PDF Remediation Guide

Created 4/21/25

Last Updated 2/5/26

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Introduction

From the [Americans with Disabilities Act Title II Regulations](#):
- "No qualified individual with a disability shall, because a public entity's facilities are inaccessible to or unusable by individuals with disabilities, be excluded from participation in, or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity."
- "A public entity shall ensure that the following [is] readily accessible to and usable by individuals with disabilities: web content that a public entity provides or makes available, directly or through contractual, licensing, or other arrangements"
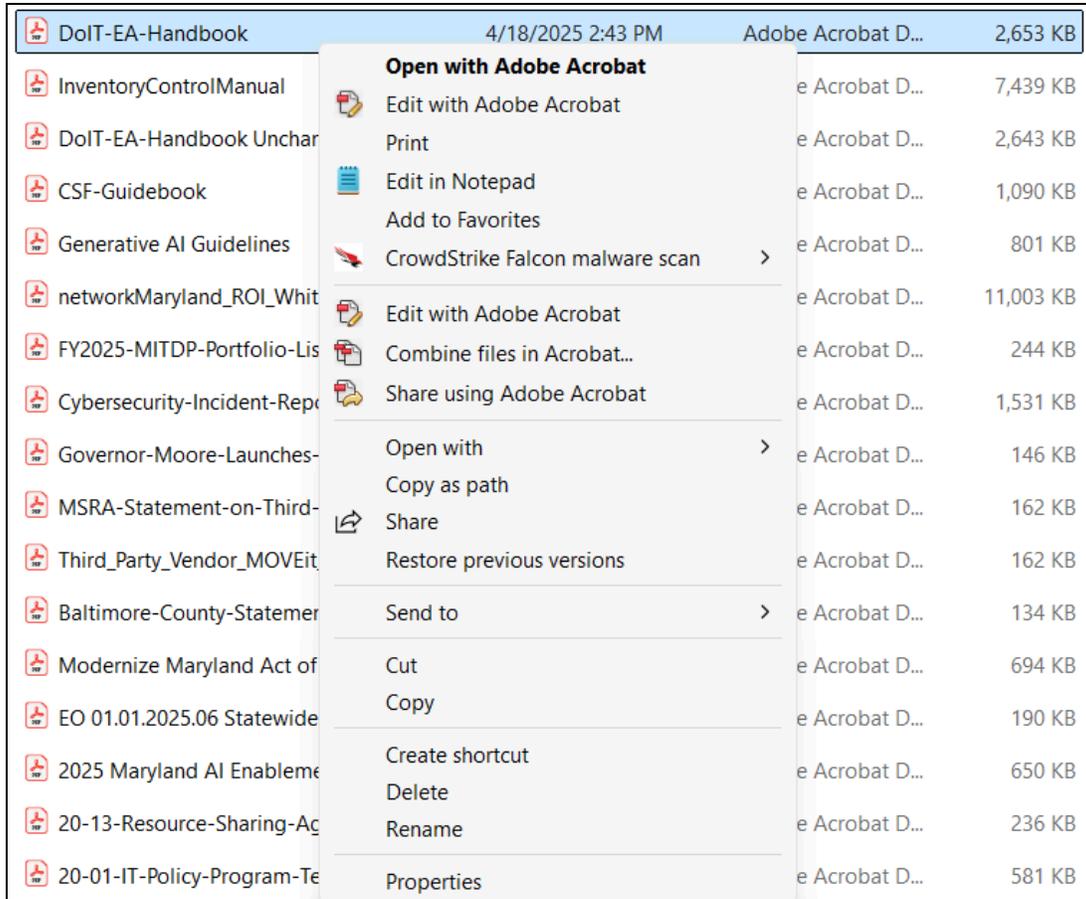
This document was created in order to be a comprehensive guide on how to remediate inaccessible documents using Adobe Acrobat Pro DC (version 2025.001.20458 at the time of this writing). As the program is updated, this guide shall also be changed accordingly to help meet the needs of the State..

Setup

This section describes both how to initially open up a document in Adobe Acrobat Pro DC, along with some tips that will save some time throughout the document remediation process. It is highly recommended that these tips be followed as they will be utilized throughout the rest of this guide.

Opening a Document in Adobe Acrobat Pro DC

1. Download the latest version of Adobe Acrobat Pro DC (needs prior approval from your agency's IT leadership, as this is a paid service)
   a. [Download Adobe Acrobat Pro](#)
2. Open a PDF document using Adobe Acrobat Pro DC. If documents automatically open in a different program (such as Chrome), you can open PDFs in Acrobat using one of the following methods
   a. Go to File Explorer and right-click on the PDF you wish to open. Then click on "**Open with Adobe Acrobat**"

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Open with Adobe Acrobat
Edit with Adobe Acrobat
Print
Edit in Notepad
Add to Favorites
CrowdStrike Falcon malware scan   >
Edit with Adobe Acrobat
Combine files in Acrobat...
Share using Adobe Acrobat
Open with   >
Copy as path
Share
Restore previous versions
Send to   >
Cut
Copy
Create shortcut
Delete
Rename
Properties

File Explorer view after right clicking on a PDF

     b. Open Acrobat, click on "Your Computer" on the left sidebar, and find the document you wish to open

3. Your screen should now look something similar to this (your PDF will most likely look different than this one)
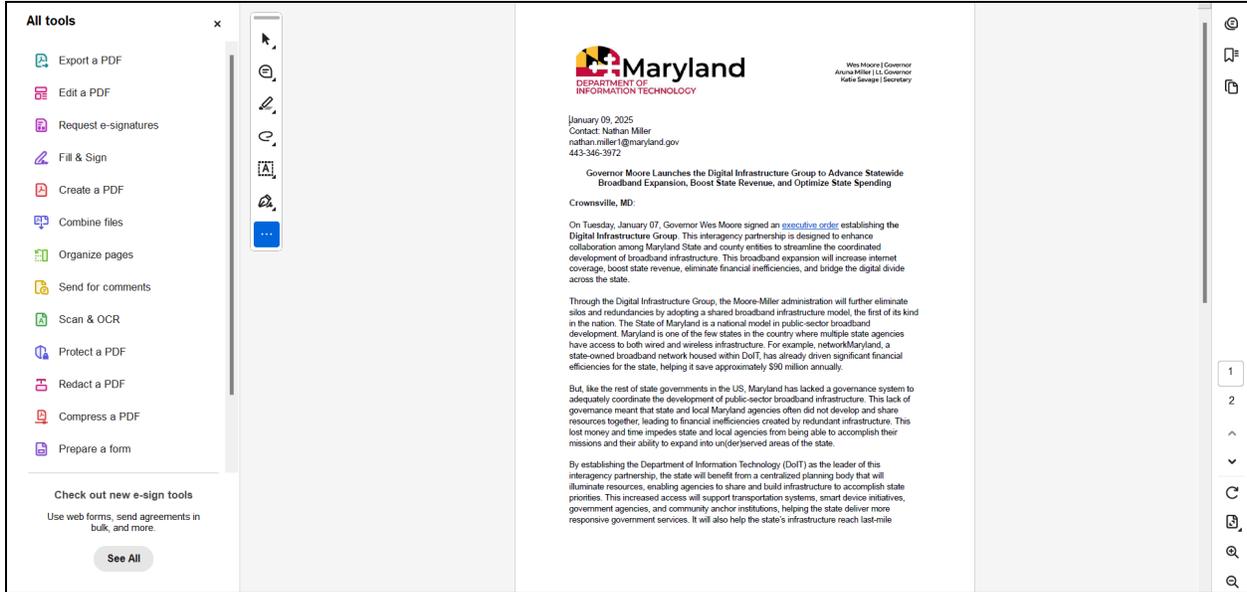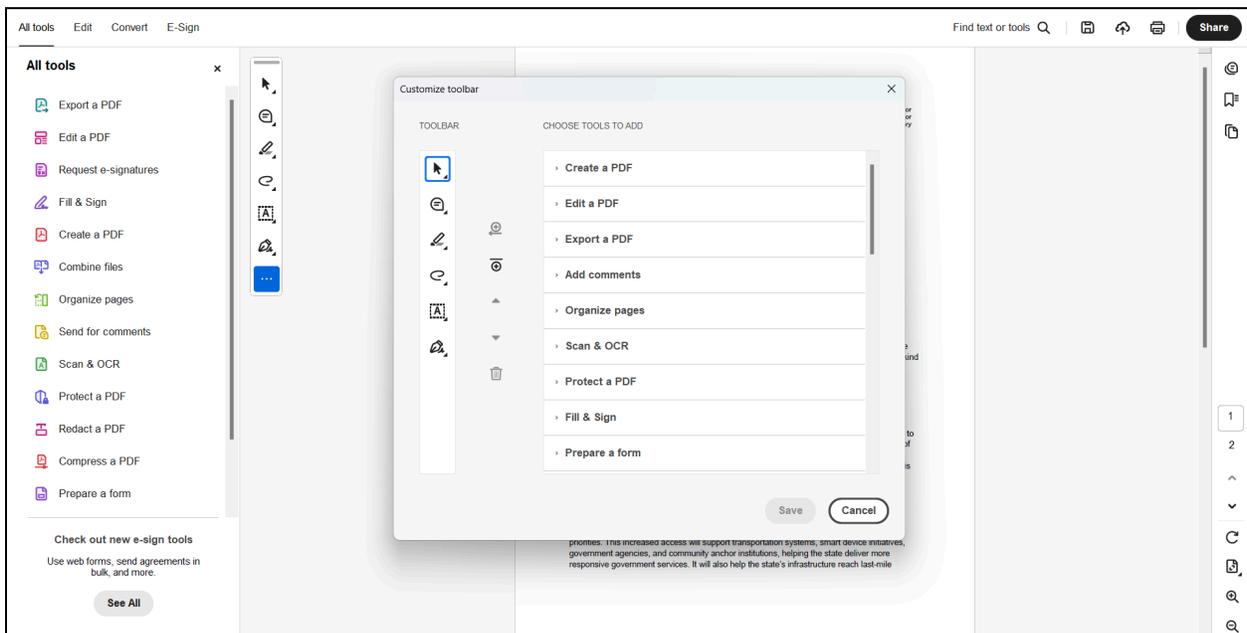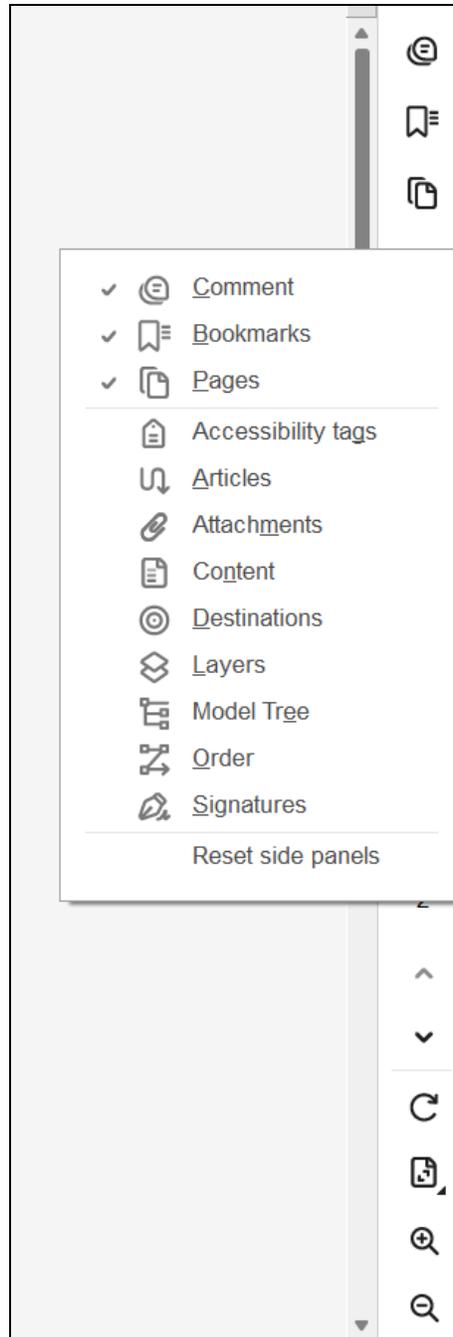
Open PDF

Tool Access

Customize the Left Toolbar

1. Currently, the left toolbar does not have many tools that are needed for remediating a document. In order to change that, hit the 3 dots at the bottom (...). A new button that displays a gear icon and the text "Customize toolbar" should appear. Click on it to open a popup screen

Customize toolbar popup menu

2. Scroll to almost the bottom of the options until you get to "Prepare for accessibility" and click on it to expand the options. From there, you will perform the following steps:
    a. Click on "Autotag Document"
    b. While it is highlighted in blue, click on the icon to the left of the menu, which features a plus button in a circle with a left arrow underneath it. This shall add it to your toolbar
    c. Repeat the above steps for "Automatically Tag Form Fields", "Accessibility Full Check", "Identify Form Fields", "Set Alternative Text", and "Reading Order"
    d. Click on the blue "Save" button
3. Your toolbar should now look similar to this

Customized toolbar

Add Side Panels

1. On the rightmost side of the screen, with the vertical right bar that displays the page number, right-click on any of the blank white space to open up a pop-up menu

Panel popup menu

2. Click on "Accessibility Tags", "Content", and "Order" to add them to the right side of the screen
3. You should now have these extra options

Customized panel selection

Aspects of Document Accessibility

This section describes what procedures must be performed in order to ensure that a document is accessible. While the subsections are presented in a linear format, these steps will not always be followed in this exact order depending on the needs of the PDF, but it is still good to have an overall procedure so that no steps are accidentally left out.

Create Accessibility Report

The accessibility report gives a general overview of what issues currently exist within the document that negatively affect accessibility. It is key to note that even if a document fully passes the check without issue, that does not at all entail that problems do not still exist.

1. Open the document in Adobe Acrobat Pro DC
2. Click on the checkmark button in a circle in the left toolbar (this is the "Accessibility Full Check" button)
3. A pop up will appear
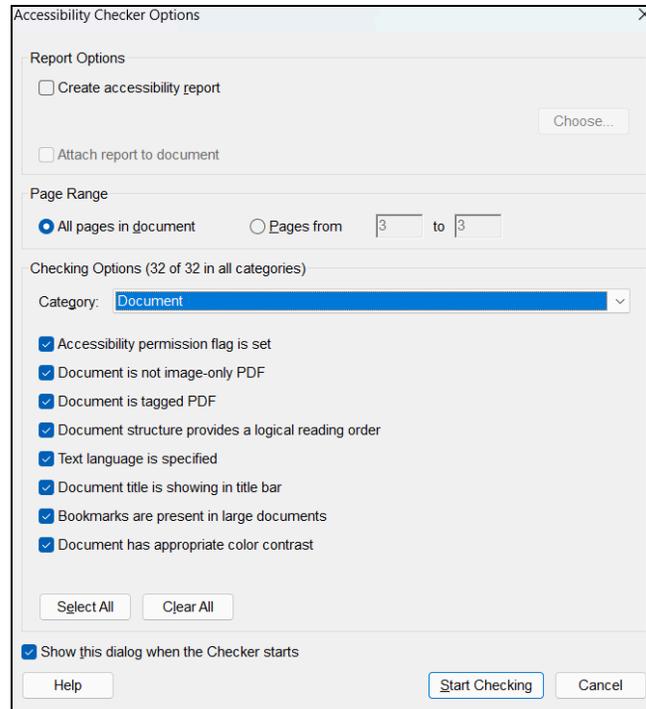
Accessibility report popup

4. (OPTIONAL) "Create accessibility report" will make a file that will be downloaded to your computer. If you don't want this, make sure it is unchecked
5. Ensure that it says "Checking Options" (32 of 32 in all categories). If not, do the following:
    a. Click on the dropdown menu next to "Category"
    b. Go to each of the four options and check to make sure each available option is checked
6. Click "Start Checking"
7. The right sidebar should now be expanded and (after loading) will show a header titled "Accessibility Checker" along with some expandable sections that lists out the number of the types of issues encountered
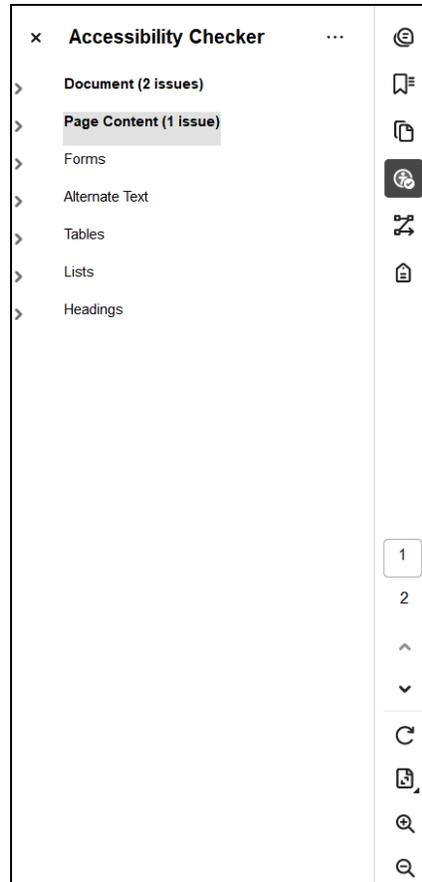
Accessibility Checker test results

8. It is important to note that the number next to the different sections is not the total number of issues associated with that. It is the number of subtypes of issues found related to the overall section

9. **IMPORTANT:** The document section will always have two issues. This is because "Logical Reading Order" and "Color Contrast" need to be manually checked, as the program is not able to check this.

10. These steps will typically give you a general idea of how much work will need to be done on the document. Some users may find it best to fix these specific issues first; however, the author of this guide believes that it is more efficient to follow the next few steps before focusing on the problems mentioned in the report.
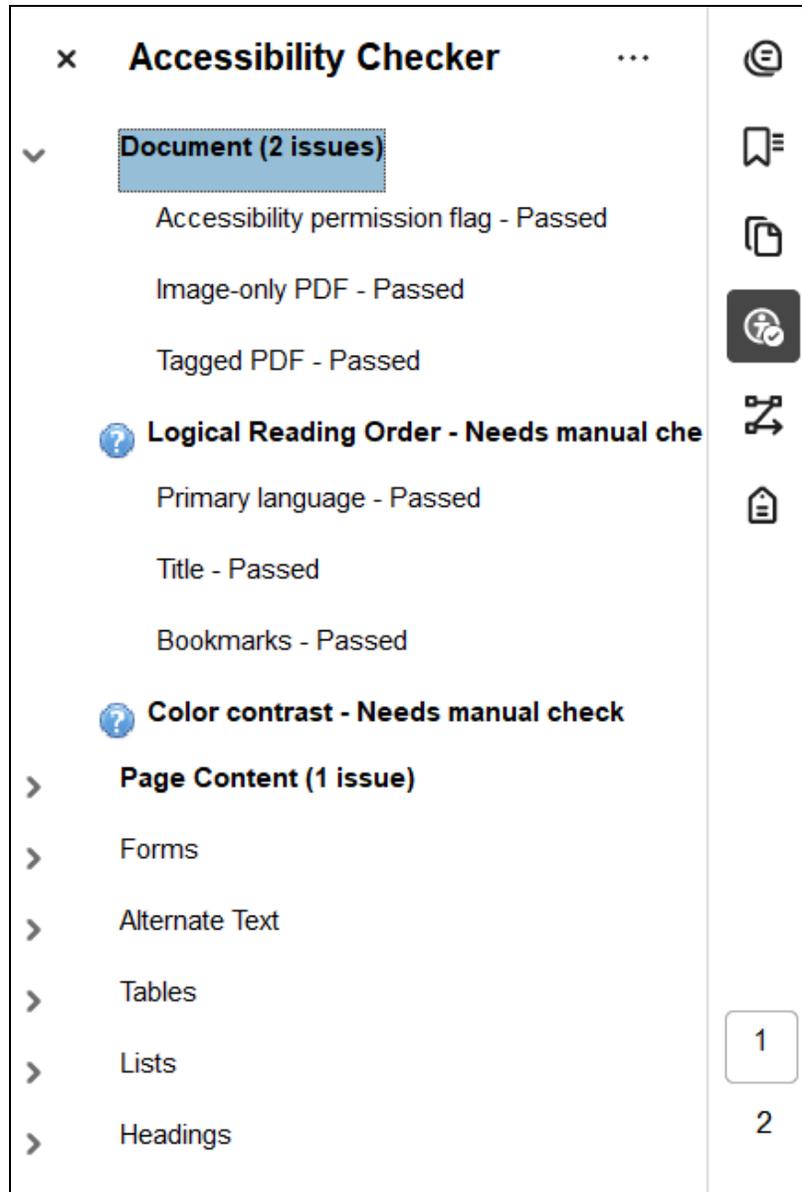
Accessibility Checker test results

Check Document's Metadata

The metadata of a PDF has multiple purposes. Some aspects of it, such as the title or subject, can be used by assistive technologies to give the user a basic understanding of what the document is about, but it can also be used for easier searching in databases.

1. Click on the "Menu" button at the top left of the screen with the three lines next to it for a dropdown menu to appear
2. Click on "Document Properties" near the bottom which will open a pop-up menu
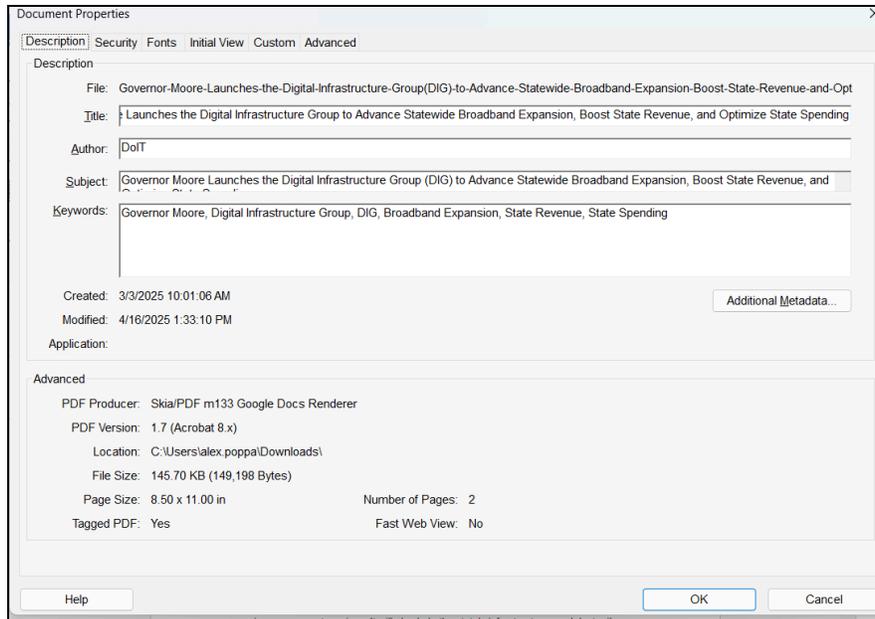
Metadata popup

3. Ensure that the Title, Author, Subject, and Keywords section all have some sort of appropriate information filled in. If not, fill them out based on the following criteria:
    a. **Title:** The title should not be the same as the file name and reflect the main topic or purpose of the document, making it easy for users to understand quickly
    b. **Author:** Include the name of the document's primary author. For collaborative efforts, list all contributors or the team responsible
    c. **Subject:** Provide a brief but informative summary of the document's subject matter. Be specific and use keywords that align with the content
    d. **Keywords:** Choose keywords wisely, considering terms that users might use when searching for the document. Include both general and specific keywords to broaden the document's discoverability. If you don't know which keywords to add, consider the ones from the title or subject. **Ensure that each keyword/phrase has commas between them to separate them**
4. Setting the language
    a. Under the Document Properties, select the "Advanced" tab
    b. Select the Language under the dropdown menu
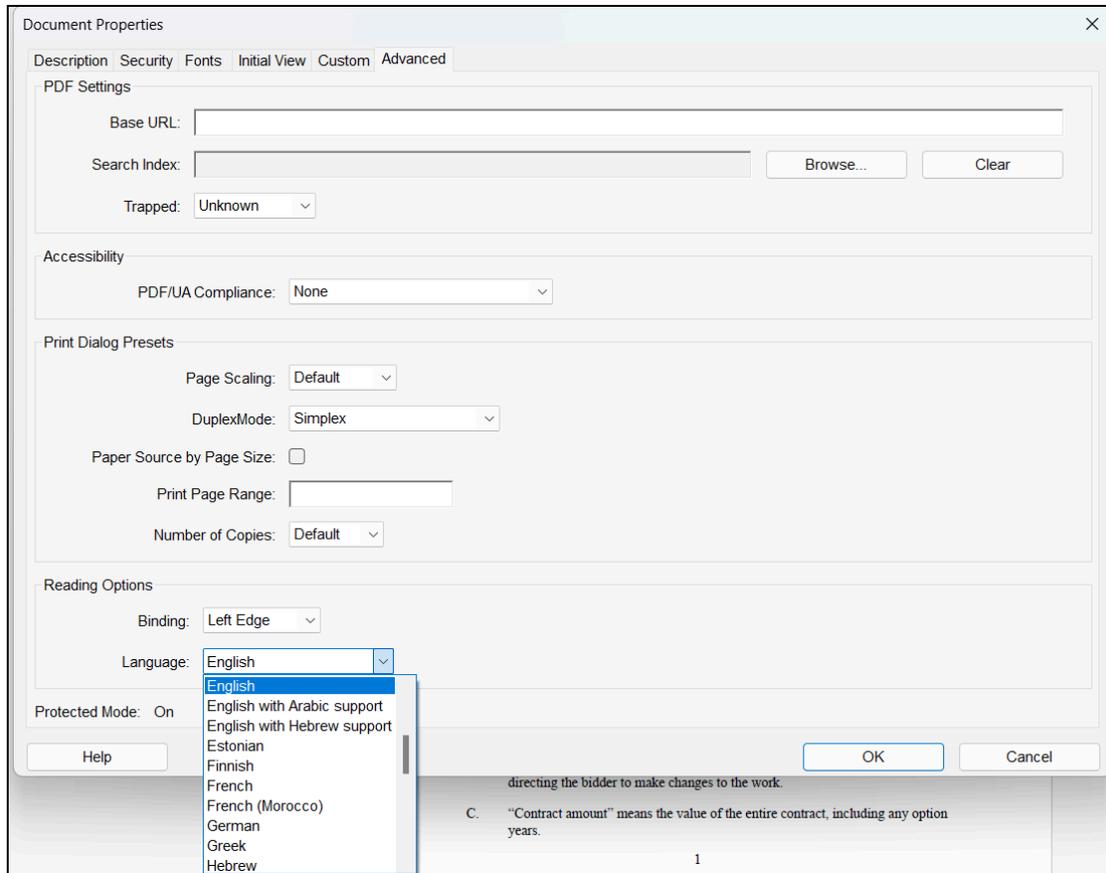
Setting the language of the document

5. Showing the document Title
   a. Under the Document Properties, select the "Initial View" tab
   b. For the Show dropdown, select "Document Title" and click OK
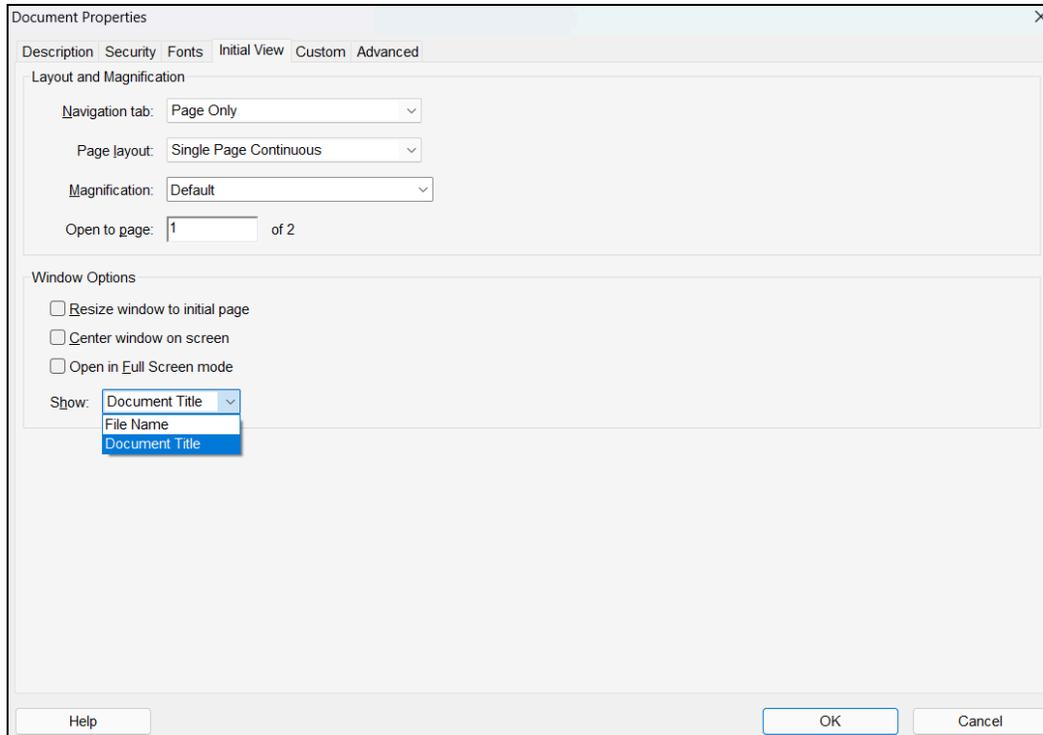
Showing the document title as the initial view
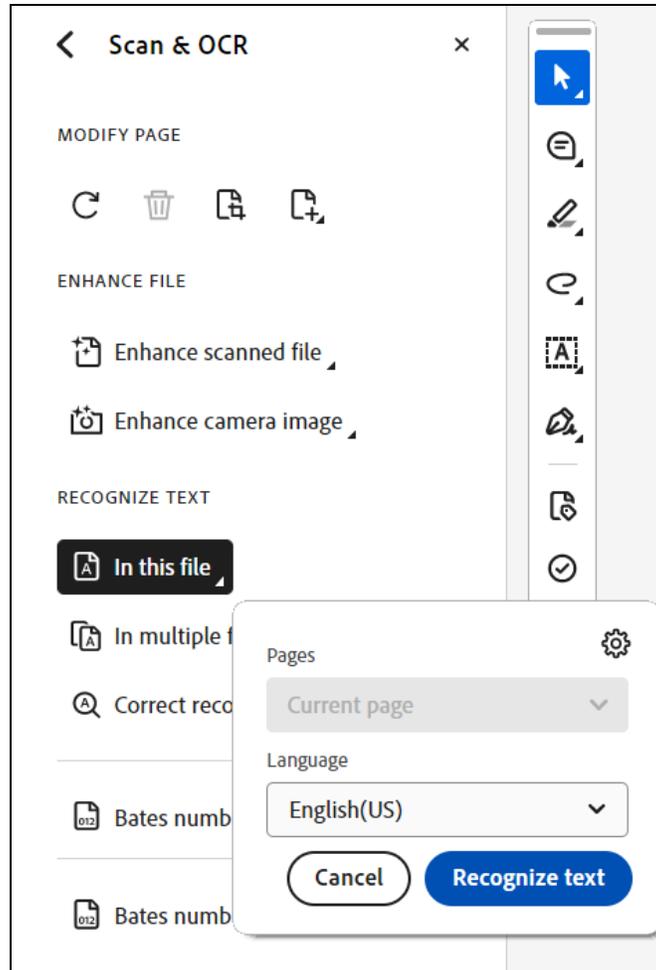
Scanning and OCR

Oftentimes, people will scan a document to their device using a scanner. The issue with this is that scanners can only create an image of text and not the actual text itself. This means the content is not accessible to users who rely on assistive technology. Luckily, Adobe has a feature that scans the document and turns any images of text into actual text that can be tagged and made accessible.

1. From the "All Tools" menu on the left, select "Scan and OCR"
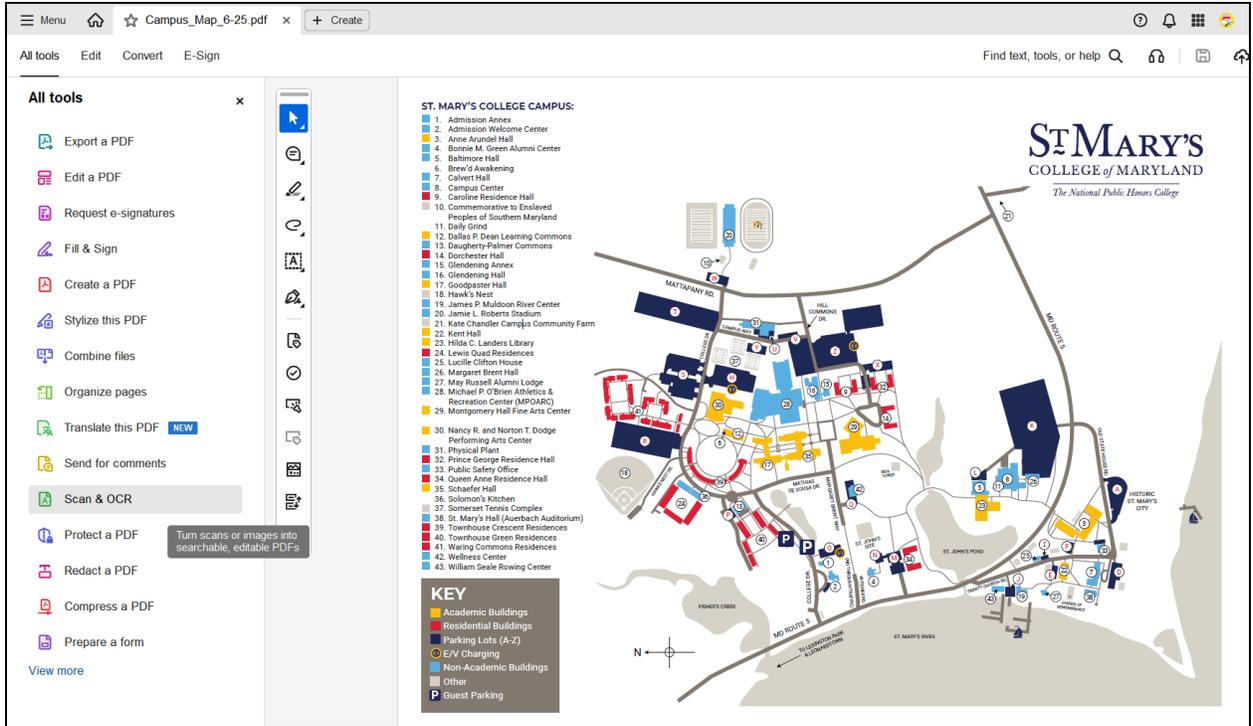
Scan and OCR

2. Select "In this file" and then select the pages you would like to be scanned. Finally, click on "Recognize text", and then the text present in the scanned document should now be selectable

Scanning an image for text

Tagging

      Tags label what a piece of content in a PDF is. For example, text could be labeled as plain text, a header, a block quote, or more depending on what its associated tag is. Ensuring that a PDF is correctly tagged drastically assists screen reader users in understanding the informational relationship between various parts of the PDF along with helping interpret the content being present. This is typically the longest part of ensuring a document is accessible as there are many aspects that go into ensuring that all pieces of content in a PDF are tagged correctly. While the following section will try to describe everything related to tagging in detail, watching some of the videos in the "Helpful Documents and Videos" section might be of extreme use to some individuals.

Tag Meanings

      There are 37 standard PDF tags which each has its own individual meaning. Below, we have grouped together the different tags under what they are generally associated with.

Container elements

Container elements are the highest level of elements and provide hierarchical grouping for other block-level elements.

- **Document:** The root element of a document's tag tree. **IMPORTANT: The Document tag is the main tag in every PDF, and all other tags in the document must be placed inside of it. Every PDF must have this tag present**
- **Part:** A large division of a document; may group smaller units of content together, such as division elements, article elements, or section elements. This tag is not necessary, but it can help screen reader users mentally separate content sections from each other
- **Div:** Division element. A generic block-level element or group of block-level elements. This tag is not used very often
- **Art:** Article element. A self-contained body of text is considered to be a single narrative. This tag is not used very often
- **Sect:** Section element. A general container element type, comparable to the Division (DIV Class="Sect") element in HTML, which is typically a component of a part element or an article element mentioned previously. This tag is not necessary, but it can help screen reader users mentally separate content sections from each other

Heading and paragraph elements

Heading and paragraph elements are paragraph-like, block-level elements that include specific-level heading and generic paragraph tags. The six levels of headings (H1 to H6) should never skip levels (such as going from H2 to H4 without an H3 in between).

- **H:** Heading element. This tag is not used
- **H1:** Heading 1 element. This is the title of your document. There should only be one H1 for the entire document
- **H2:** Heading 2 element. This is the highest-level subheading in a document
- **H3:** Heading 3 element. This is a third-level heading
- **H4:** Heading 4 element. This is a fourth-level heading
- **H5:** Heading 5 element. This is a fifth-level heading
- **H6:** Heading 6 element. This is a sixth-level heading
- **P:** Paragraph element. This tag is used for any plain text and is one of the most common tags

Label and list elements

Label and list elements are block-level elements used for structuring lists.
IMPORTANT: THERE IS A SPECIFIC ORDER TO THE NESTING OF LIST-RELATED TAGS. In order for a screen reader to properly convey the information in a list, there must be an overall List tag, followed by as many List Item tags as there are elements in the list. Each List

Item tag should then have one Label and one List Item Body tag. See image below for an example of a list with one (1) element in it:
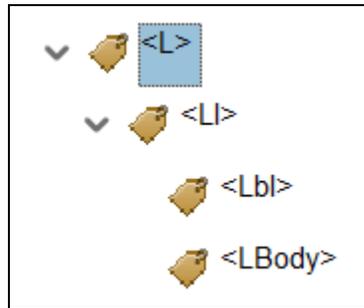
Typical list hierarchy

- **L:** List element. Any sequence of items of similar meaning or other relevance; immediate child elements should be list item (LI) elements
- **LI:** List item element. Any one member of a list may have a label element (optional) and a list body element (required) as a child
- **Lbl:** Label element. A bullet point, name, or number that identifies and distinguishes an element from others in the same list. For example, if a grocery list was "1. eggs 2. milk", then the "1." and "2." would have an Lbl tag
- **LBody:** List item body element. The descriptive content of a list item. In the above example for the Lbl tag, "eggs" and "milk" would go in the LBody tag

Special text elements

Special text elements identify text that isn't used as a generic paragraph (<P> tag).

- **BlockQuote:** One or more paragraphs of text attributed to someone other than the author of the immediate surrounding text
- **Caption:** A brief portion of text that describes a table, image, or figure
- **Index:** A sequence of entries that contain identifying text and reference elements that point out the occurrence of the text in the main body of the document. This tag is not used very often
- **Annot:** An annotation element. A comment someone has left on a document

Table of contents elements

These tags are used if a table of contents is present in the document.

- **TOC:** Table of contents element. An element that contains a structured list of items and labels identifying those items; it has a similar hierarchy to lists with an overall TOC tag followed by as many TOCI tags as there are elements in the table of contents

- **TOCI:** Table of contents item element. An item contained in a list associated with a table of contents element. Each TOCI tag should have a Reference tag as an immediate child where the associated link would go

Table elements

Table elements are special elements for structuring tables.

- **Table:** A 2D arrangement of data or text cells that contains table row elements as child elements. It may have a caption element as its first or last child element. Regardless, its immediate children should be as many Table Row tags as there are actual rows
- **TR:** Table row element. One row of headings or data in a table; may contain table header cell elements and table data cell elements as its immediate children
- **TH:** Table header cell element. A table cell that contains header text or data describing one or more rows or columns of a table. **Each table needs at least one of these tags**
- **TD:** Table data cell element. A table cell that contains nonheader data

Inline-level elements

Inline-level elements identify a span of text that has specific formatting or behavior. They are differentiated from block-level elements. Inline-level elements may be contained in or contain block-level elements.

- **BibEntry:** Bibliography entry element. A description of where some cited information may be found. This tag is not used very often
- **Quote:** An inline portion of text that is attributed to someone other than the author of the surrounding text. It's different from a block quote, which is a whole paragraph or multiple paragraphs, as opposed to inline text. This tag is not used very often
- **Span:** Any inline segment of text; commonly used to delimit text that is associated with a set of styling properties such as bold, underlined, or italicized

Special inline-level elements

Similar to inline-level elements, special inline-level elements describe an inline portion of text that has special formatting or behavior.

- **Code:** Computer program text embedded within a document
- **Figure:** A graphic associated with the text. These need some sort of alternative text, but that is a separate not related to tags
- **Form:** A PDF form annotation that can be or has been filled out. **IMPORTANT: ALL LINKS TAG NEED A [FORM FIELD NAME] - OBJR TAG AS AN IMMEDIATE CHILD**
- **Formula:** A mathematical formula. This tag is not used very often

- **Link:** A hyperlink that is embedded within a document. The target can be in the same document, in another PDF document, or on a website. **IMPORTANT: ALL LINKS TAG NEED A LINK - OBJR TAG AS AN IMMEDIATE CHILD.** The OBJR (Object Property Justification Requirements) tag should be autogenerated when correctly tagging something as a link and inputting its target location
- **Note:** Explanatory text or documentation, such as a footnote or endnote, that is referred to in the main body of text
- **Reference**: A citation to text or data that is found elsewhere in the document. Often used as a parent for Link tags especially in a table of contents

Autotagging

Using the autotag feature is optional, but it is often a very helpful tool. There are two situations where it would typically be a good idea to utilize this feature.

1. **Situation 1:** The document has no tags at all. This can be easily seen when going to the Tags panel on the right side and seeing nothing displayed under the initial "Tag" header
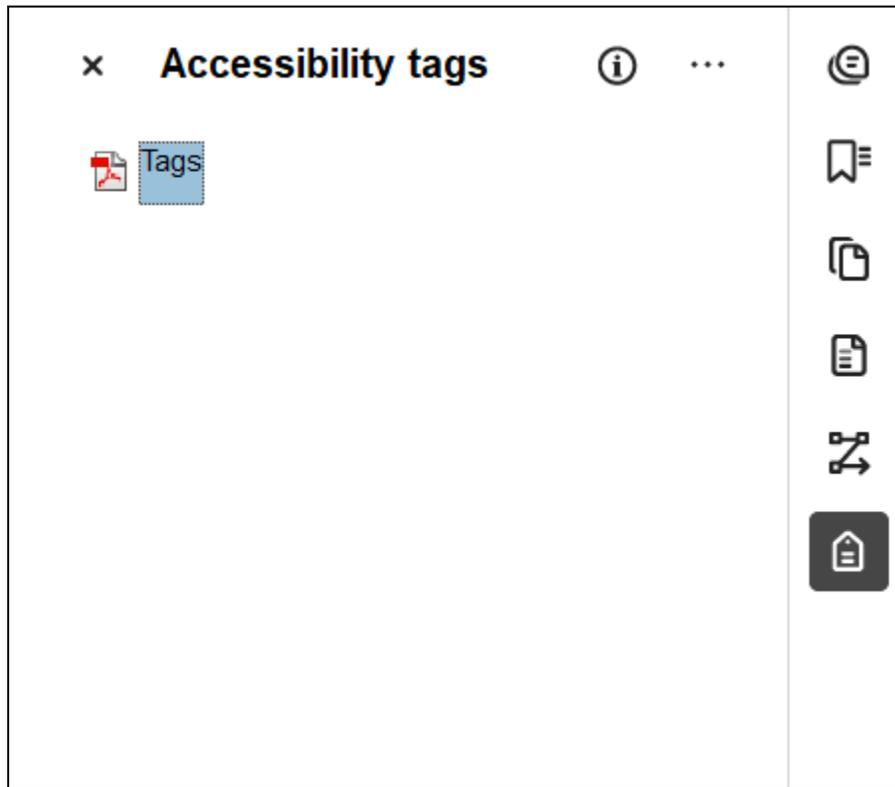
Tag panel

2. **Situation 2:** If there are already tags on the document, it is best practice to skim all of them and generally see if they are appropriate. If they aren't (such as everything being

tagged as plain text, for example), then it might be in your best interest to use the autotag feature.

In either case, there are two primary ways to have the system automatically tag the document.

1. Click on the icon of a document with a tag on the toolbar and click "Confirm"

Toolbar

2. Right-click on the "Tags" button in the Tags panel. Right-clicking on any empty space in this panel does not do anything. From there, click "Autotag Document" and then "Confirm"
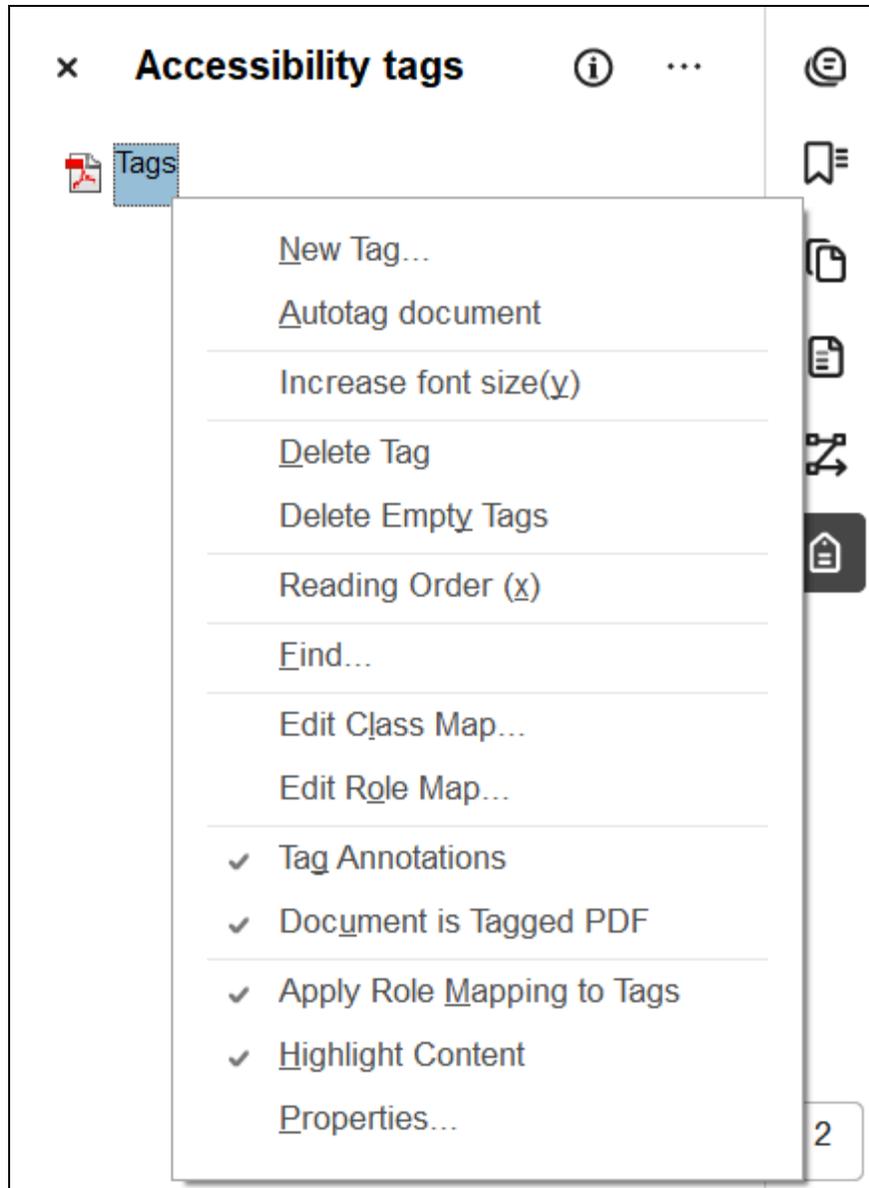
Tag panel with popup menu

Manual Tagging

After deciding whether or not to autotag the document, it is imperative that you go through each tag and ensure that they are appropriate and fix the ones that are not.

Creating New Tags

If you want to add a new tag to the tag list, right-click on any tag and then click "New Tag". This will create a pop-up window where you can select what kind of tag you wish to create along with a possible title for that tag (which is completely optional). Then click "Ok" to see your new empty tag appear underneath the original tag you right-clicked on.
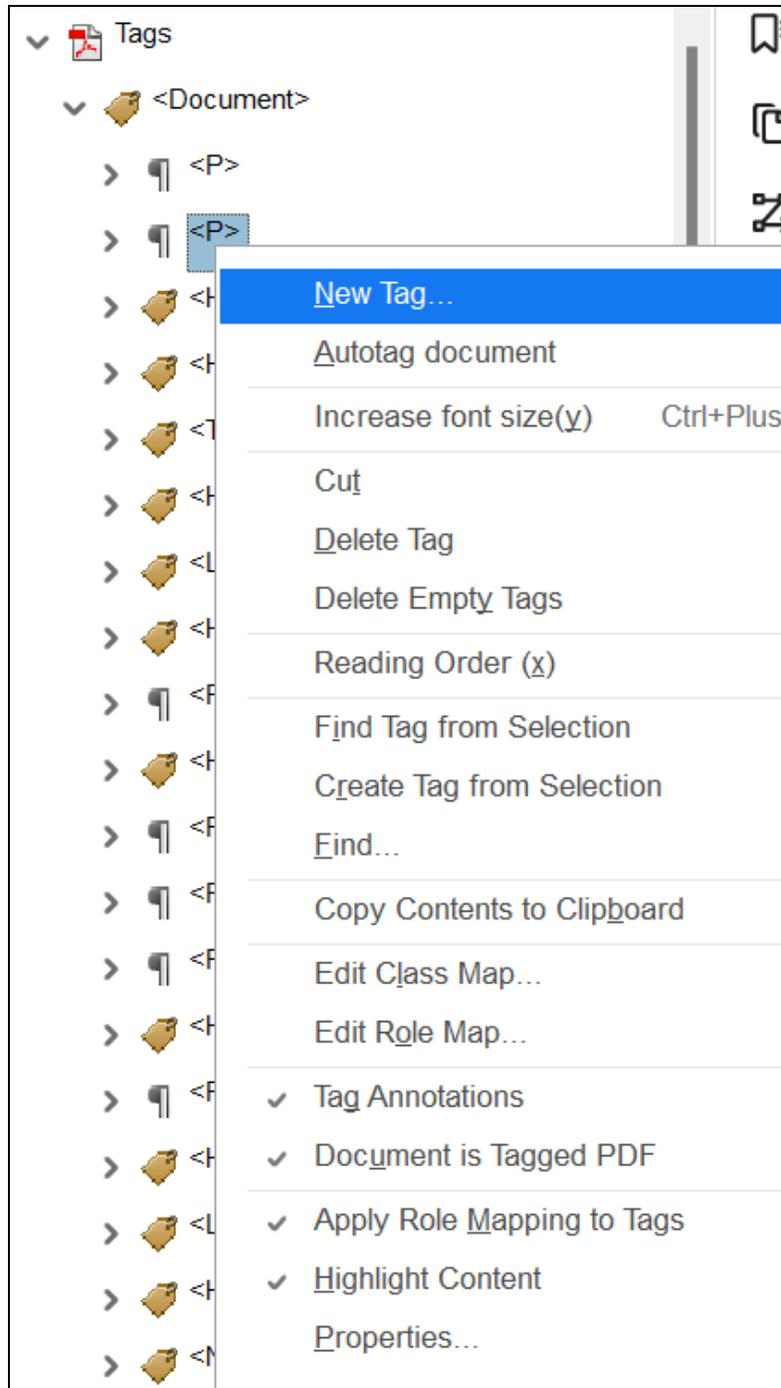
Tag panel with pop-up menu

Deleting Tags

If you wish to delete a tag from the hierarchy, it is as simple as right-clicking on the tag and selecting "Delete Tag". It is important to note that if this tag has any children, those children will be deleted along with it.

Moving Content

Moving content, whether it is a piece of text, an image, or another tag, is very simple. All you need to do is click and drag on the item you want to move. However, it is important to note that when moving something, a black bar will appear which indicates whether the currently held content will be placed either below whatever is currently being hovered over or become a child of it. A smaller line underneath solely the textual title of the tag indicates that letting go of the mouse button will make it a child, while a longer line covering the entirety of the bottom of the tag means it will just be placed below it.
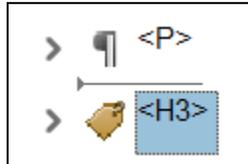
Will be placed directly underneath the text tag
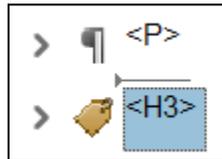
Will become a child of the text tag

Changing What Content is Part of a Content Tag

There will be times when the elements within a Content tag contain too much/little information and may include items that would usually span multiple tags. This occurs the most often with lists, as many pretagged documents will display the entirety of a list as text instead of having the correct order of tags with denoting items such as bullet points as labels and text as the list item body. Luckily, there exist ways to change this.

Separating out Content or Making a new Tag

1. Find whatever content is grouped incorrectly in the Tags panel and select it
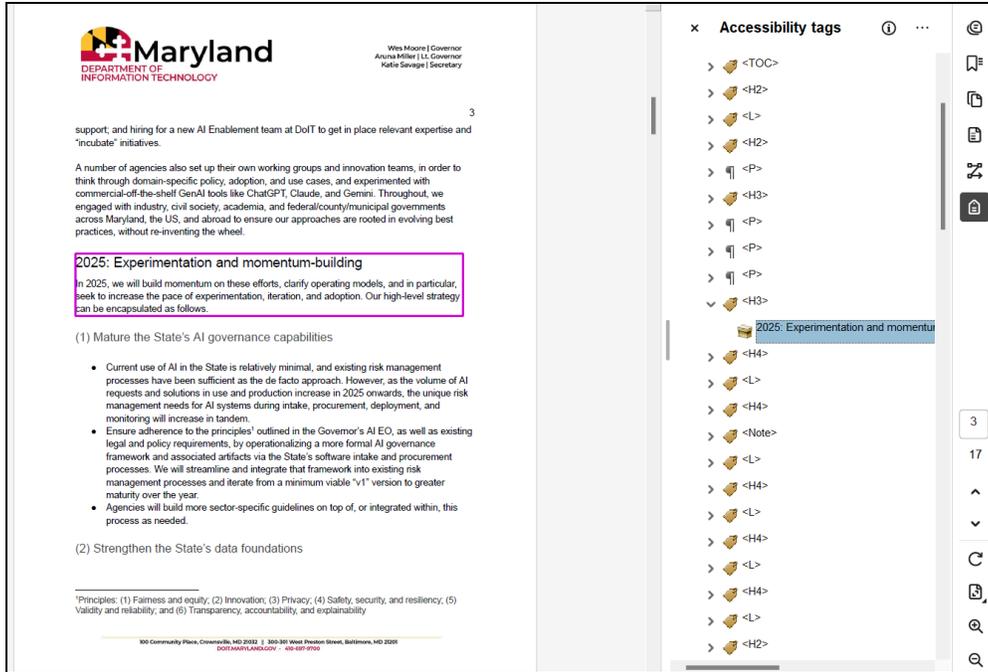
Both the header and plain text are in the same content tag when they should be separate

2. Highlight the part of the text you would like to separate out from the content tag.
   IMPORTANT: ENSURE THAT THE CONTENT TAG IN THE TAG PANEL HAS A GRAY BOX AROUND IT OR THIS METHOD WILL NOT WORK
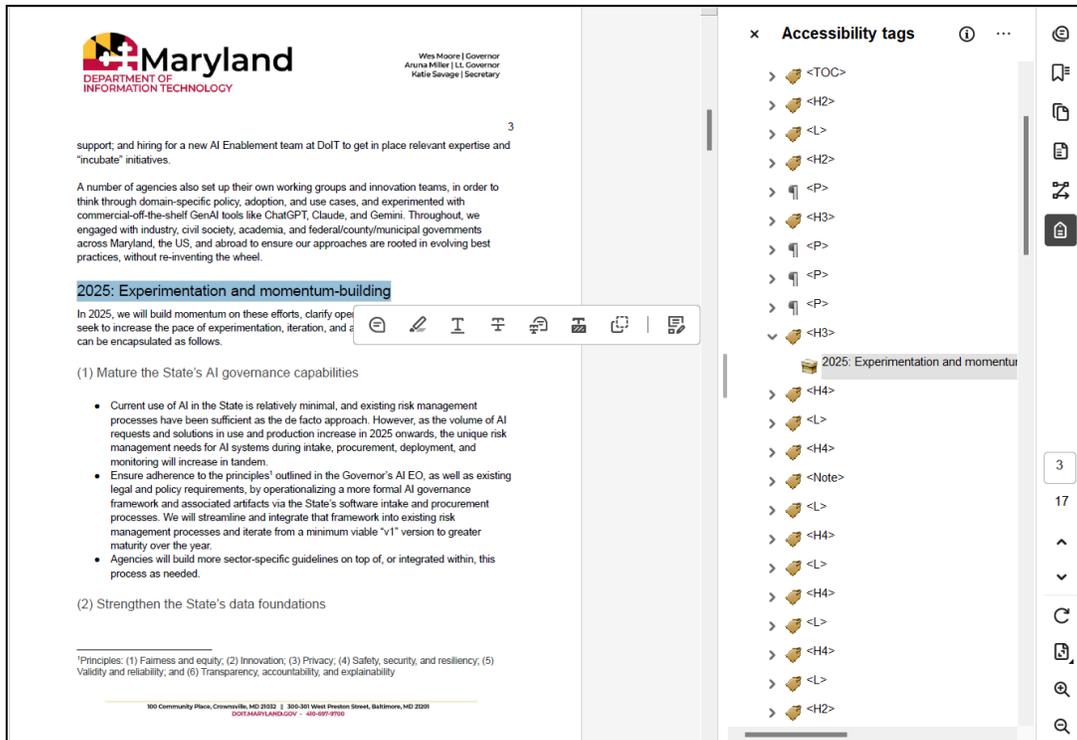
Selecting content that the user wants to separate

3. Right click on THE CONTENT TAG WITH THE GRAY BOX and click "Create Tag from Selection"
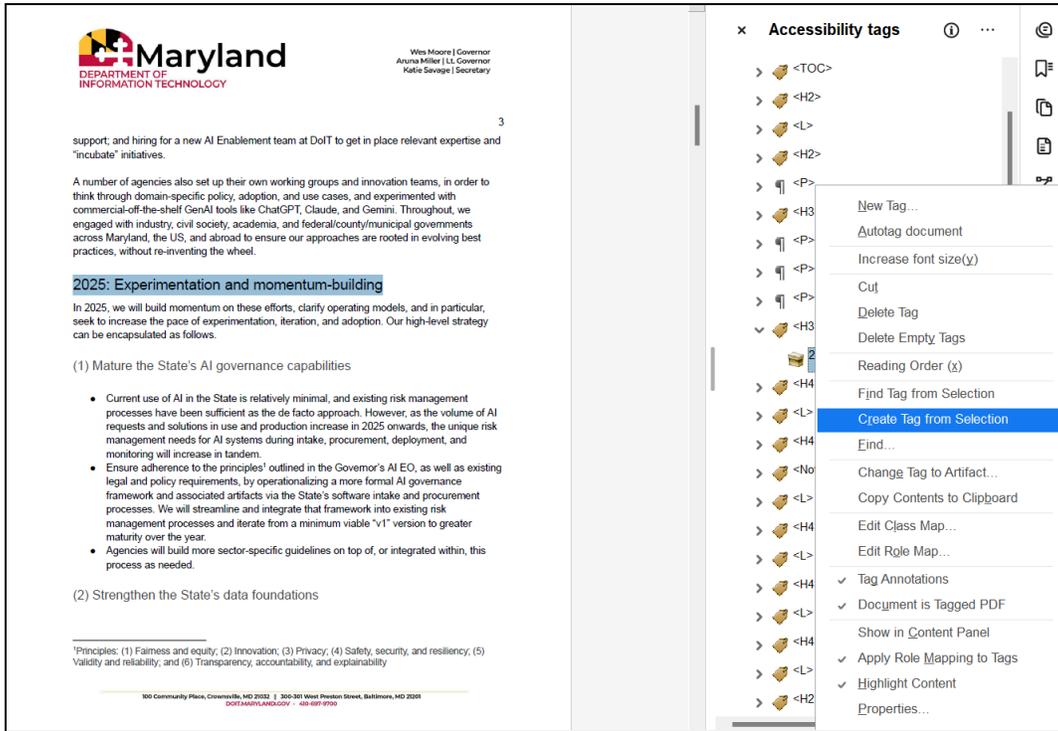
Right clicking on the grayed out content grouping

4. There should now be two separate content tags. You can put them under the correct parent tag by moving them around as you wish
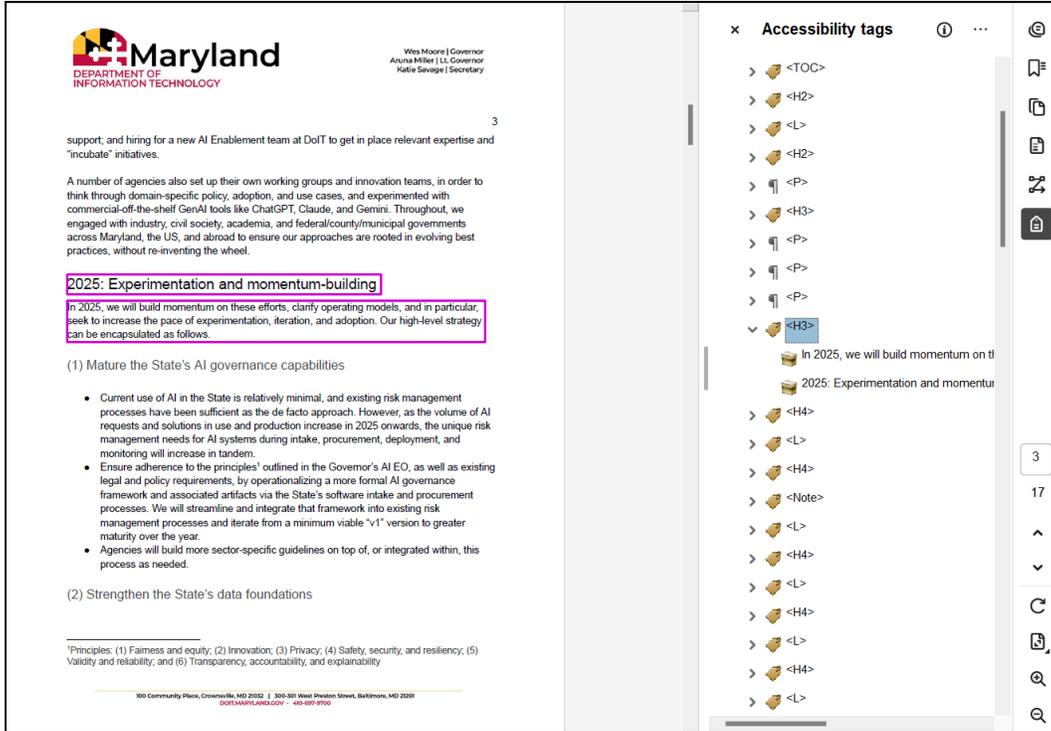
Separated content tags

Combining Content

If you wish to combine two content tags, there is a completely different method to do that unrelated to the above procedure.

1. Access the Content panel on the right sidebar and find the page with the associated content
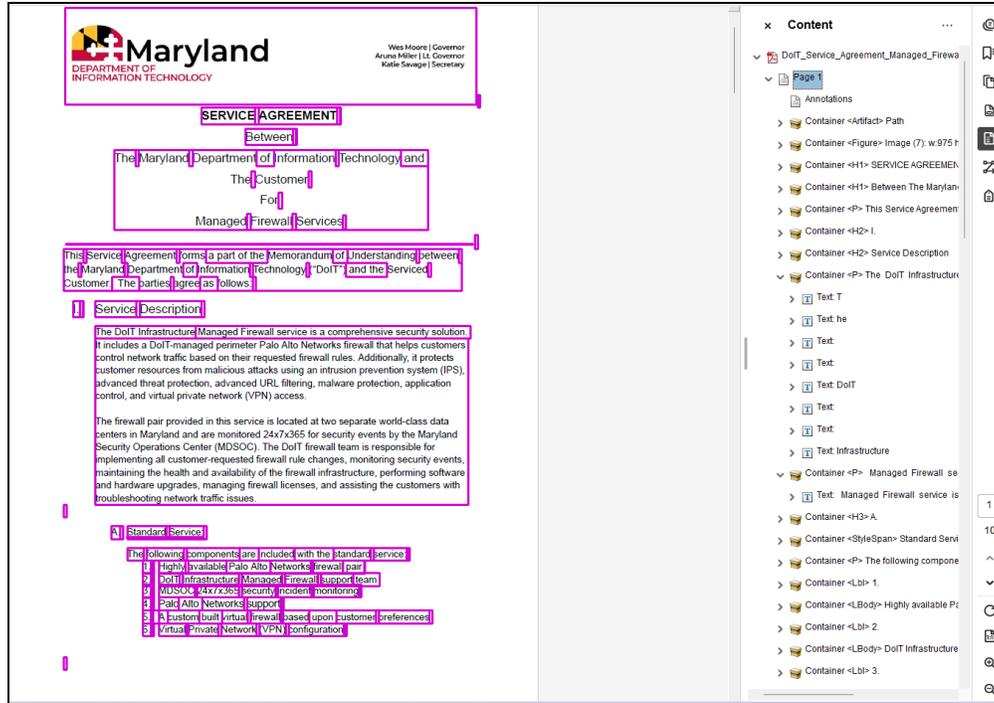
Open Content panel

2. Find the two (or more) containers from the list in the right sidebar that contain the content you wish to combine and open them (in this case, text)
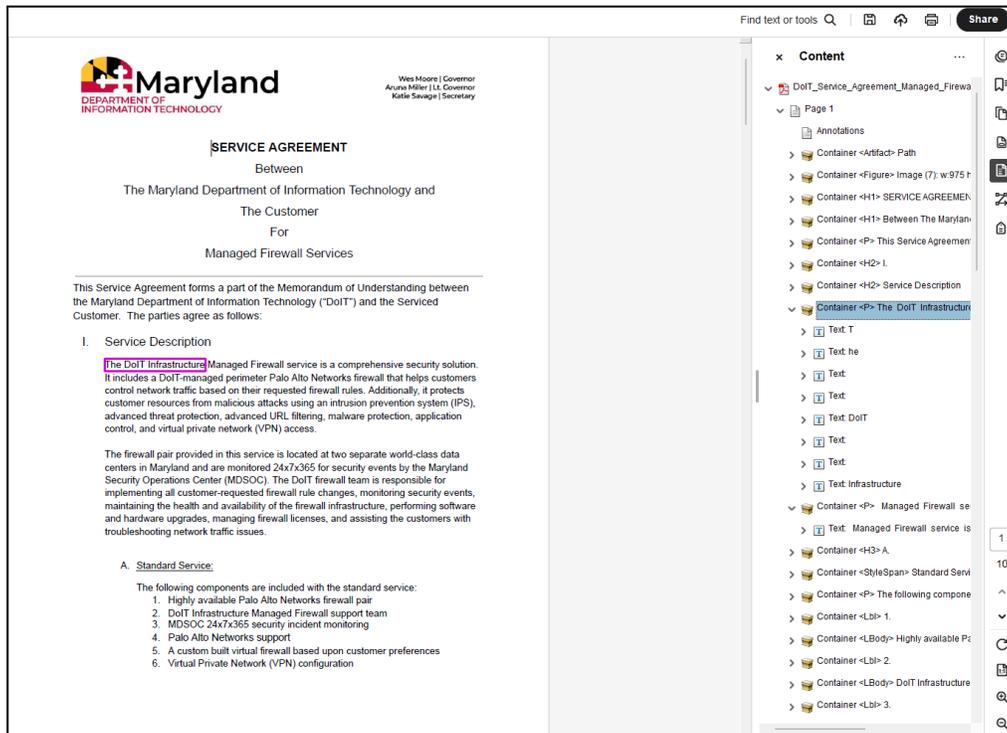
Combining text elements in the Content panel

3. Click and drag the text elements from one container to another so that they are all within the same container to effectively combine them
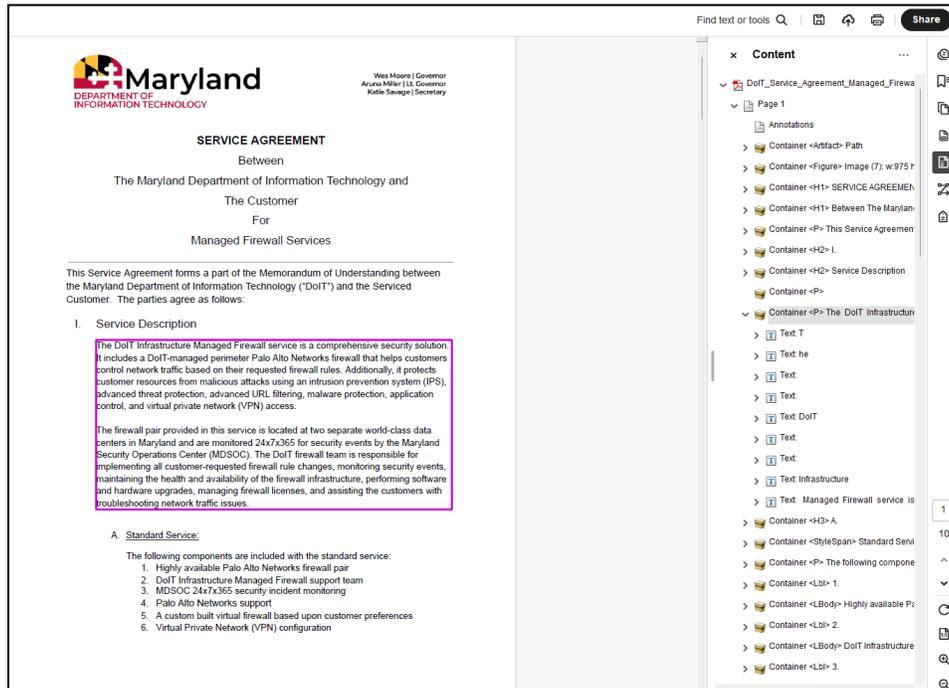
Successfully combined text elements

Tagging Content as an Artifact

Artifacts are not read out by screen readers and are essentially ignored by most assistive technologies. There are multiple reasons why you might want to tag something as an artifact, including an image being purely for decoration with no inherent content value, or there being an extra line at the end of a document that would be read out by screen readers.

1. Select the content tag you wish to tag as an artifact in the Tags panel
2. Right-click on it and select "Change Tag to Artifact"
3. A pop-up should appear. You can simply click "Ok" without selecting anything
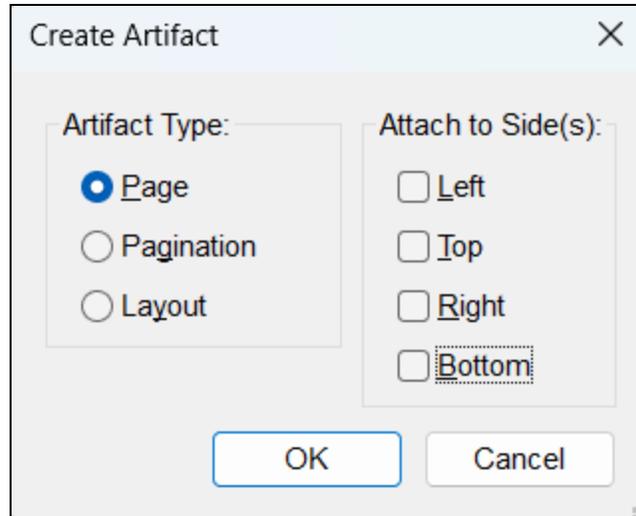
Create Artifact popup menu

4. It should disappear from the tags
5. If the content was a child of a parent tag and the parent is now empty, it is best practice to now remove the empty tag

Tagging Using the Reading Order Panel

There is another way to mass tag content that some users may prefer especially if the document did not come with any tags.

1. Click on the Reading Order button in the toolbar (the icon with two boxes with arrows pointing in opposite directions)
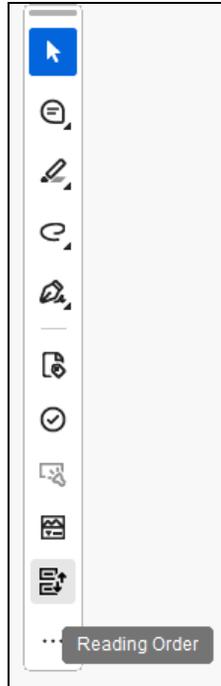
Toolbar

2. This should open a pop-up and change the general view of the document to have multiple gray boxes
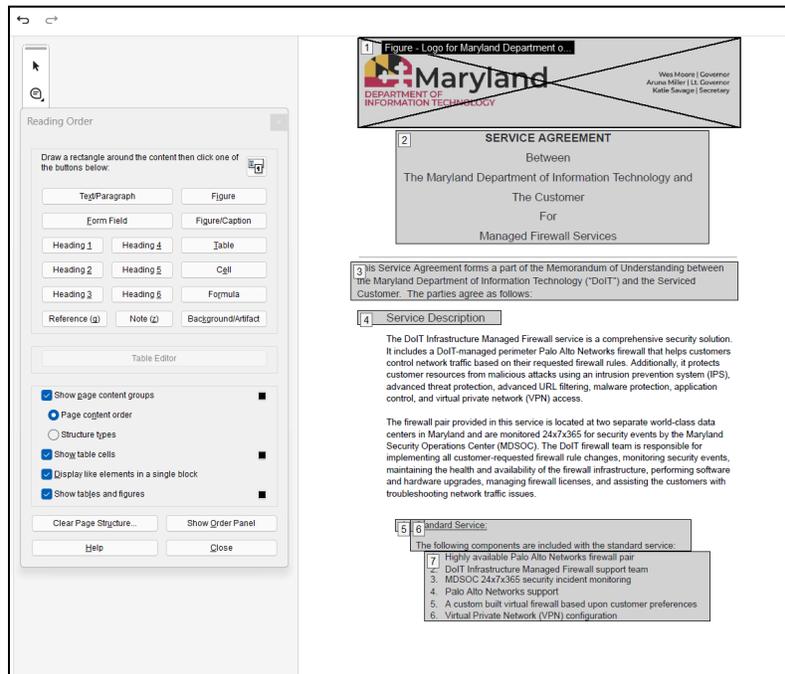
Reading Order panel opened

3. With this popup open, draw a rectangle around content that you would like to tag. Then click the appropriate option in the popup menu to tag everything in that rectangle as that tag
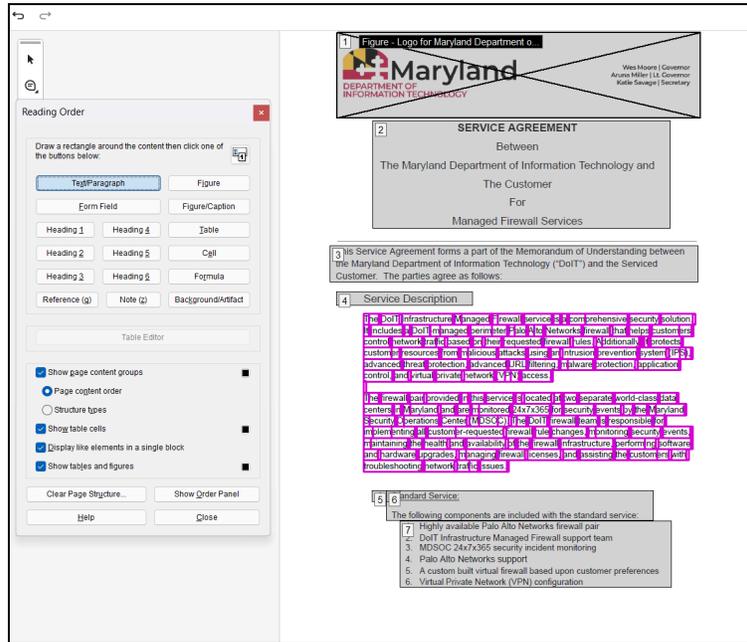
Before clicking text/paragraph
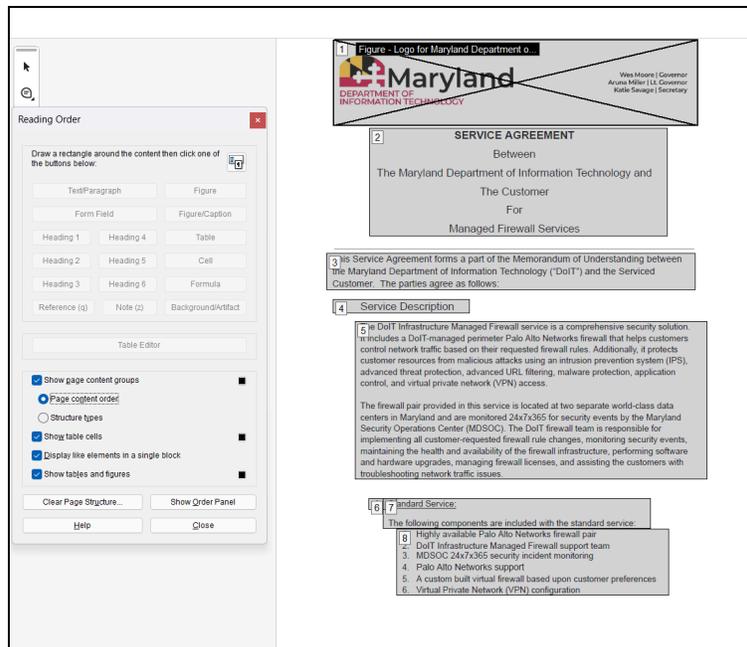
After clicking text/paragraph

4. Note: the Reading Order panel can also be used to show the types of tags present instead of the reading order. Simply select the "Structure types" on the panel to change the numbers at the top left of the gray boxes to their associated tags
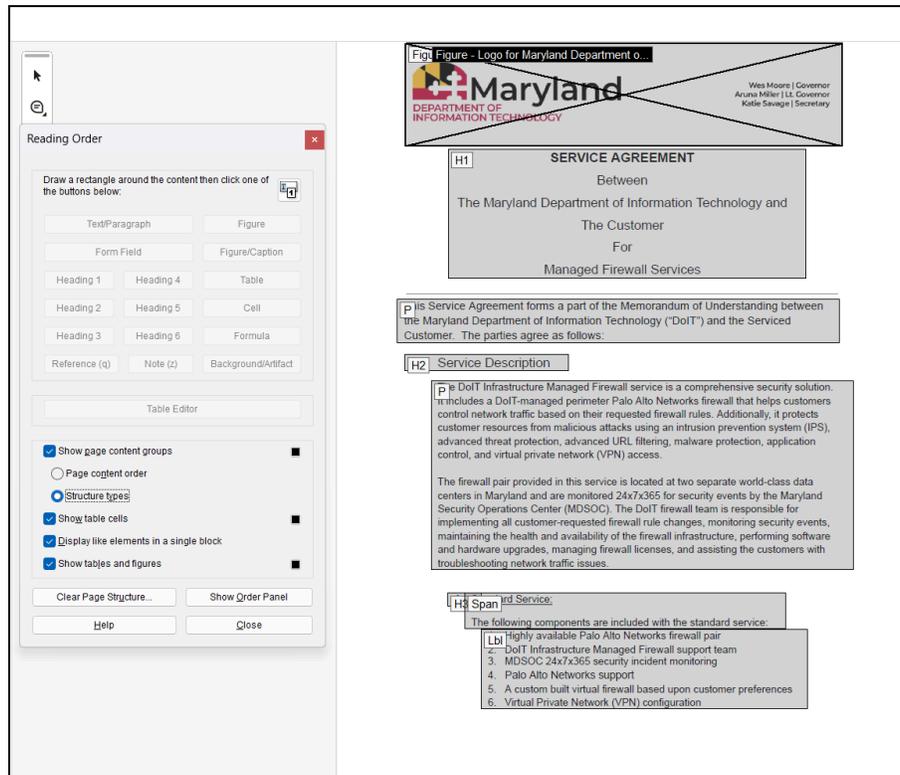
Structure types are shown instead of order number

Role Mapping

If you open the tag tree for a document, and there is a new tag type that doesn't match any of the ones found in Tag Meanings, then it is most likely a custom-made tag. These can be made by the program that was used to create the source document or by another user if they had access to the tag structure. Adobe allows users to rename tags to whatever they wish. This will still read as normal to a screen reader, but it may be useful for certain individuals to tag documents. If you would like to create your own custom tags or check if they exist in the document you are working on, please follow the instructions below.

1. Right-click on any tag in the tag tree and select "Edit Role Map". This should cause a pop-up to appear
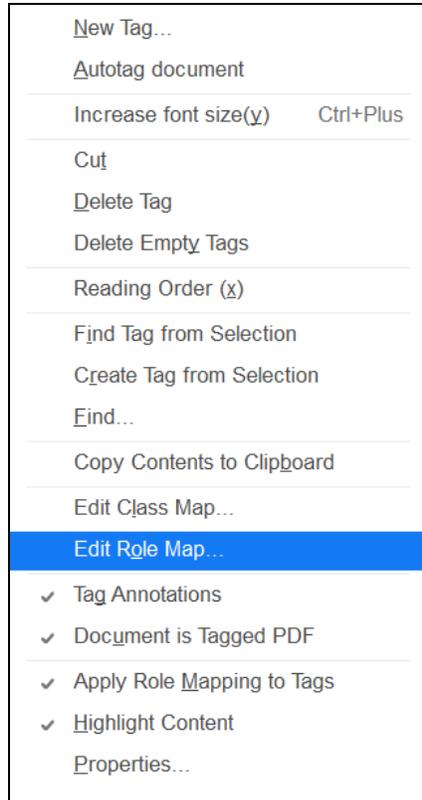
Accessing the role map

2. Click on the small plus + button near "Document Roles" to show all the custom tags and what they map to
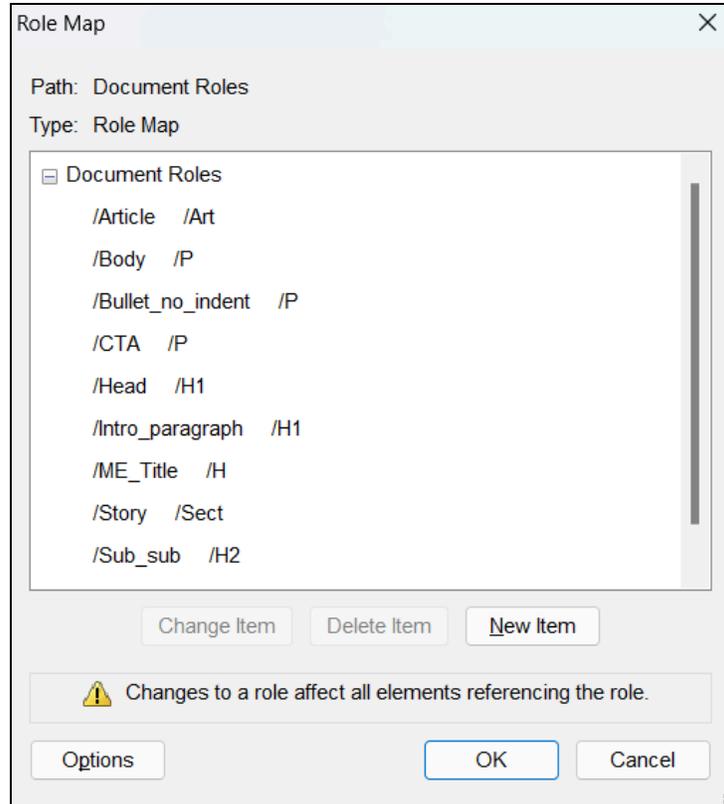
Role map

3. If you would like to change a custom tag to represent a different tag, simply click on it, select "Change Item", and then enter the name of an existing tag in the search box. Similarly, if you want to delete a custom role, click on that tag, and then "Delete Item"
4. If you would like to create your own custom tag, make sure that the "Document Roles" section is currently highlighted, and then select "New Item". This will create another pop-up titled "Add Role" where you can enter the name of the custom tag you wish and specify what tag it represents
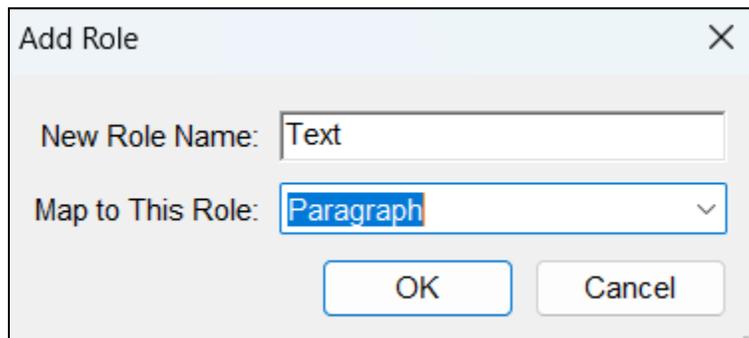
Adding a new custom tag

Tables

This section will discuss how to make tables accessible. If a table is present in a PDF, then it is important to ensure that it is properly labeled and tagged as while they are extremely beneficial for users to help understand relationships between data points, the fact that they are very visual is a hindrance to screen reader users.
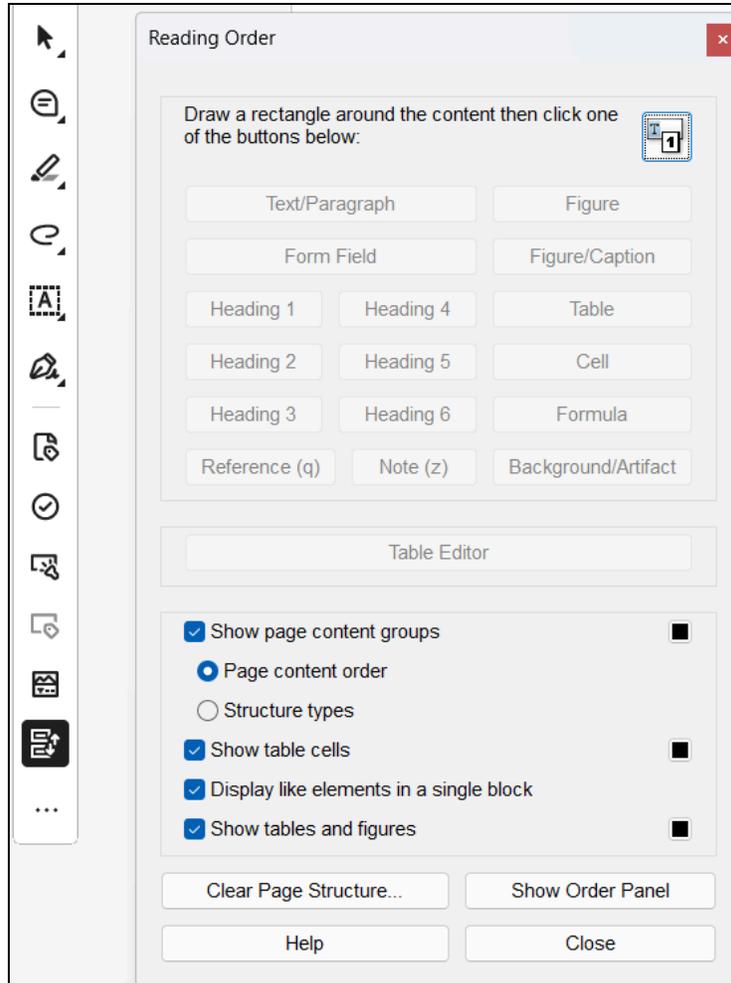
1. Go through the tags and ensure that the structure for the table is correct. There should be one singular <Table> tag, as many <TR> tags as there are rows, and as many <TD> or <TH> tags within the <TR> tags as there are cells. If anything is incorrect, follow the instructions found in Manual Tagging

   a. It is important that header cells are marked as such because screen readers use that information to organize the information and determine how the table is presented to the user

   b. **If a table spans multiple pages, only one table tag should be present. There should not be unique table tags for each page**

   c. If a layout table (a tabular structure that was only used to achieve a certain visual layout but does not actually convey relationships like a data table does) was used, move the content outside of the table tags and retag it. By having it tagged as a table, it can confuse screen readers

Checking the tags on a table

2. Once that is done, open the Reading Order tool found on the left shortbar. This is not to be confused with the Order panel on the right navigation menu
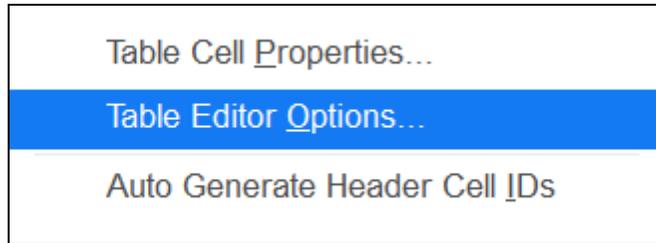
Accessing the Table Editor tool

3. Click on the table being worked on in the document followed by the "Table Editor" button in the Reading Order pop-up. This should change all the cells in your table to various colors and display if they are tagged as <TH> or <TD>
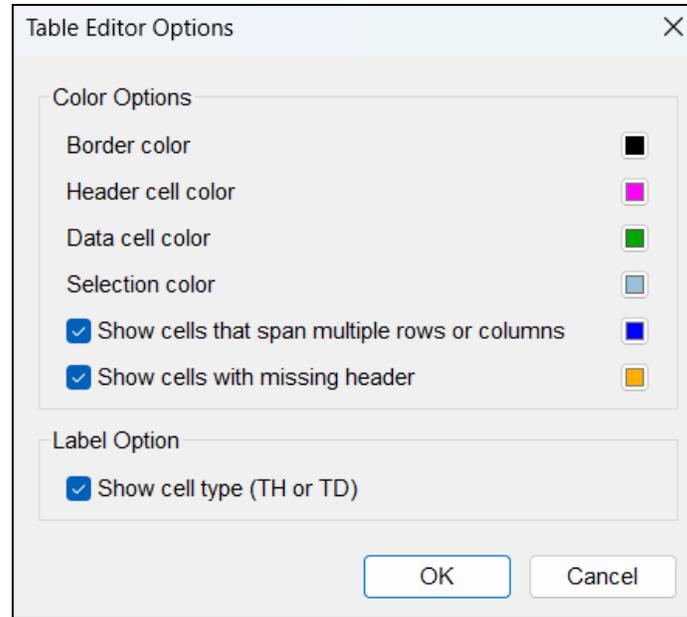
Table view when the Table Editor is open

4. Right-click on any cell and then click on "Table Editor Options" from the menu. This will open a pop-up where you can customize what colors you would like to see. Also, ensure that every option has a check next to it

Accessing the Table Editor options

Customizing the Table Editor

5. From here, right-click on a header cell, then click on "Table Cell Properties" for a pop-up to appear. This will allow you to change header cells to data cells and vice versa, declare the scope of the header cells, and state how many cells the currently selected cell spans (1 in row and column is regular and means that there is no merged cell present). Also, the cell ID number is present, and you can associate certain cells with a header cell
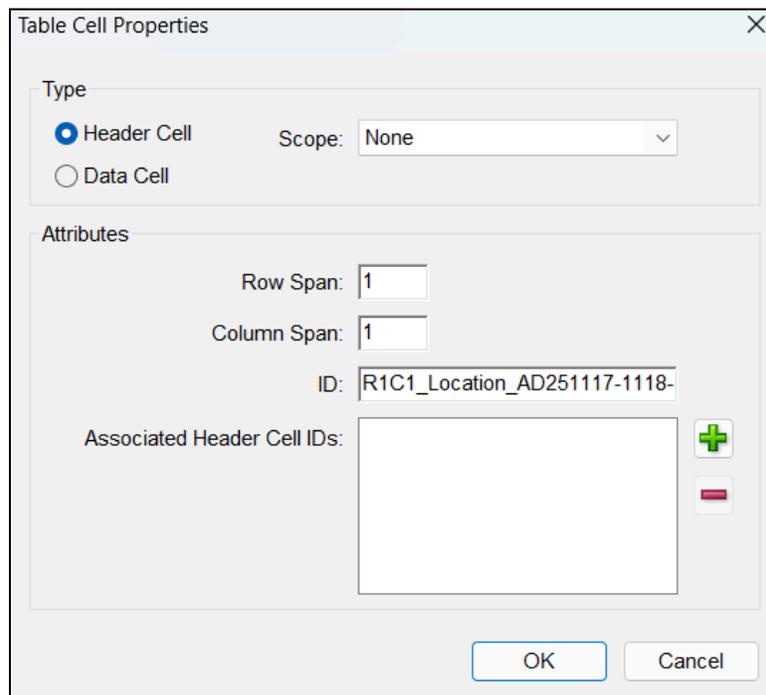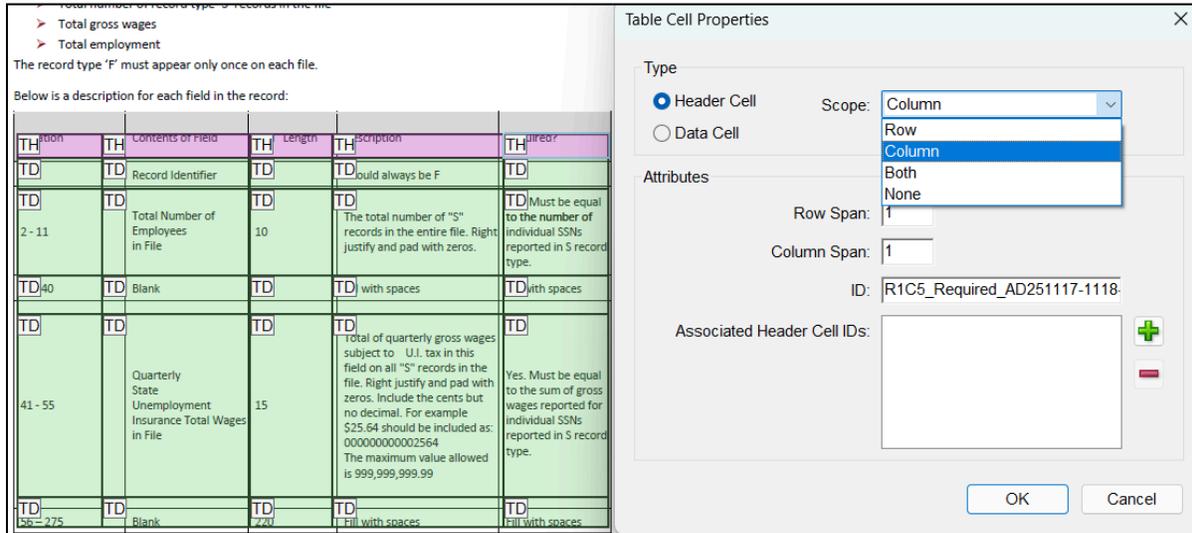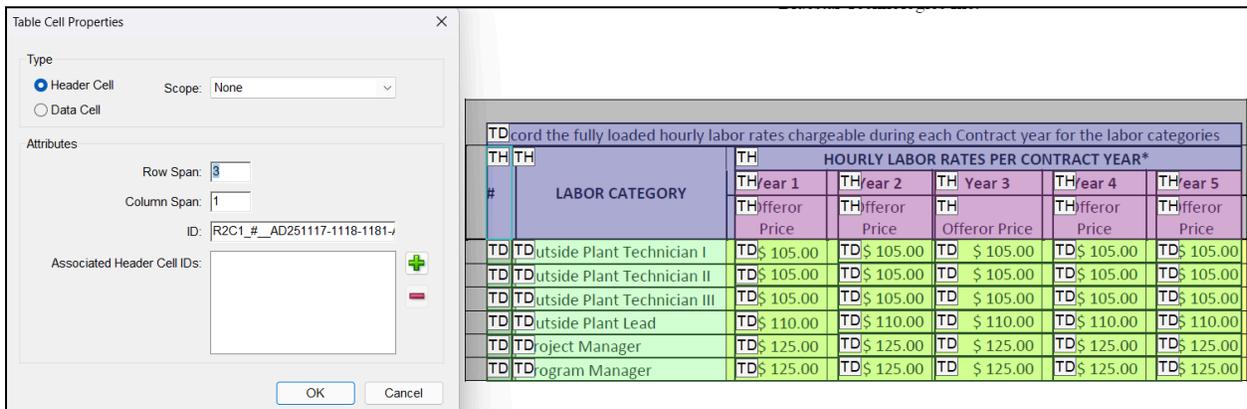

Table cell properties

6. Open the properties menu for all the header cells and ensure that their scope attribute is accurate. If the header cell should be associated with the cells vertically aligned to it, then you should select "Column". If the header cell should be associated with the cells horizontally aligned to it, then you should select "Row". If both are the case, then select "Both"

Setting the scope for a header cell

7. If your table is simple as shown in the images above, then this should be enough to deem your table as accessible and move on. However, if you table is more complex due to having merged cells or multiple rows/columns of headers, continue with the following instructions

8. If your table has merged cells, it is important that their row and column span values reflect this. Go to the properties of those merged cells and ensure that their span values are correct. If not, this could cause the Accessibility Checker to flag the table as having a regularity issue

Changing how many cells one single cell spans

9. If there are multiple header cells that should be associated with a data cell, go to the properties of that cell and click on the plus + button near the "Associated Header Cell IDs" box. This will open a pop-up with a drop-down menu

Adding a header ID to a cell

10. Add all of the header cells associated with that data cell and repeat this step for all of the data cells in the table. If many data cells are present, multiple cells can be selected simultaneously by holding down the "Shift" key while clicking on all the cells

Successfully added associated header cell IDs

Forms

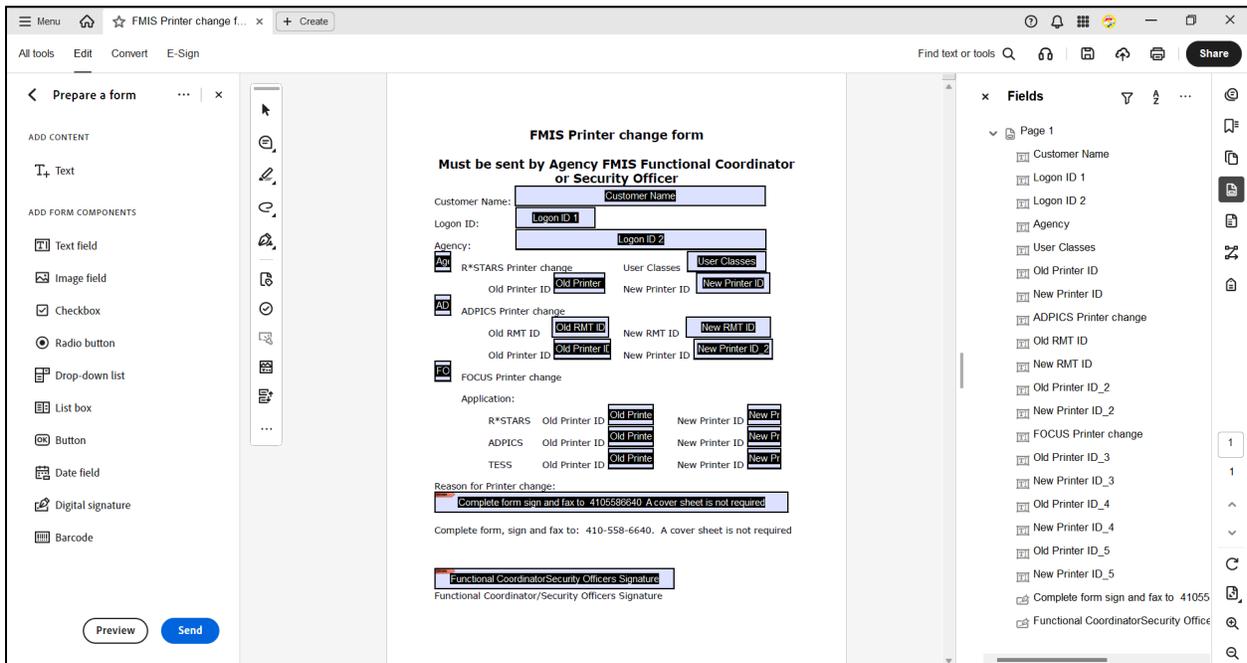This section will discuss PDFs that require user input, whether through text boxes, checklists, or other means. It is **CRITICAL** that any PDF that is transactional in nature be as accessible as possible, as these forms allow constituents to contact their government. Having an inaccessible transactional PDF with form fields constitutes a direct form of discrimination that violates ADA guidelines.

Adding Form Fields

There are two primary situations that change how someone would add form fields to a PDF. The first scenario occurs when the original source document already contains form fields, and the second scenario involves the PDF creator manually adding form fields.

Scenario #1: Form Fields are From the Source Document

1. Click on the "Recognize Form Fields" button on the left toolbar. A new layout should now appear with all the fields with their names along with Adobe now being in "Edit" mode (as can be seen at the top left)

Example screen layout after clicking "Recognize Form Fields"

2. Check to make sure that all form fields are of the correct type (such as checklists not being text fields which is an issue in the above image). If there is an inconsistency, follow the instructions in the next section

Scenario #2: Manually Adding Form Fields

1. Ensure that you are in "Edit" mode. This can be found at the top left of the screen next to "All Tools". After that, click on "Prepare a Form" at the bottom left of the selection menu. This will open up a screen that will look like the image in the previous section
2. On the left side of the screen, click on the form component that you would like to add to the PDF and click on the PDF where you would like the associated element. The image below is after a text field was manually placed

PDF after manually adding a text field

3. If you wish to resize the form field, click on the component on the PDF. This will cause dots to appear on it. Click and drag on these dots to resize the component to the desired size

4. Make sure to change the name of the form field. This can be done in two different ways. The first is to double-click on the associated field on the right panel underneath the "Fields" header and type in the new name. The second is to right-click on the same field and then click "Rename" in the pop-up menu

Fields panel expanded with a pop-up for renaming a field

Some form components are a bit more complicated to create manually in PDFs. Below are the instructions for how to add/customize other types of form components that require a unique set of steps to properly create:

Radio Button

1. If there is only one set of radio buttons in your form, there is no need to proceed any differently than you would normally. However, if there are multiple sets, then extra steps must be taken to ensure that the buttons are part of different groups

2. Adding new radio buttons will automatically add them to an existing grouping of other buttons. Only one single button in a group can be selected at a time as that is the nature of radio buttons, so if you have two different questions with two different radio button sets, then they must be part of separate groups. To do this, you need to go to the "Properties" section as detailed in [Adding Tooltips](#)

Four radio buttons that are all grouped together

3. Change the name of the radio buttons you wish to be a different grouping to the name of the group you want them to be a part of. For example, if you want the two left buttons shown in the image above to be in Group1 and the two right buttons to be in Group2, go to the associated "Properties" menu and change the two right radio buttons to Group2 which will automatically remove them from Group1 and add them to Group2

Four radio buttons that are part of two separate groups

4. Now, both the left and right buttons are officially part of two separate groups and can be selected as such

Two separate groups of radio buttons

Drop-down List

1. After adding a drop-down list to the PDF, go to the "Properties" section of the list as detailed in Adding Tooltips. Then click on the "Options" tab that appears

Options tab for drop-down list

2. In the "Item" field, type one option that you would like to be present on the menu, and then click on the "Add" button which will add it to the "Item List" section

Drop-down list with one selectable option added

3. Repeat step 2 for all of the options that you wish to have in the drop-down list

4. If you decide you wish to change the order/delete any of the selections after they were added to the "Item List", simply select the option you wish to edit and click either the "Up" or "Down" buttons to move them in the associated direction in the order or "Delete" to remove it from the list

Drop-down list with four selectable options added

List Box

1. Follow the same instructions described in Drop-down List

Button

1. After adding a drop-down list to the PDF, go to the "Properties" section of the list as detailed in Adding Tooltips. Then click on the "Actions" tab that appears

Actions tab for a button

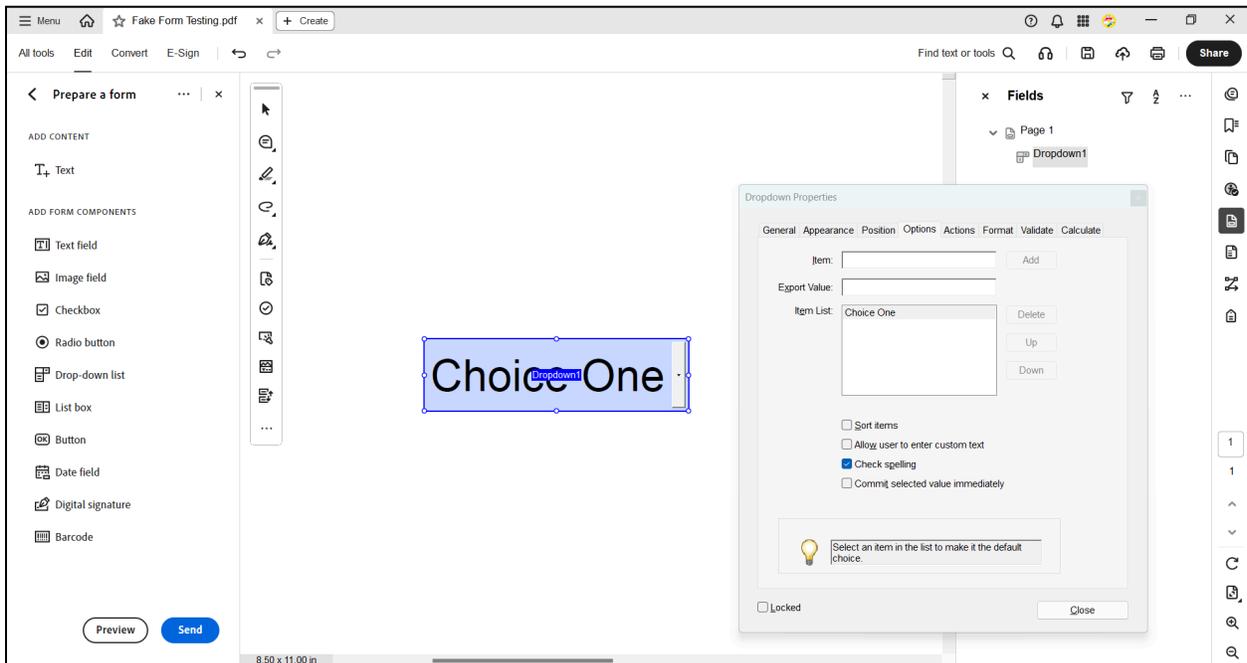2. Select the option you would like the button you would perform from the "Selection Action" drop-down menu and then click "Add"
3. Click on the "Options" tab and enter the text you would like to appear to visually to viewers of the PDF

Button with the label text that says "Example"

Date field

1. If you would like to change the date format, go to the "Properties" section of the list as detailed in Adding Tooltips. Then click on the "Format" tab that appears
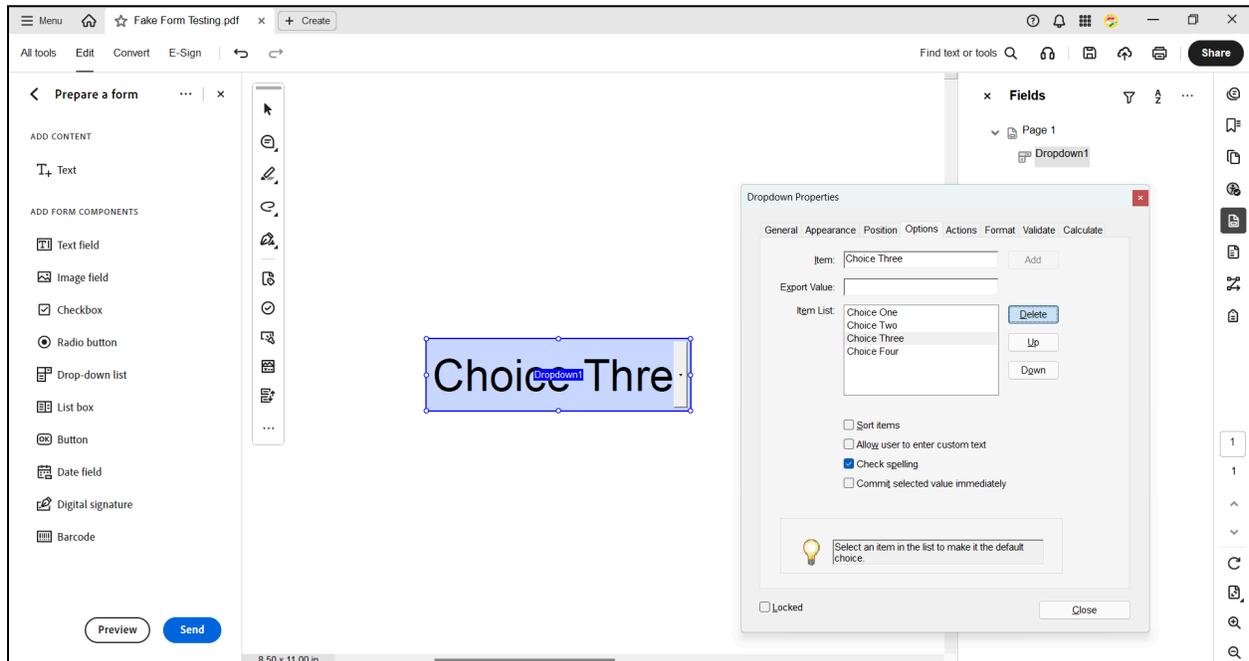

Format tab for a date field

2. Select the format you prefer from the list that appears

Adding Tooltips

All form components need an associated tooltip, which is a short description that is read out to screen reader users or displayed when the user hovers over the field. This is done to provide concise instructions on what is required from the user and is particularly helpful for users with disabilities, enabling them to understand how to complete the form.

1. With the "Fields" panel open, right-click on the associated component and click on "Properties". A pop-up should appear with two fields for the name and tooltip

Pop-up for adding a tooltip

2. Enter concise, descriptive instructions into the "Tooltip" field and hit close

Tagging a Form

Just like with other pieces of content in a PDF, it is important that all forms have an associated tag. For form fields, a Form tag should be present with an OBJR tag as a child (similar to links, which have an OBJR tag). In order to create the OBJR, follow the steps below.

1. Using the steps discussed in the Creating New Tags section, make as many Form tags as there are form fields
2. Click on the "Recognize Form Fields" icon on the shortcut bar to ensure that Adobe has discern all of the form fields
3. Click on the "Automatically Tag Form Fields" icon on the shortcut bar. This will add many OBJR tags to the tag tree
4. From here, make sure to drag-and-drop all of the OBJR tags to an associated form tag so that they will be correctly recognized by screen readers. If all of the form fields were identified and given an OBJR tag, then you are finished. However, if Adobe missed some form fields, then continue with the following steps
5. Right-click on the Form tag and select the "Find" option from the menu that appears. A pop-up will appear as shown below

Find element popup

6. From the dropdown menu next to the "Find:" label, select the Unmarked Annotations option. If your form is also more than one page, select the "Search Document" button

7. Click the "Find" button which should highlight the first untagged form field in the document

8. Ensure that the Form tag that you wish to add the OBJR tag to is highlighted on the right tags panel, and click on "Tag Element". This will automatically make the OBJR tag a child of the Form tag

9. If there are more form fields, click the "Find Next" button to highlight the next form field. Before clicking on "Tag Element", also remember to click on the next Form tag on the left as you only want one OBJR tag per Form tag. Once that has been completed, click "Tag Element" again

10. Repeat step 6 for as many form fields as there are present

Form tags with OBJR tags

Bookmarks

If the document being made accessible is at least 10-20 pages, then the PDF needs bookmarks to be made accessible. Bookmarks work similar to a table of contents where it allows users to jump to different parts of the document without needing to scroll. If your document has no bookmarks, there is a method to quickly add them. However, it is important to note that this only works if you have finished correctly tagging the document.

1. Click on the "Bookmarks" icon on the right bar to open the Bookmarks panel

Opened Bookmarks panel

2. Click on the three dots in the top right corner and then select "New Bookmarks from Structure". This will cause a pop-up to appear

Expanded Bookmarks options menu

3. Select the tags that you believe are the most important for a user to want to have easy access to. Oftentimes this will be the headers in your document, but it depends on the content. Then click on "Ok" to add the Bookmarks

Structure Elements pop-up box

4. All of the Bookmarks should now appear. Now you should rename the collection of Bookmarks to something more descriptive than "Untitled". To do so, double click on "Untitled" and type in a name such as "Bookmark Structure" or the title of the document

Populated Bookmarks panel

5. If you wish to add more bookmarks to specific sections of your document, all that you must do is go to the part you would like to become a bookmark, highlight it with your mouse, and then click on the "Add a new bookmark" button. It will add that new bookmark to the associated structure

Manually creating a bookmark

Tab Order

The tab order of a document determines what elements will be focused on when the "tab" key is selected. It is key that the tab order is correctly specified so that keyboard users can efficiently navigate through the document.

1. On the right toolbar, select the "Pages" button which will expand the pages panel

Pages panel

2. Select all of the pages by clicking on the first page, holding down the "Shift" key, and then selecting the last page. Right-click and then select "Page Properties" from the menu

Accessing page properties

3. Ensure that "Use Document Structure" is selected. This means that the tab order will be based on the tags and reading order of the document

Selecting the tab order

Color Contrast

It is important to ensure that the color contrast throughout the document is consistent with the WCAG 1.4.1 and 1.4.3 guidelines. This can be done with whatever tool is preferable, but WebAIM: Contrast Checker is a useful tool if needed. If the color contrast does not meet the necessary threshold of 4.5:1, there are multiple ways to proceed depending on the situation.

If the problem is with an image or you do not have edit access, you should make a note about it and move on. However, if it is expected that you will fix this issue and it is related to some text-based content, follow the steps below:

1. Swap the current view to Edit mode. This can be done by selecting the Edit button at the top left
2. Highlight the text of choice and then click the color box next to the font size on the left side of the program

Changing the color of text

3. Change the color to something that fits within the color contrast ratio
4. **IMPORTANT: Changing the color of text can often disrupt the tags associated with it and potentially affect the surrounding content**. Swap back to the "All Tools" mode in the top left to ensure that you don't accidentally edit anything else, and look at the content tags with the text in them. There is a good chance that they are most likely empty. In order to solve this, you will need to manually retag all the content (see Changing What Content is Part of a Content Tag)

Reading Order

It is important to make sure that the reading order of the document is correct so that screen readers go through the PDF in a logical order. Follow the steps below to check this.

1. Click on the Order button on the right panel. Your screen should now look something similar to this:

Reading Order panel expanded

2. Go through each page and ensure that the order of the elements makes logical sense
    a. If not, click and drag the content boxes on the right into their correct order
3. Once the overall larger elements have been corrected, right-click on a content box in the Order panel and deselect "Display like elements in a single box"

Reading Order panel popup menu

4. There should now be considerably more content boxes on screen, especially if a list or table is present. Go through these and ensure that they are also in a logical reading order

5. **IMPORTANT: Moving around content in the Order panel sometimes affects the tags associated with it and can cause them to change location in the Tags panel.** Once you have finished correcting the reading order, move back to the Tags panel and check if anything has been shifted and correct it accordingly

Add Alternative Text for Images

Alternative text allows visually impaired users to understand the message an image is trying to convey. If there are any images on the document, they need alternative text for screen reader users (along with being tagged as a figure). There are multiple ways to do this, but we will focus on the most efficient one for this guide.

1. Click on the little photo icon on the toolbar to open up a pop-up that highlights the associated image, along with a text box to input alt text

Toolbar

2. Make sure to put something concise to summarize what is happening in the image. If there are multiple images, you can click on the arrows at the top to focus on a different one. After all of them have text, click "Save and Close"

Alternative text for selected image

Redo the Accessibility Check

As the title of this section states, rerun the accessibility report to see what is left to be done and complete them as needed. For example, if there is no primary language set for the document, ensure that is fixed. Many of the issues can be solved by right clicking on them and clicking "Fix" which opens a pop up on how to solve the issue. If you ever have a question about what something means or how to go about solving it, right clicking and then clicking "Explain" opens up a webpage that has a more indepth explanation.

Recheck Your Work

Once you have been satisfied with your work, make sure to recheck everything you've done as sometimes interacting with one remediation aspect can affect another (especially when it comes to tags and reading order). Once you are satisfied with everything and the accessibility checker comes back with no issues (besides Logical Reading Order and Color Contrast if you did not click "Pass" on those tests) along with ensuring the metadata has been correctly filled, you are all done!

Helpful Documents and Videos

Below is a list of various documents and videos that can help someone better grasp the concepts discussed in this guide.

- [Official Adobe Acrobat guide on how to make a document accessible](#)
- [Official Adobe Acrobat guide on using the Content and Tags panel](#)
- [PDF Remediation Basics](#)
- [Creating Accessible Word Documents](#)
- [Multiple Tables, Lists and other PDF Remediation](#)
- [Adobe Acrobat Basic Editing Tutorial](#)
- [Advanced PDF Accessibility with Adobe Acrobat Pro DC: Scanned Documents, Tables, and Lists](#)

Things to Always Remember

Below are some important best practices to keep in mind when remediating a PDF document.

- The highest tag in a hierarchy should always be a document tag with every single other tag as a child of it

- If a list contains a sublist (aka when there is an indent in a list with slightly different labels), make a new list item underneath the <LBody> tag of the associated list item. Then follow the same order of list, list item, label, and list item body as a usual list

Correct list tag hierarchy

- If a body of text is broken up into multiple content tags, even if they are all within the same paragraph, there is no need to combine them as long as there is no split in the middle of a word. The screen reader will still read it without issue
- Link - OBJR tags must always be the immediate child of a <Link> tag. The text/image associated with the link appears after the OBJR tag
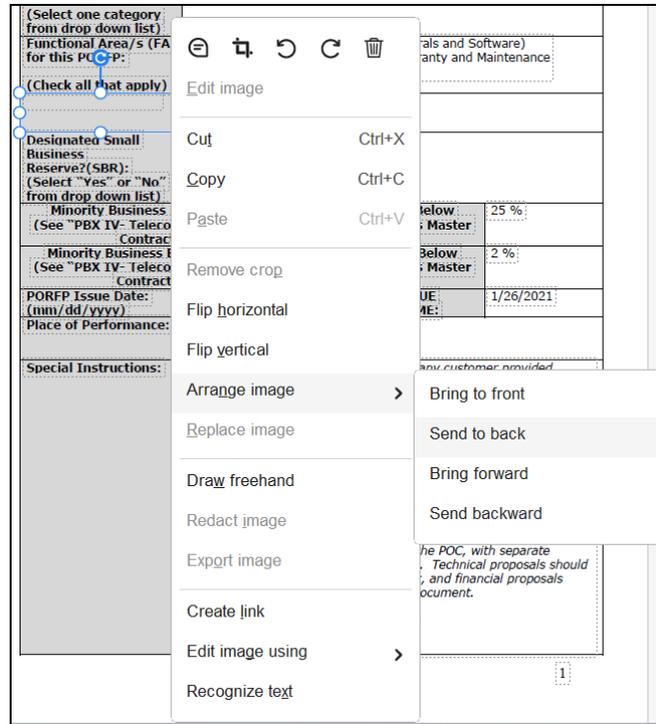- Tables always need at least one header cell
- Page numbers should be marked as artifacts
- Some documents are inaccessible simply based on how they were created, and changes will need to be made to the source document to remedy this
- If a table spans multiple pages, make sure it is all still under one single table tag instead of multiple
- If a link does not have an OBJR tag, right-click the text, click "Edit Link", then click "Actions" in the pop-up, then copy the link address. Afterwards, close the pop-up and right-click the link again and click "Delete Link." Highlight the text regularly and click "Create Link", and follow the steps to input in the desired location. After this is finished, an OBJR tag should be generated
- There will sometimes be a situation where it is genuinely easier to completely restart the work you've done on a page instead of trying to keep fixing it. The best way to do this would be to redownload the original document, then use the "Combine files" feature in Adobe to remove the problematic page and add the original page
- It is best practice to delete empty tags as it reduces visual clutter and memory usage

- Adobe Acrobat is known for being a somewhat buggy program. If you happen to encounter an issue, there is most likely someone online who has experienced a similar issue who can help out. See also the section below for more information

Known Issues with Adobe Acrobat

This section lists commonly encountered problems when making a document accessible along with possible solutions (if applicable). This is a nonexhaustive list.

- Content that has been tagged as an artifact is still appearing in the reading order
  - **Solution:** Go to the Content panel and see if the associated content that should be an artifact is under an <Artifact> container. If it is, then there is no worry as it will not be read out loud by a screen reader. Simply ignore it in the reading order and move on
- Certain content simply may be coded as an image when it is something else (such as text)
  - **Solution 1:** If you have access to the source document, see if you can either try redownloading the document as a PDF or even changing the text in question to a different font/color to see if that fixes the issue
  - **Solution 2:** Delete and retype the text using the Edit feature. You will need to retag it using this method (see Separating out Content or Making a new Tag)
  - **Solution 3:** While this is the least accessible method, adding alternative text to the image of the text that simply reads out the text is an option if the other two methods are not possible
- Creating new content tags (as described in Separating out Content or Making a new Tag) creates multiple different tags instead of one
  - **Solution:** Perform the method described in Combining Content
- The colored cells that appear with table editor do not properly align with the actual cells
  - There is no current solution to this. Oftentimes this is due to merged cells, but as long as every cell is correctly labeled and has the appropriate span values, this will not present an issue for users
- Sometimes during tagging, text can 'disappear' if it is on top of an image
  - **Solution:** Go to "Edit" in the top left, right click on the image overlaying the text, go to "Arrange image", and finally select "Send to back". The text should now appear correctly overlaid on the image

Making text reappear

Practice Material

Below are some downloadable PDFs that have been deemed accessible along with a version of them with no tags to allow for practice and comparing your personal results.

- Baltimore County, Maryland Addresses PBI Research Services MOVEit Incident (Remediation Difficulty: Easy)
  - Blank -
    📄 Baltimore-County-Statement-on-Third-Party-Vendor-MOVEit-Breach_PBI…
  - Accessible -
    📄 Baltimore-County-Statement-on-Third-Party-Vendor-MOVEit-Breach_PBI…
- LAN/WAN Service Agreement (Remediation Difficulty: Medium)
  - Blank - 📄 ServiceAgreement_LAN_WAN_Blank.pdf
  - Accessible - 📄 ServiceAgreement_LAN_WAN.pdf
- San Jose Generative AI Guidelines (Remediation Difficulty: Hard)
  - Blank - 📄 Generative AI Guidelines_Blank.pdf
  - Accessible - 📄 Generative AI Guidelines.pdf

Appendix

This section has more detailed definitions for some of the terms used in this guide.

- **Artifact:** items of a PDF that are ignored by screen readers. Marking something as an artifact on a PDF means that is not read aloud, and it is beneficial to tag items such as purely decorative images as such
- **Child:** a subitem to a "parent" tag. In this case, a tag being a child to a parent identifies the child tag as being associated with the overarching parent tag. For example, list item (LI) tags are always children of a list (L) tag as they are associated with that specific list
- **Form fields:** an area where a user can input or select information on a document. Examples include text boxes, checklists, and radio buttons
- **Radio buttons:** a set of (typically) circular, interactable components that allows the user to choose only one option from a set of choices