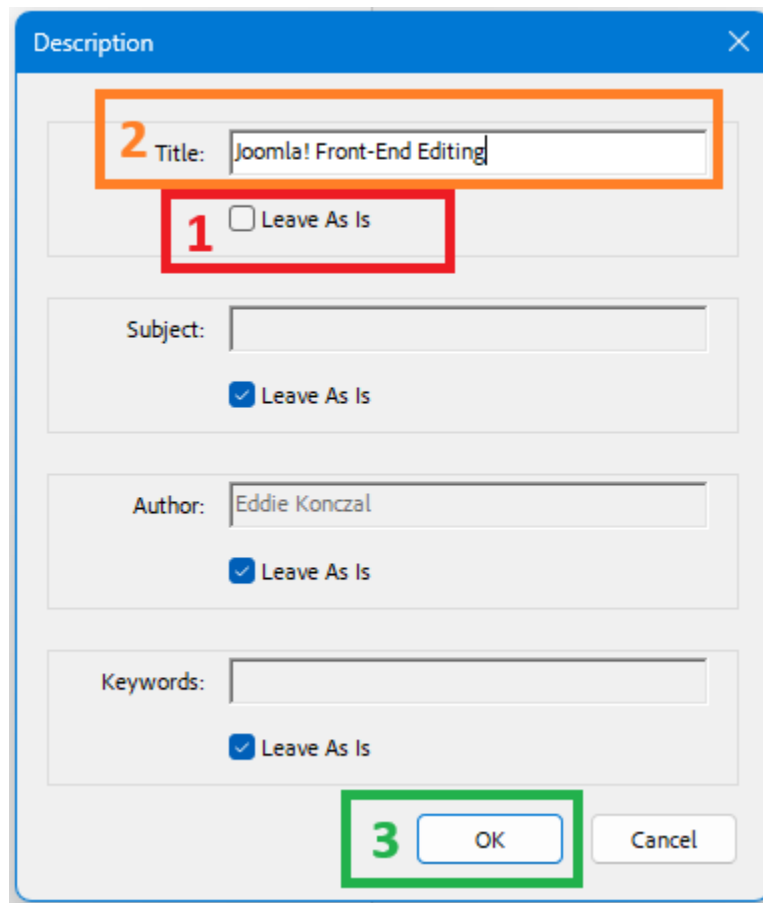
17. To fix the issue **Title – Failed** follow these steps:

- Right-click on **Title – Failed** in the **Accessibility Checker** sidebar, and select **Fix**::



- In the **Description** dialog, clear the checkbox for “Leave As Is” under “Title” (*see #1 below*).
- Enter the document title in the “Title” field (*see #2 below*).

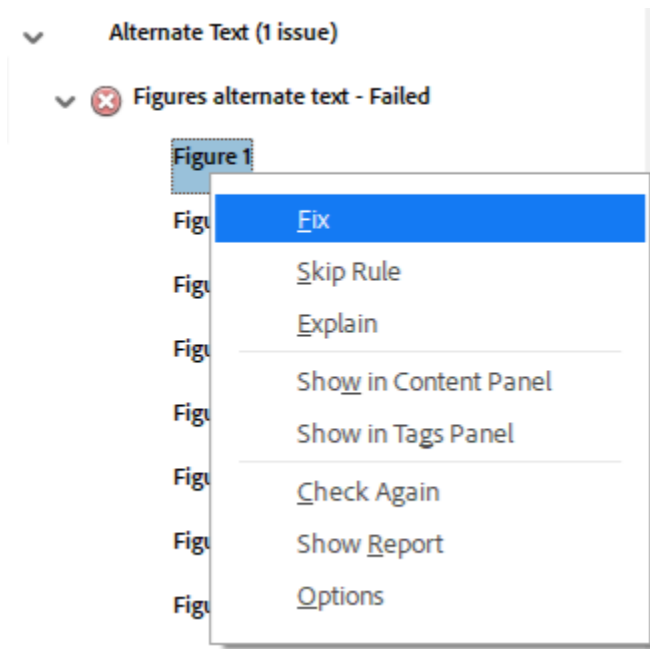
- Click the **OK** button in the **Description** dialog (see #3 below).



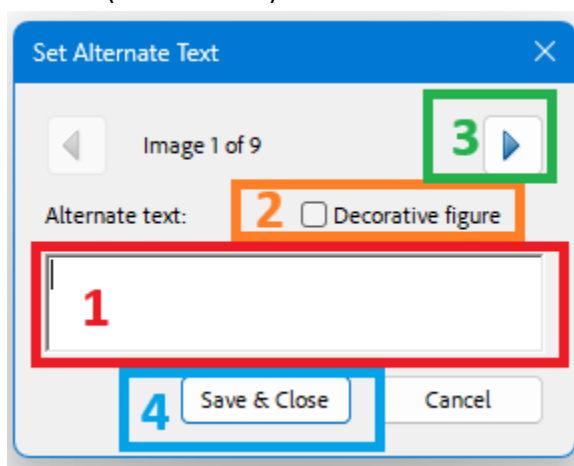
The image shows a 'Description' dialog box with a blue title bar and a close button. It contains four input fields: 'Title' (with the text 'Joomla! Front-End Editing'), 'Subject', 'Author' (with the text 'Eddie Konczal'), and 'Keywords'. Each field has a 'Leave As Is' checkbox below it. The 'Title' field and its checkbox are highlighted with an orange box and a red box respectively, with a large orange '2' and a red '1' next to them. The 'OK' button at the bottom right is highlighted with a green box and a large green '3' next to it.

18. To fix the issue **Figures alternate text - Failed** under **Alternate Text**, follow these steps:

- Right click on the first "Figure" listed under **Figured alternate text - Failed**, and select **Fix**:



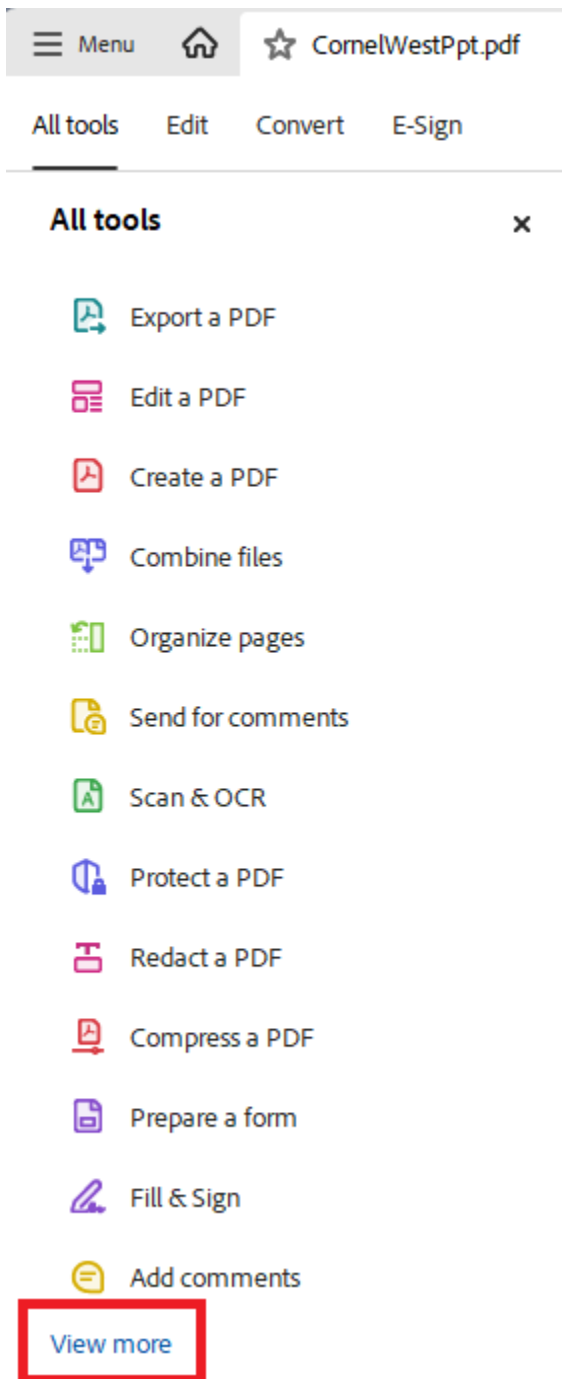
- If the image is relevant to the content of the document, enter a short, accurate description of the image in the text area labelled "Alternate text:" (see #1 below).
- If the image is strictly decorative and does not relate to the content of the document, check the box for "Decorative figure" (see #2 below).
- If there are more images to fix, click the right arrow (see #3 below). For each additional image, either enter alternate text or mark the image as decorative.
- When you have entered alternate text for the last image (or marked it as decorative), click **Save & Close** (see #4 below):



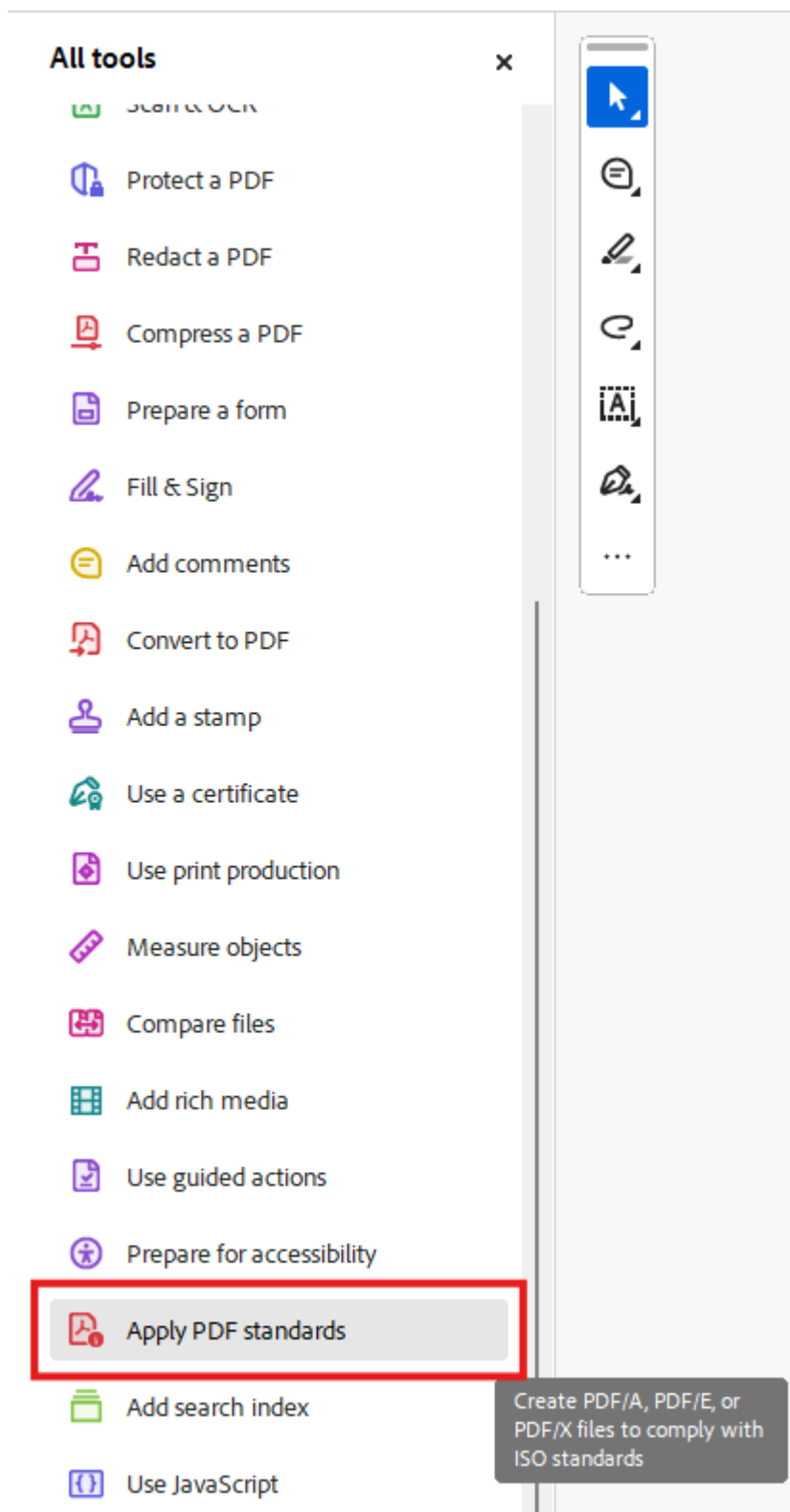
19. Drill down to any other remaining issues, right click them and select **Fix**. Follow the tips in Acrobat to fix the issues.

20. Mark untagged content as artifacts as follows

- a. Under “All tools” to the upper left click **View More**:



- b. Select **Apply PDF Standards**:



c. Select **Preflight**:

< Apply PDF standards ×

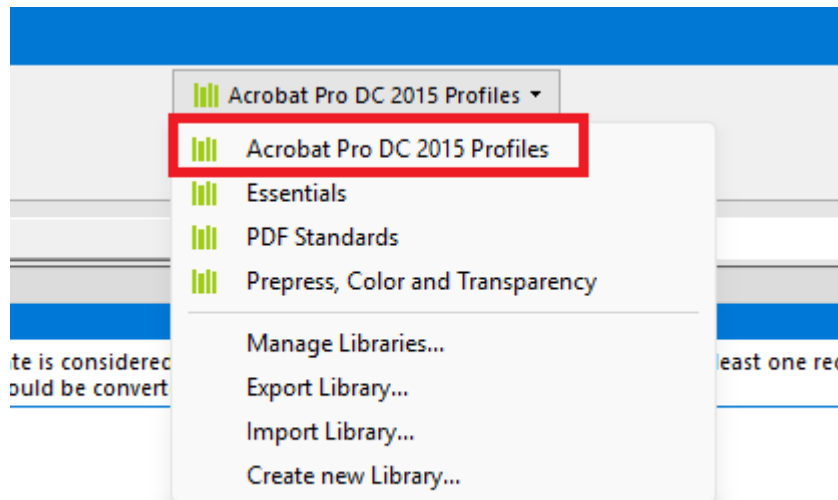
 Save as PDF/A

 Save as PDF/X

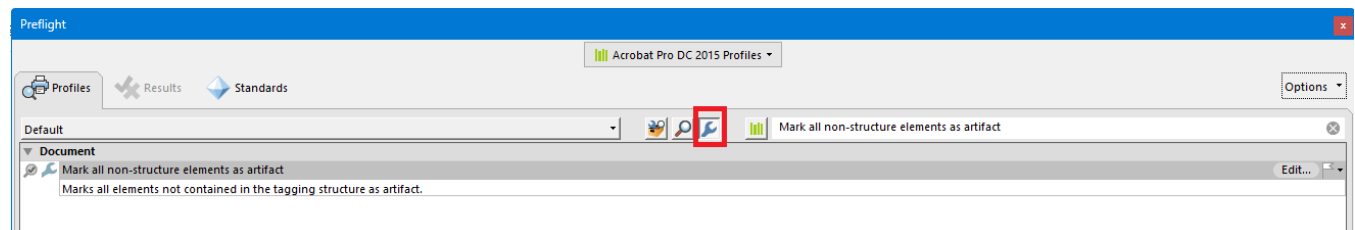
 Save as PDF/E

 Preflight

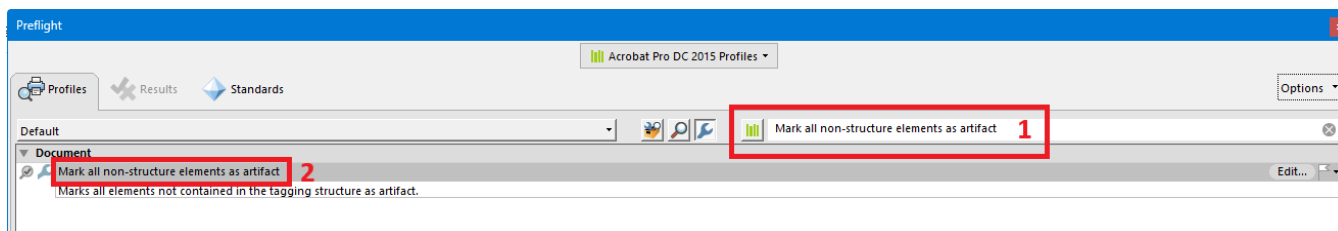
d. In the dropdown menu at the top, select “Acrobat Pro DC 2015 Profiles:”



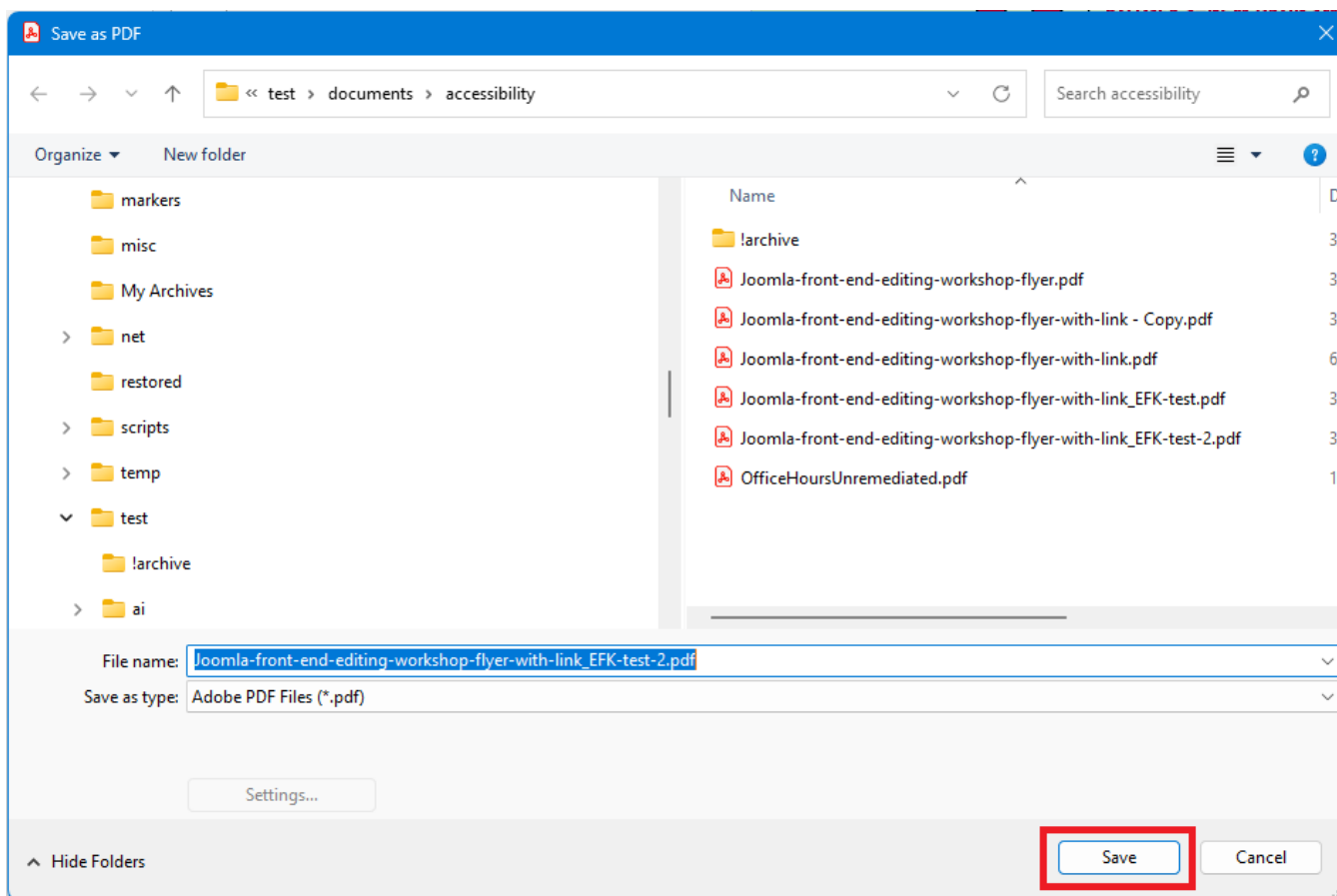
e. Click the "wrench" icon:



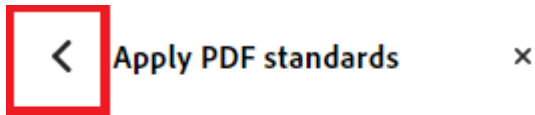
f. Search for **Mark all non-structure elements as artifact** (see #1 below) and double-click on it (see #2 below):



g. Save the new PDF with the same name:



- h. When advised that the file already exists, click **Yes** to replace the existing file.
- i. Close the Preflight window to return to Acrobat.
- j. Click the arrow to the left of "Apply PDF standards" to return to the "All tools" menu:



 Save as PDF/A

 Save as PDF/X

 Save as PDF/E

 Preflight

21. It may be necessary to fix the reading order again. Refer to steps **(5)** through **(10)** above to check the reading order and fix it if necessary.
22. Check the document for accessibility again; see steps **(11)** through **(13)** above.
23. Fix any additional issues that were found; see steps **(14)** through **(19)** above.
24. After all issues have been resolved, save the PDF file.

FIXING ISSUES WITH TABLES

Tables can present additional accessibility issues, particularly if the header cells are not properly tagged. Fortunately, Adobe Acrobat includes a **Table Editor** feature in the **Reading Order** dialog box.

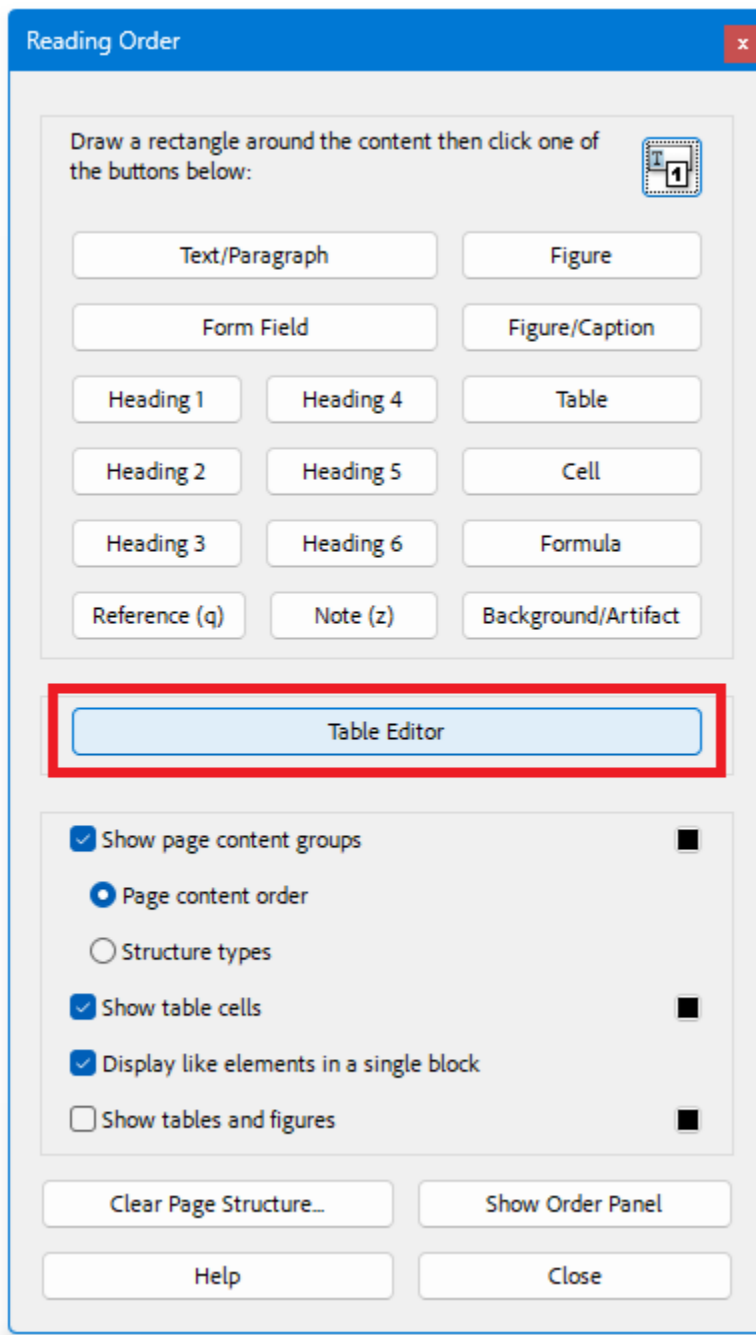
For this portion of the training, we will download an additional document, which contains a table, from:

<https://webtraining.sas.rutgers.edu/accessibility/document-with-table-to-remediate>

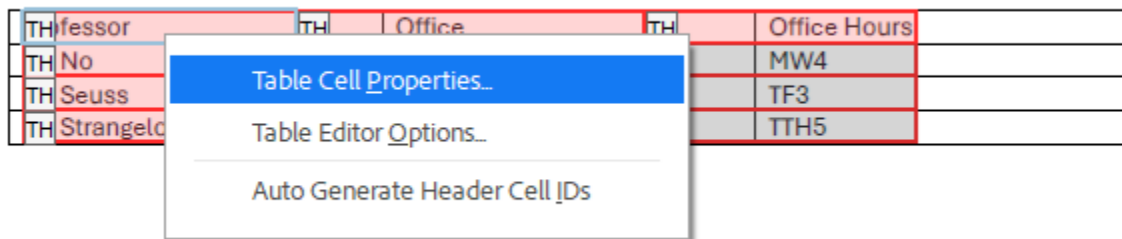
To fix issues with table header cells, do the following:

- Under **Prepare for accessibility**, select **Fix reading order** (see step (5) above)

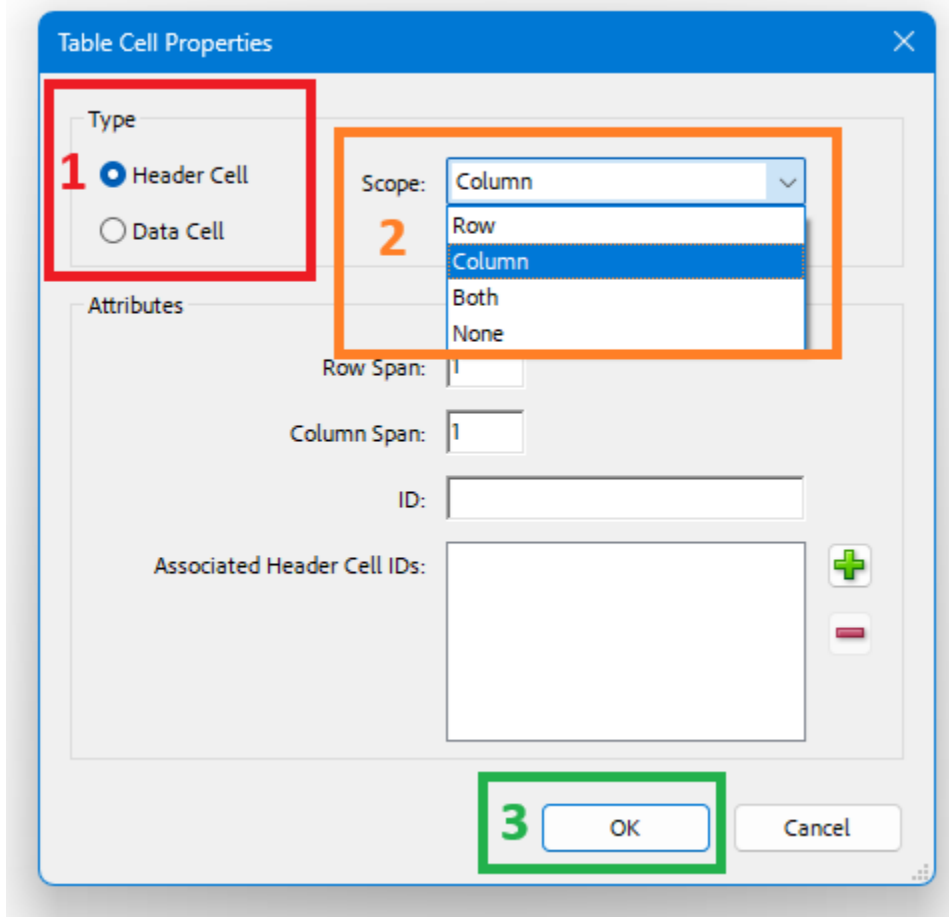
- Click somewhere inside the table, then click the **Table Editor** button in the **Reading Order** dialog:



- Right-click inside each cell that should be marked up as a header cell, and select **Table Cell Properties**:



- Make sure **Type** is set to "Header Cell" (see #1 below)
- Set **Scope** to "Column" for a header cell at the top of a column, or to "Row" for a header cell at the beginning of a row (see #2 below)
- Click **OK** (see #3 below)



- Repeat the above steps for any other cells that should be marked up as table header cells.

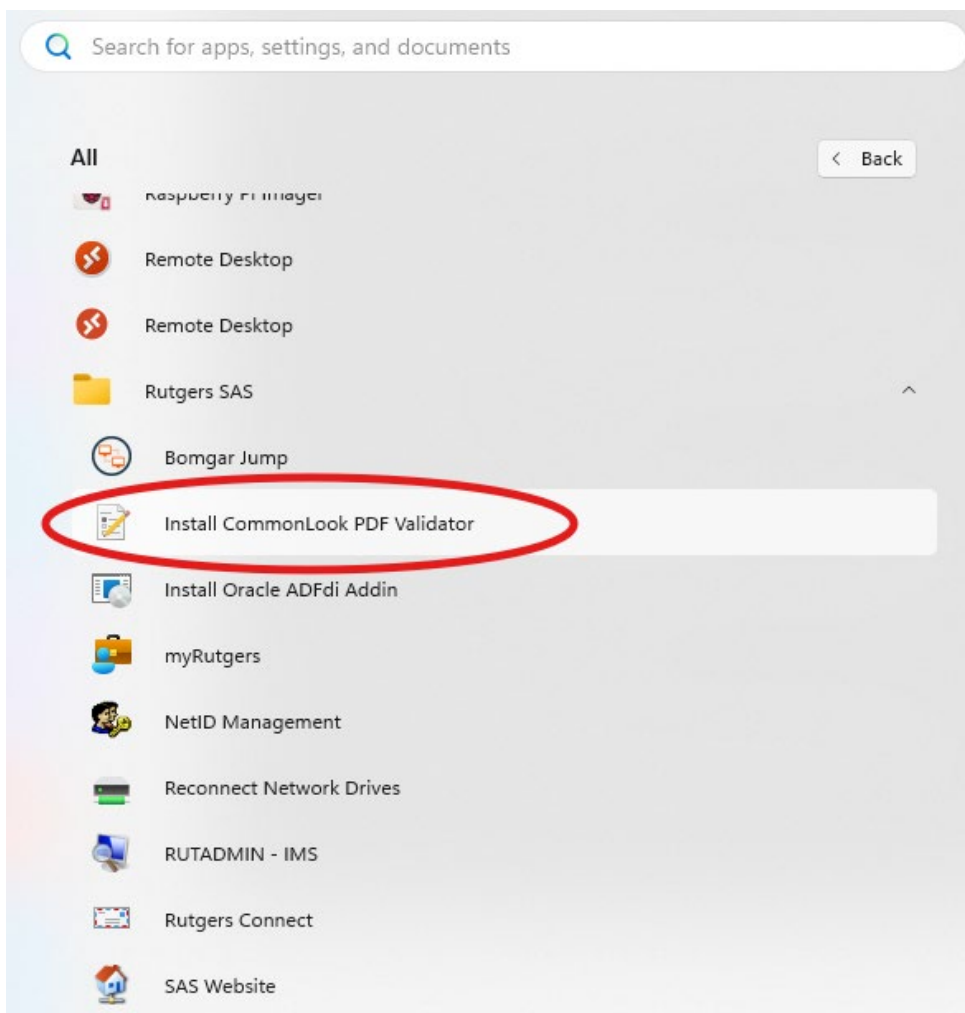
STEP 4) SCAN YOUR DOCUMENT FOR ISSUES USING THIRD-PARTY SOFTWARE

The accessibility scanner in Adobe Acrobat does not always detect all issues. It is necessary to re-scan the document using software that can determine whether a document meets the WCAG 2.1 AA accessibility standards.

For this step, you will need to download and install the free CommonLook PDF Validator, available from: <https://allyant.com/free-pdf-accessibility-checker-validator/>.

If you are using a SAS-managed computer, you can install CommonLook PDF Validator as follows:

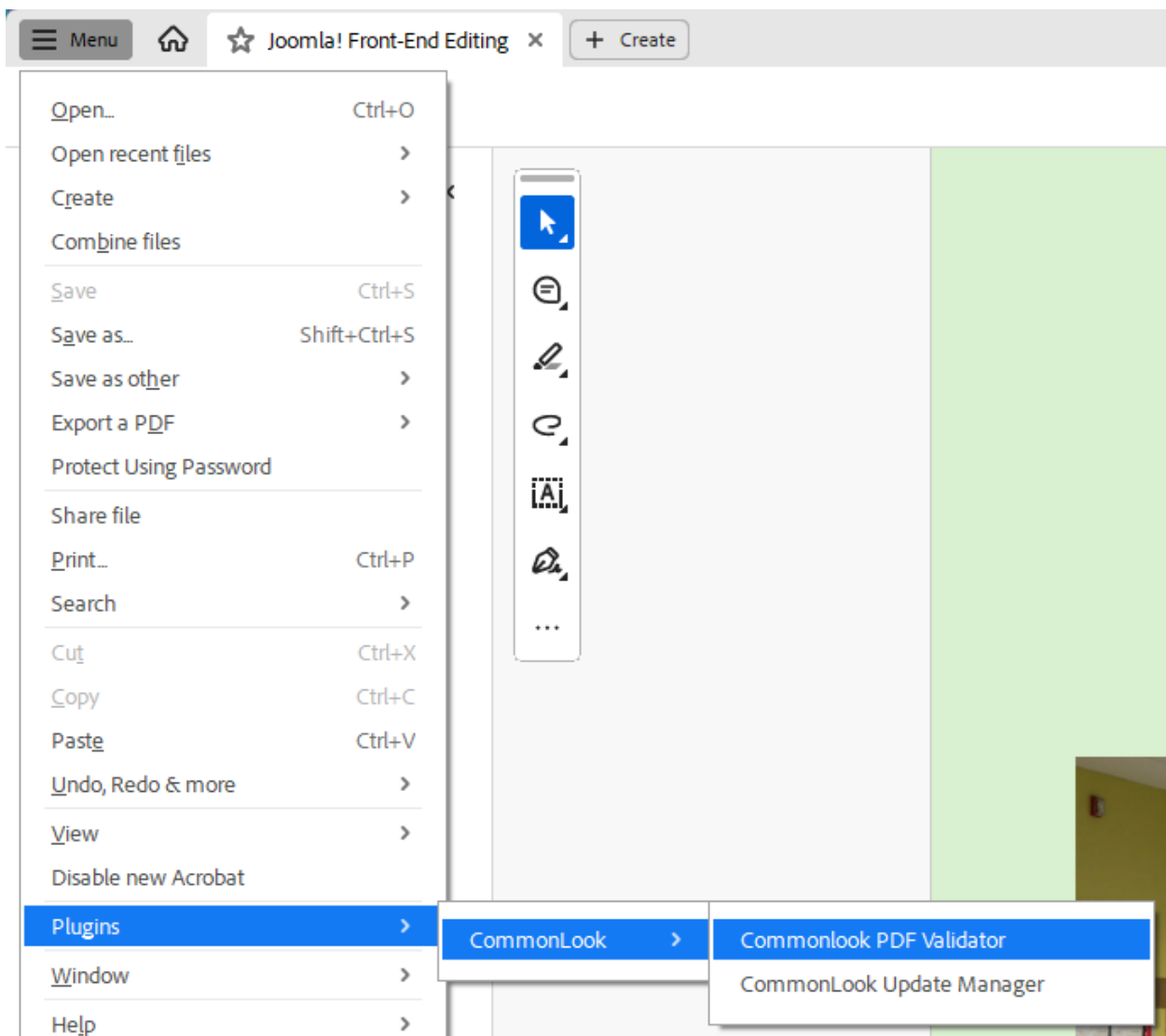
- Click the Windows Start icon
- In the Start Menu, click “All” to the right of “Pinned”
- Scroll down to the “Rutgers SAS” folder and click on it
- Click Install CommonLook PDF Validator:



WARNING: Please do not use CommonLook PDF Validator to check sensitive documents, such as documents containing PHI (Protected Health Information) or NPPI (Non-Public Personal Information). These types of documents should not be posted on your website anyway, but if you do need to remediate these documents for any other purpose, do not check them with CommonLook PDF Validator since this software uploads the information to a third-party website.

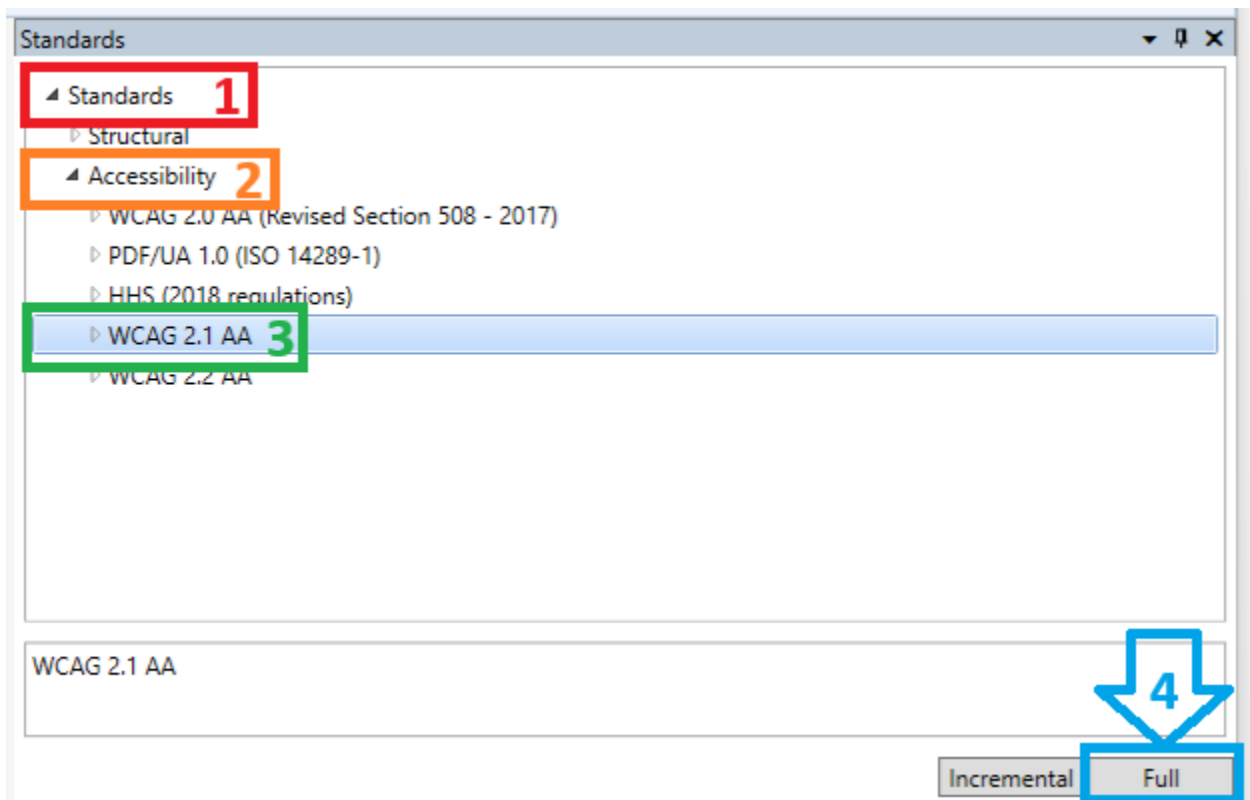
Once CommonLook PDF Validator has been installed, use it to check your document as follows:

1. Select the **Menu** to the upper left in Adobe Acrobat, then select **Plugins > CommonLook > CommonLook PDF Validator**:



2. In the **Standards** pane to the upper right, click the arrow to expand **Standards** (see #1 below).
3. Click the arrow to expand **Accessibility** (see #2 below).
4. Select **WCAG 2.1 AA** (see #3 below).

- Click the **Full** button to the lower right of the **Standards** pane to run a full scan of your document (see #4 below).



- The results will appear in a new pane below the preview of your document. Click the **Results** column to sort the results by type:

Results						
Filter by : All		Report	Status	Column Options	Clear Results	
Result No.	Checkpoint	Test	Standard Name	Results	Description	Comment
4	Guideline 1.1 Provide text	Alternative Representati	WCAG 2.1 A	Failed	Parent tag of Link annotation	
5	Guideline 1.1 Provide text	Alternative Representati	WCAG 2.1 A	Failed	Link Annotation doesn't defir	
13	Guideline 1.3 Create conte	Links	WCAG 2.1 A	Failed	Link tag does not have a Link	
56	Guideline 2.5 Input Modal	Pointer Gestures	WCAG 2.1 A	Not Applicable	No RichMedia or FileAttachme	
30	Guideline 1.3 Create conte	Scope attribute	WCAG 2.1 A	Not Applicable	No TH elements were detecte	
23	Guideline 1.3 Create conte	Correct Structure - Warich	WCAG 2.1 A	Not Applicable	No Warichu elements were d	
32	Guideline 1.3 Create conte	Article Threads	WCAG 2.1 A	Not Applicable	No Article threads were deter	
29	Guideline 1.3 Create conte	Summary attribute	WCAG 2.1 A	Not Applicable	No Table elements were dete	
64	Guideline 3.3 Help users a	Required fields	WCAG 2.1 A	Not Applicable	No Form Fields were detecte	
24	Guideline 1.3 Create conte	Correct Structure - WT an	WCAG 2.1 A	Not Applicable	No WP or WT elements were	
28	Guideline 1.3 Create conte	Header Cells	WCAG 2.1 A	Not Applicable	No tables were detected in th	
27	Guideline 1.3 Create conte	ListNumbering	WCAG 2.1 A	Not Applicable	No List elements were detect	
49	Guideline 2.3 Do not desig	Three Flashes or Below Th	WCAG 2.1 A	Not Applicable	No elements that could cause	

7. If there are no “Failed” entries in the **Results** column, your PDF file is compliant with WCAG 2.1 AA and can be uploaded to the website.
8. If there are one or more “Failed” entries in the **Results** column, your PDF file is not compliant with WCAG 2.1 AA and needs additional remediation before it can be uploaded to your website.

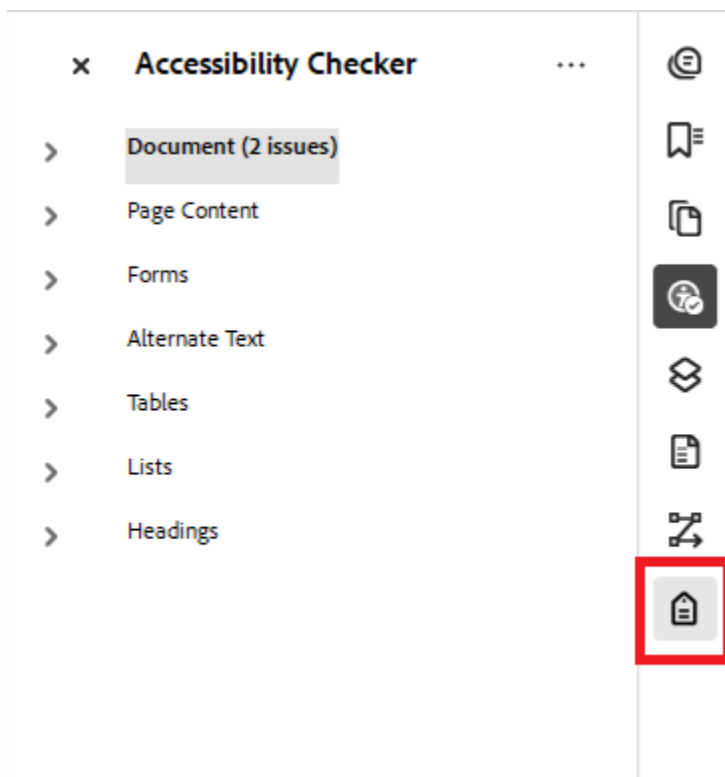
FIXING MISSING ALTERNATE TEXT FOR LINKS

Two of the most common issues detected by CommonLook PDF Validator (but not Adobe Acrobat) are the following:

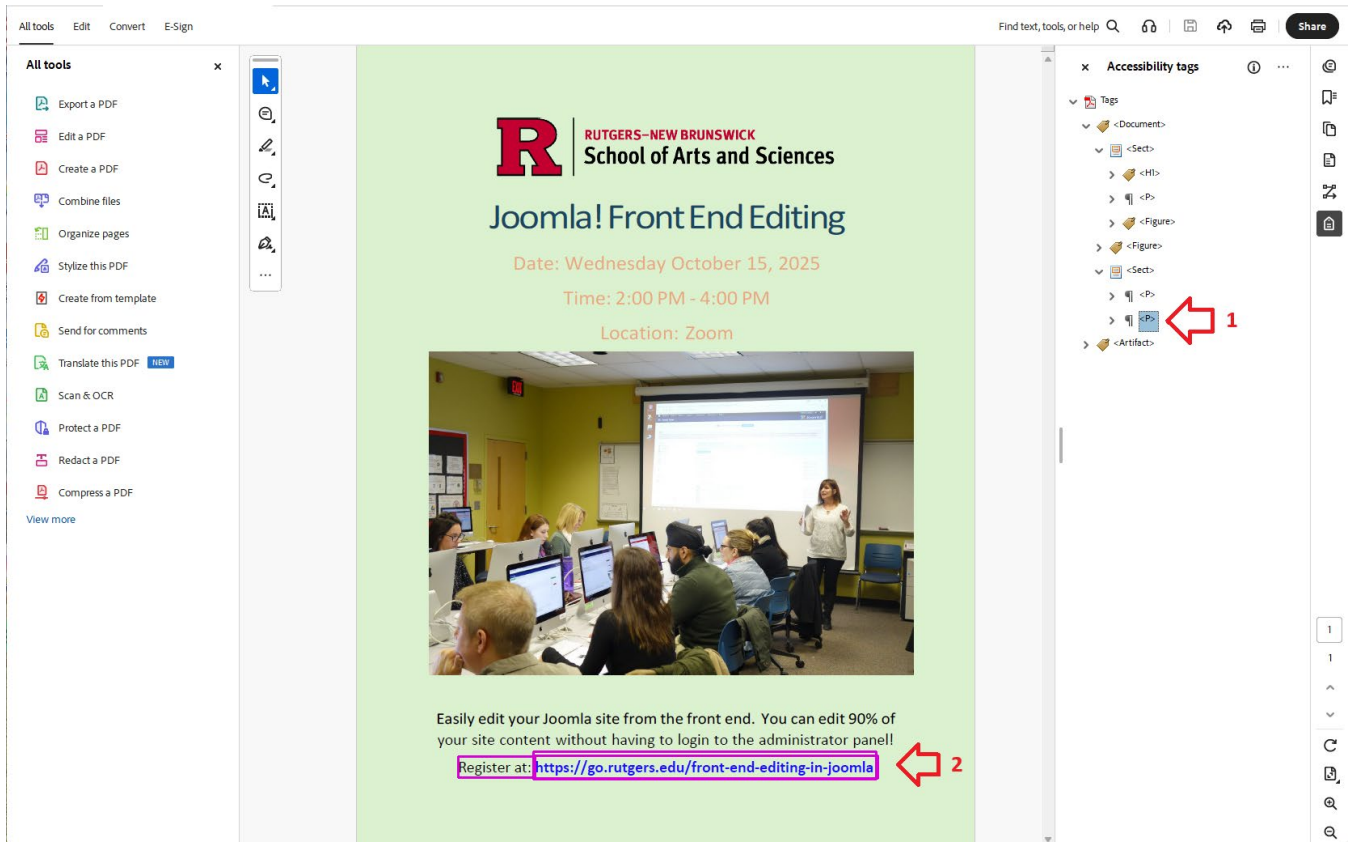
- Parent tag of Link annotation doesn’t define the Alt attribute
- Link Annotation doesn’t define the Contents attribute

The above failures both occur when a link does not have the “Alternate Description for Links” value set. This can be fixed in Acrobat as follows:

1. Close CommonLook PDF Validator; the document should remain open in Acrobat
2. Click the “Accessibility Tags” icon in Acrobat’s right-side menu:



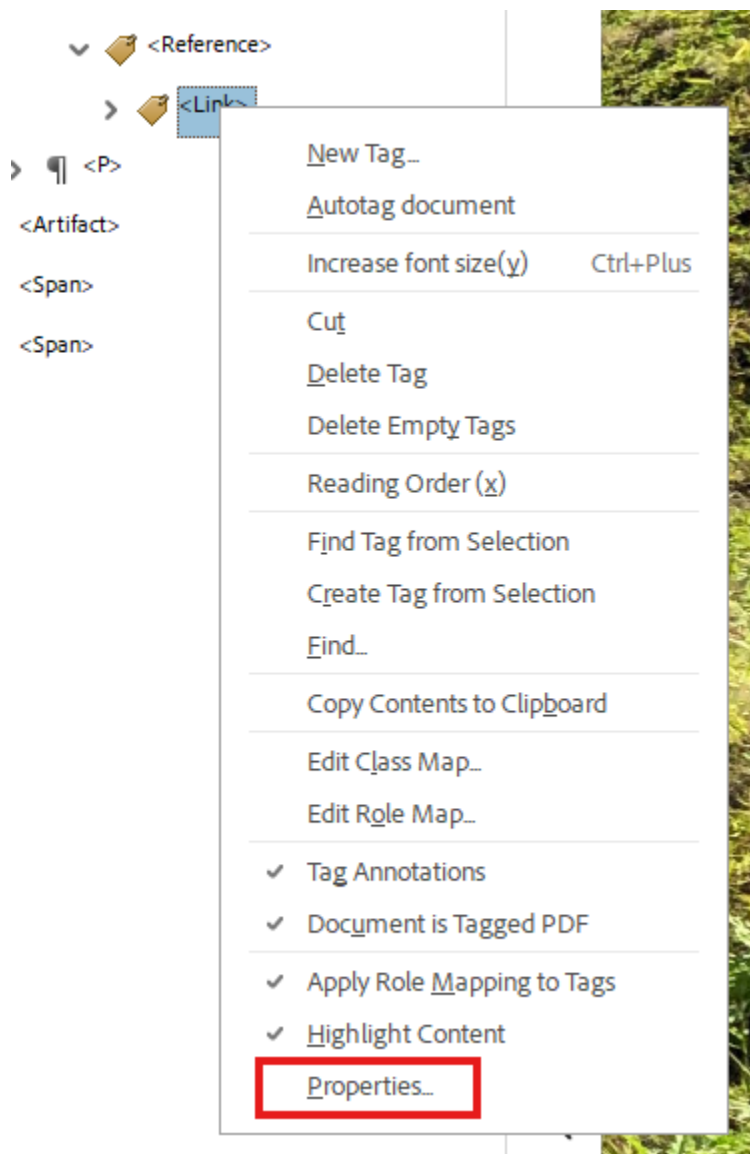
3. Single left-click on the tags shown under “Accessibility tags” (see #1 below) until the tag that contains the link is highlighted in the main window (see #2 below):



4. Expand the tag containing the link by clicking the arrow pointing to the tag. Keep doing this until you see a **<Link>** element in the **Accessibility tags** list:



5. Right-click the <Link> tag and select "Properties" from the popup window:



6. In the “Object Properties” dialog, enter a description of the link for “Alternate Description for Links” (see #1 below).
7. Click **Close** to close the “Object Properties” dialog (see #2 below)

Object Properties

Content Tag Color

Type: Link

Title:

Actual Text:

Alternate Text for Images:

1 Alternate Description for Links: Register for Joomla! Front End Editing workshop

ID:

Language:

Edit Tag... Edit Attribute Objects... Edit Attribute Classes...

2 Close

8. Save your PDF file in Acrobat.
9. The next time you run CommonLook PDF Validator on the PDF file, the link should not generate any failures.

STEP 5) UPLOAD YOUR DOCUMENT TO THE WEBSITE

Upload the PDF file to the same location on the website where the original PDF was located, so that the new PDF replaces the old one. You can follow the documentation on our website:

- [Uploading a file using JCE File Browser](#)

ADDITIONAL INFORMATION

ADDITIONAL DOCUMENTATION

Visit our Title II Resources web page: <https://sas-it.rutgers.edu/how-to-guides/title-ii-resources>

FUTURE WORKSHOPS

Please visit: <https://sas-it.rutgers.edu/it-services/web-development-and-support/workshops-and-training>