MONTCLAIR STATE
UNIVERSITY

Creating an Accessible PDF

Montclair State University is committed to making our digital content accessible to people with disabilities (required by Section 508). This document will discuss best practices in creating/editing an accessible file in Adobe Acrobat. This document is based off Adobe Acrobat XI Pro.

There are 4 recommended ways to create an PDF file:

1. Saving an accessible Microsoft Word file as a PDF
2. Saving an accessible Microsoft PowerPoint file as a PDF
3. Saving an accessible Microsoft Excel file as a PDF
4. Scanning a document using OCR (Optical Character Recognition)*

*It is helpful that when you scan a document, you set the OCR on your scanner so the text in the document is accessible and can be read by screen readers. If you do not have this feature, follow the Accessibility Wizard steps below.

Quick Tip:

To easily tell if your PDF is an image:

1. When you open the file does the document appear crooked on the page?
2. Are you unable to highlight specific text?
3. When you use the **Edit** / **Find** command to locate a piece of text that you can easily see on the page, the text is not found?

If you answered "Yes" to any of the above items, it is highly likely that your document is an image and not accessible. Adobe Acrobat Pro will assist you in making your documents accessible.

Using Adobe Acrobat Pro's Accessibility Wizard

The Accessibility Wizard will walk you through all of the steps necessary to making a document accessible, as well as identify any outstanding issues.

To run the Accessibility Wizard:

1. Open Adobe Acrobat Pro
2. Click **Edit PDF**
3. Select file and click **Open**
4. Click on **Tools** and select **Action Wizard**
5. Click on **Make Accessible**
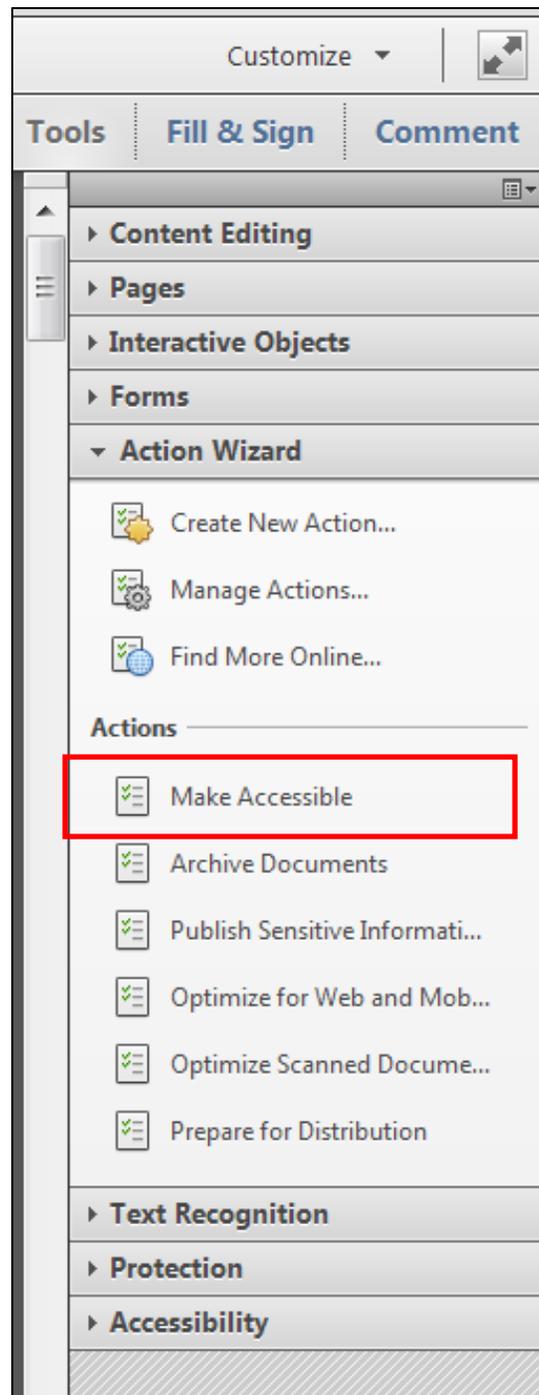
There are three main areas of this wizard:

- Prepare
- Set Language & Tags
- Run Accessibility Check

Prepare

The Prepare section allows you to set the document description, set open options, identify the OCR (Optical Character Recognition used by screen readers), detect form fields and set tab order.

To Add a Document Description:

1. Click **Add Document Description** and enter any necessary information
2. Click **OK** when finished
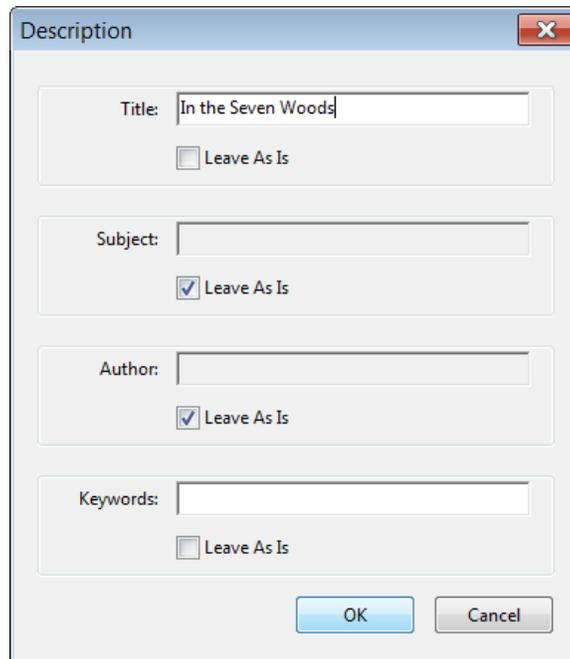
Note: Deselect **Leave As Is** if you entered text in the fields.

Set Open Options

This option assists users when the document loads by setting the metadata as the document title.

1. Click **Set Open Options**

Recognize Text Using OCR

Recognize Text Using OCR converts an image of text to actual text that can be read by screen readers.

1. Click **Recognize Text Using OCR**
2. Select the **Language** and click **OK**
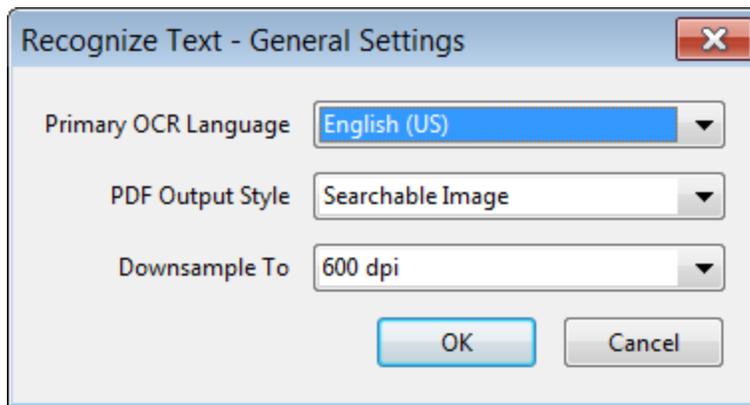
Detecting Form Fields & Setting the Tab Order

Adobe will attempt to identify if the document has any fillable forms fields, as well as set the proper tab order so the structure of the documents is preserved.

1. To detect if there are any fields in the PDF file, click **Detect Form Fields**
2. Either click **Yes, Detect the Form Fields** or click **No, Skip this Step** because your document does not contain form fields.
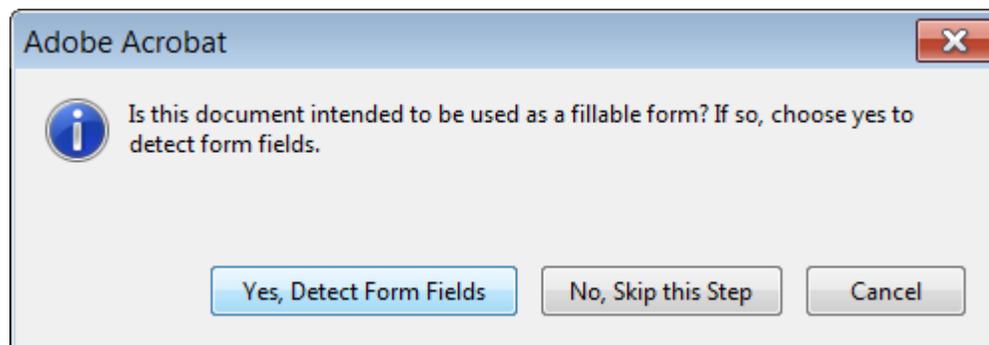
3. If the document contains Form Fields, click **Set Tab Order Property**

Set Language & Tags

Setting the Document Language allow screen readers to recognize the correct language.

To set the Reading Language:

1. Click **Set Reading Language**
2. Select the Language
3. Click **OK**

Autotag Document

Tags determine the reading order as well as identify non textual objects such as pictures, tables, etc.

1. Click **Add Tags to Document**

Setting Alternate Text for Tagged Item

In order for non-text elements to be accessible, alternate text must be added. The wizard will attempt to identify those items needing Alternate Text. For example, a picture or logo must have alternate text.

1. Click **Set Alternate Text**
2. Click **OK**
3. If an item(s) is found, enter the **Alternate Text** for the item or mark it as a **Decorative Figure**.
4. Navigate to the next item and repeat if necessary
5. When finished click **Save & Close**
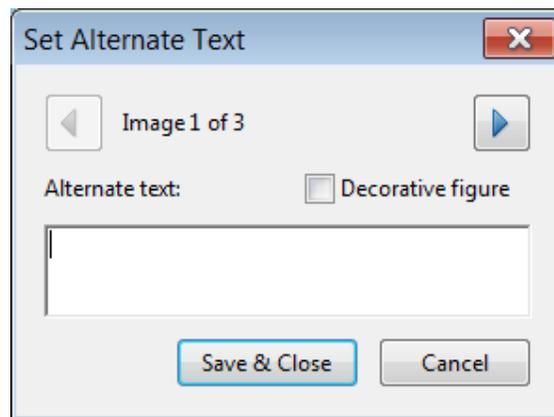
Run Accessibility Check

Once you have completed the steps above, you can now run the Accessibility Checker.

To run the Accessibility Check:

1. Click **Run Accessibility Full Check**
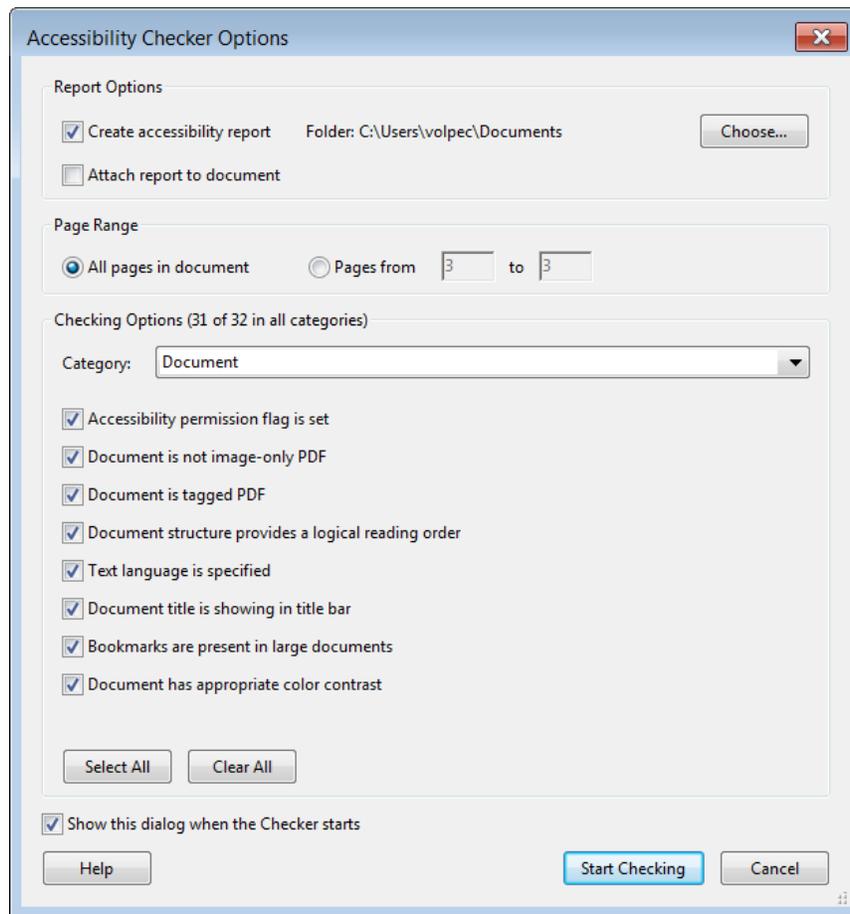
Note the default items selected in the above window.

2. Click **Start Checking**

Accessing the Report

Once the report runs, any issues that have not been resolved will be identified in the Accessibility Checker window on the left.
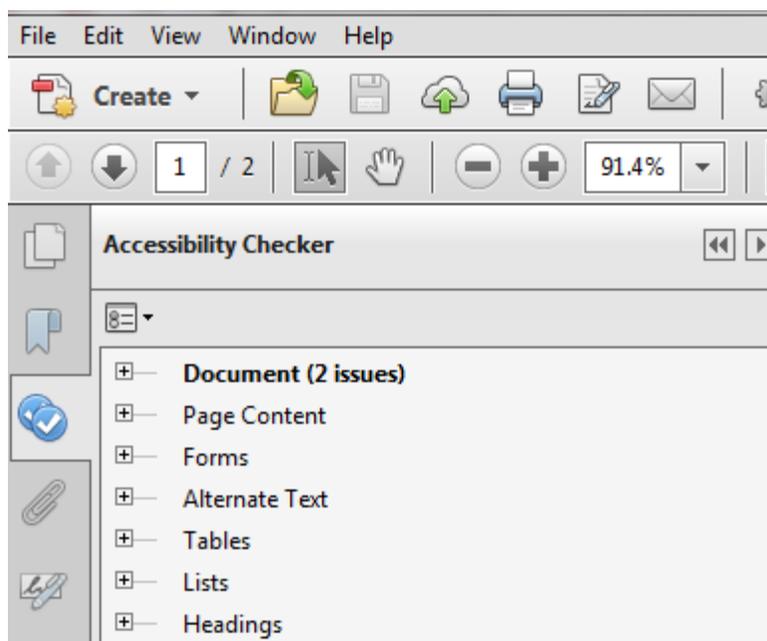
For details on the item detected:

1. Click the +link in the tree where the issues are identified

To view an explanation of the issue:

1. Right-click on the issue and select **Explain**
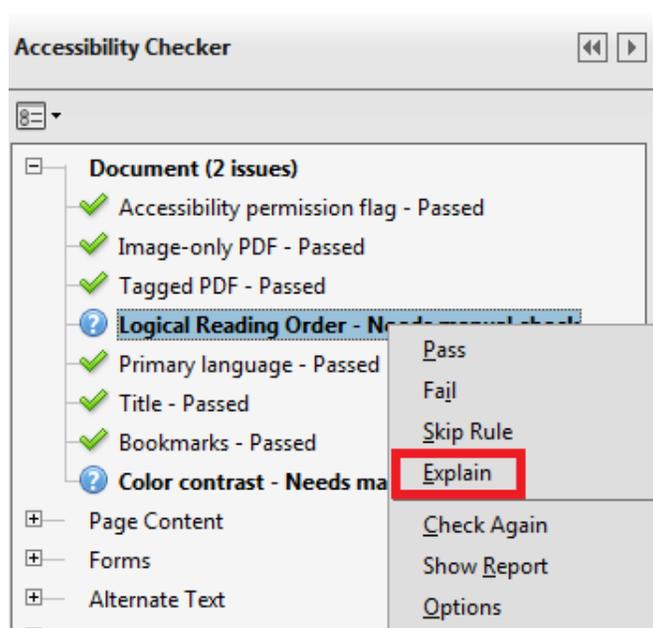
An Adobe Guide will open in your browser taking you to the location in the guide where you can learn more about the issue/topic.

If there is an actual error, a **Fix** option will also appear in the right click menu. Clicking on the **Fix** option will prompt you to make the appropriate adjustment.
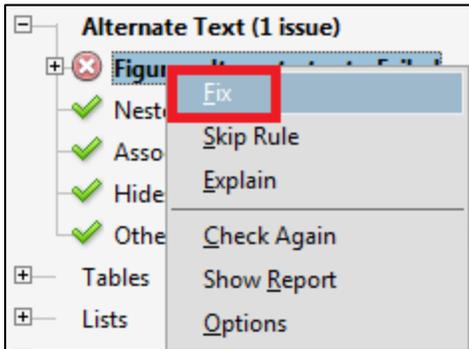
To view the full report

1. Click the **Accessibility Report** icon on the left (note: if the icon does not appear on the left, click the **Options** icon and choose **Show Report**
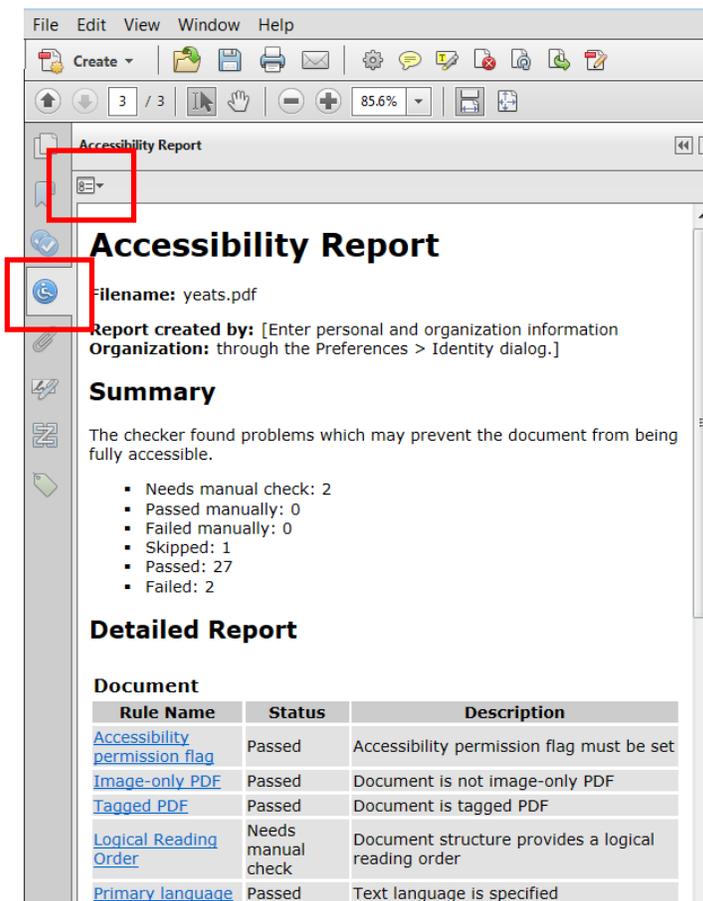
The items that still need to be checked will be identified in the **Status** field within the report.

For further information on the item, click on the link in the **Rule Name**.

Once the file has been made accessible, save the file.

To save the updated PDF file

1. Select **File**
2. Click **Save**

Understanding the Reading Order

Reading Order is the order that the content of the document will read aloud by a screen reader. Sometimes a user will have to manually add/edit tags in a document.

You can view the current reading order of your document by navigating the tags tree using your arrow keys on the keyboard.

To move through the reading order:

1. Click the **Tags** icon in the navigation pane on the left
2. Click **+tag** to expand the tree and continue clicking the **+** to continue expansion of the tree
3. Next, use your down arrow keys to move through elements of a document.

This is the reading order that the screen readers will use.

Headings

It is important that Headings in the document are tagged as headings so that those using assistive technology will understand what paragraph text is and what a heading is.

To check if the document has correctly tagged Headings:

1. Click the **Tags** button in the Navigation Pane
2. Click **+Tags** to expand the tag structure

Notice in the picture below, Adobe Acrobat uses the following codes to identify items as Headings.

1. H1
2. H2
3. H3
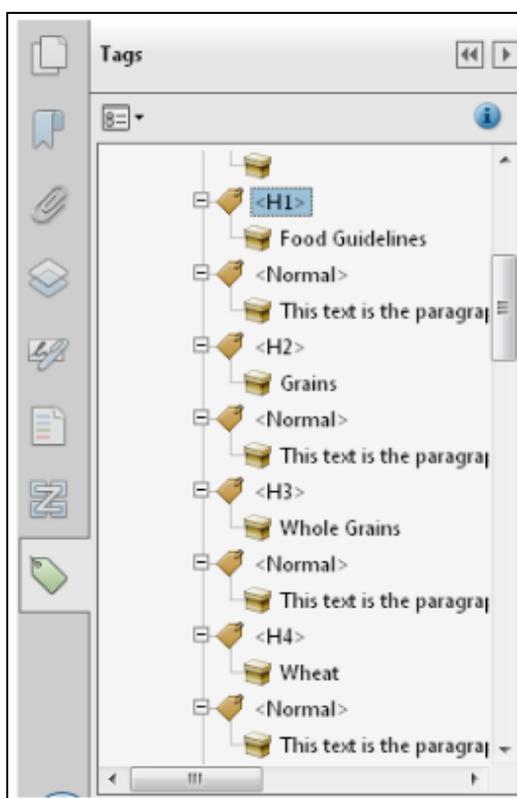
Links

Links in a document pointing to another website should be properly tagged as well as be purposeful when read out loud by a screen reader. Links should be tagged with the LINK-OBJR tag.

Understanding High-Contrast View

This tool is used either by an individual for reading purposes or by the creator of the document for evaluating the document for accessibility.

To enable High-Contrast View in a document:

1. Click **Edit** menu
2. Select **Preferences**
3. Choose **Accessibility** on the left
4. Select **Replace Document Colors**
5. Click **OK**
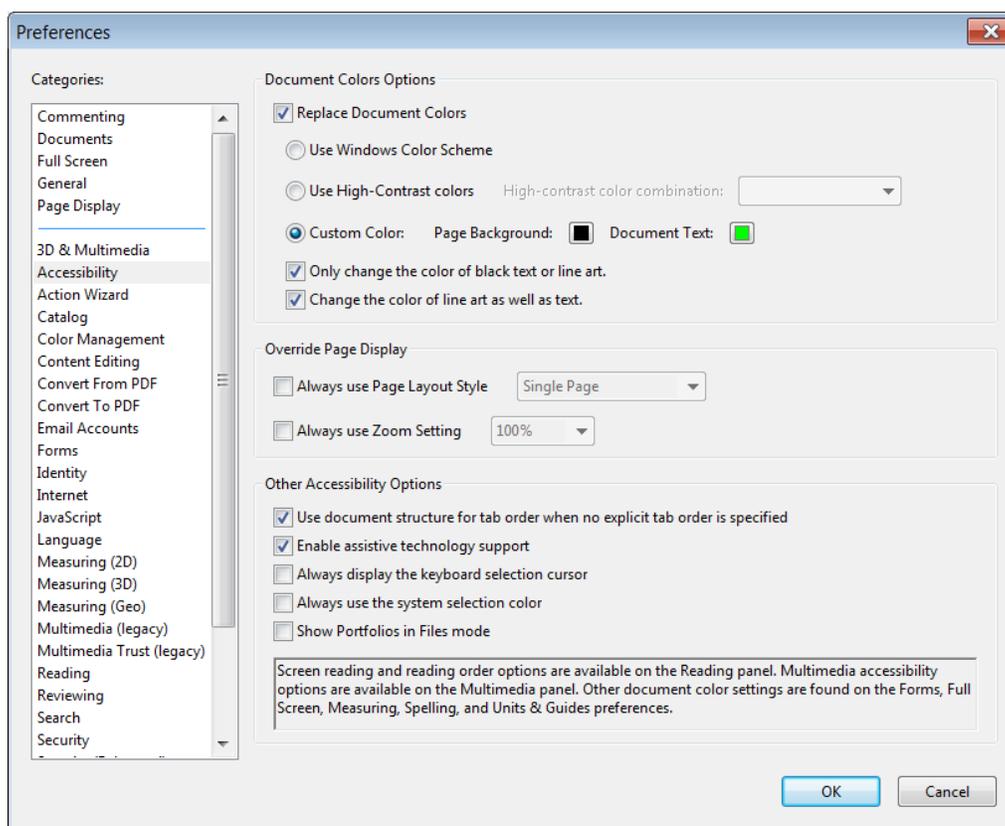
Repeat the steps to turn this function off.

Lists

Lists often cause accessibility issues for users with disabilities. If a list is not properly tagged, those using assistive technologies may not understand the relationship between the items in the list.

Note: It is recommended if you are creating lists in a Microsoft Office application, that you use the icons for numbering or bulleting on the toolbar. This way, should you later PDF the document, the list will be tagged appropriately by Adobe.

Below is a Table explaining how the lists should be tagged.

Item Type	Proper Tag
List	L
List Item	LI
List Item Label	Lb1
List Body	List/Item Body

Understanding Tags in Tables

Proper design and tagging is essential for documents that contain tables. Without the correct table structure, individuals using assistive technology may not be able to properly access and understand the content inside of tables.

Item Type	Proper Tag
Table	Table
Table Row	Tr
Table Header	Th
Table Date	Td

Note: Make sure tables have header rows and are defined as headers.

To view or edit the tags in a table:

1. Click on tags in the navigation pane
2. Click **+tags**
3. Locate the table in the list
4. Click **+table** to expand the tags of a table
5. If necessary, click on the tag that needs to be edited
6. Enter the tag code

Below is a picture identifying tags of the table below it.
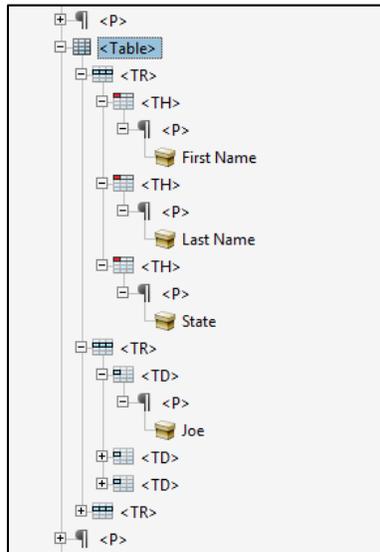
First Name	Last Name	State
Joe	Smith	New Jersey
Steve	Jones	Ohio

Table of Contents

Include a Table of Contents (with links) to large PDF files to allow those using a screen reader to jump to sections of the file. Creating the Table of Contents in Word and then saving the document as PDF will carry over the links for the TOC.

For detailed information on the items found in this window, visit the Adobe Acrobat XI Pro Accessibility Guide: Best Practices for PDF Accessibility website.