Introduction to Using Acrobat Pro DC to Create Accessible PDFs

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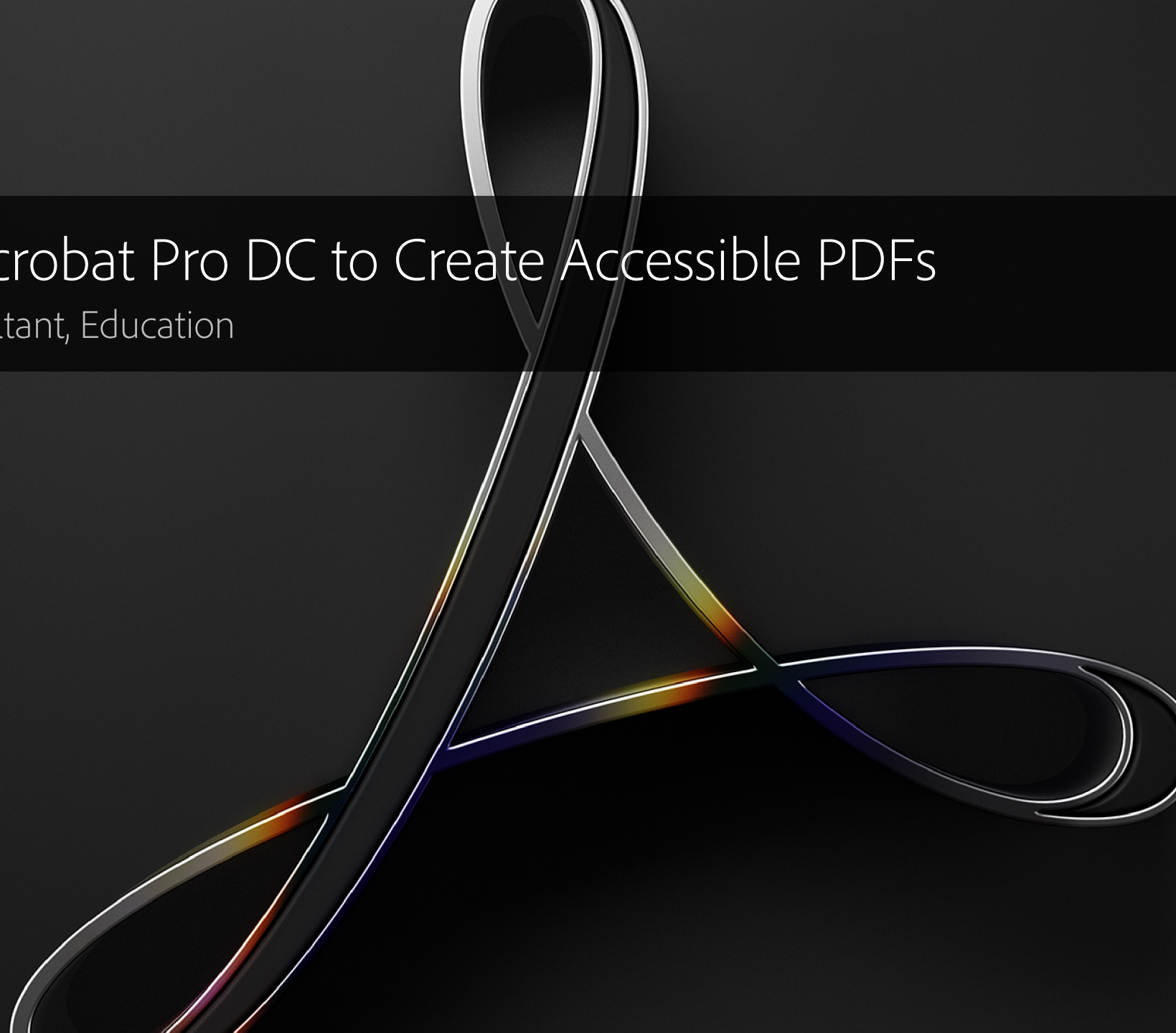

Revised April 2020

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Let's Talk About PDF/UA – ISO 14289-1

ISO 14289-1 is a subset of and references ISO 32000

- Subset of ISO 32000 for accessibility.
- Provides the text, structure, and organization of the content to assistive technologies.
- Tag Tree (Structure Tree) must be in the logical reading order.
- Shall vs. May
  - e.g., lists – Individual list items **shall** be specified by <LI> tags. <Lbl> and <LBody> tags **may** be included.
- Organizations may define their own specific rules

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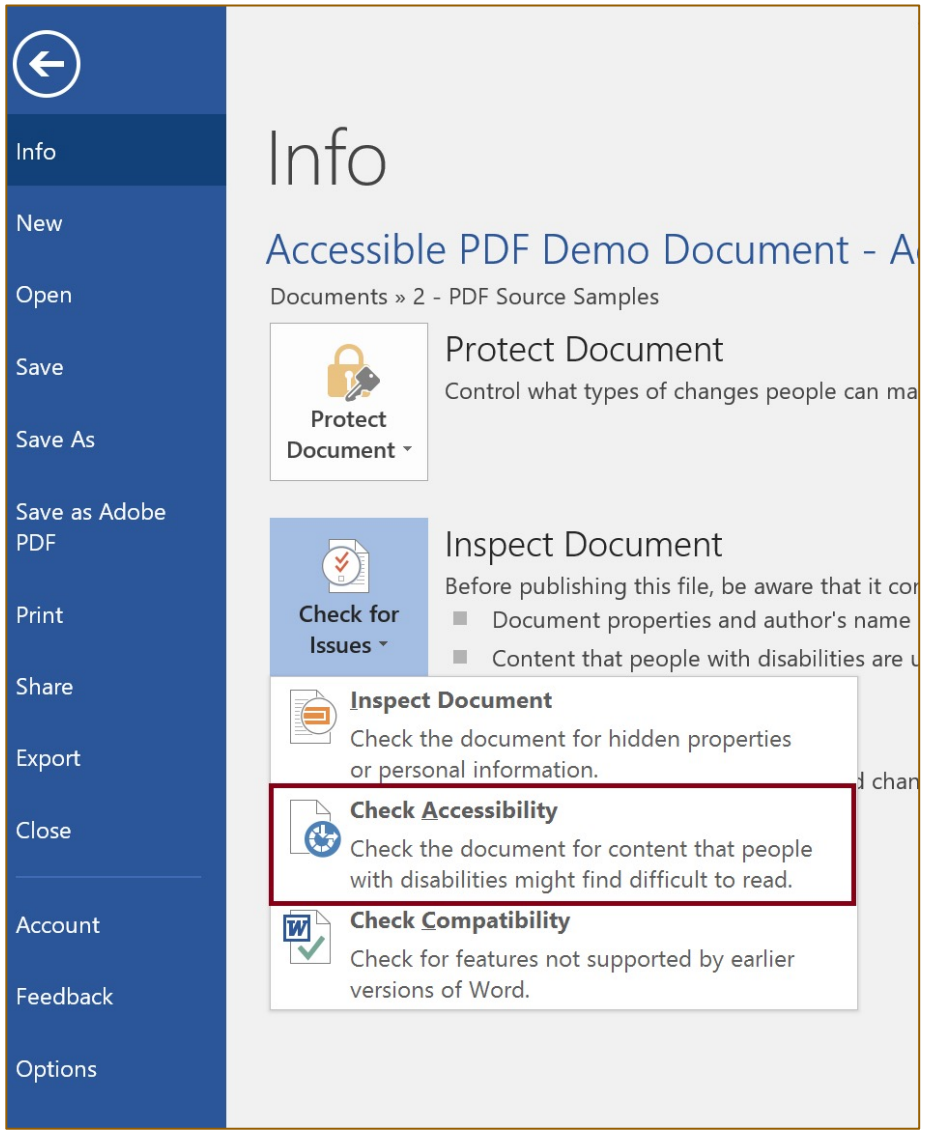
Source Document

The Source Document is Supreme

Things to consider when creating the source document:

- Does the authoring tool of the source document allow the author to create an accessible document.
  - For Example: Word has an Accessibility Checker to help the author make the document more accessible.
- Does the author know how to create an accessible document
  - For Example: In Word, are Styles used to apply Headings or are headings “created” by changing the font size and making the font bold?
- It is almost always easier to remediate the source document then the converted PDF document.



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Reading an Accessible PDF

Variables

1. Quality of the tagging of the PDF document (how accessible is the document)
2. Assistive Technology (e.g. Screen Reader) support for PDF tags
3. PDF “Reader” support for PDF tags
4. Untagged document (reading order inferred)

Best Results

1. PDF/UA tagged document
2. NVDA screen reader from NV Access (free screen reader)
   - https://www.nvaccess.org/download/
3. Acrobat Reader (desktop)

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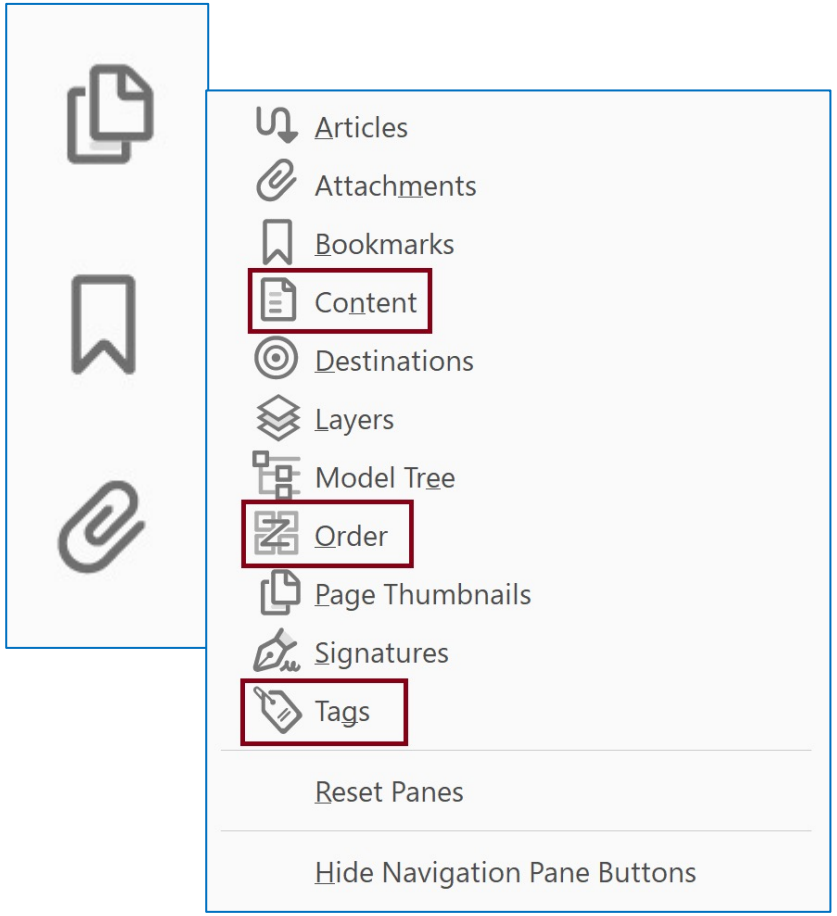
Acrobat Accessibility Setup – Navigation Pane

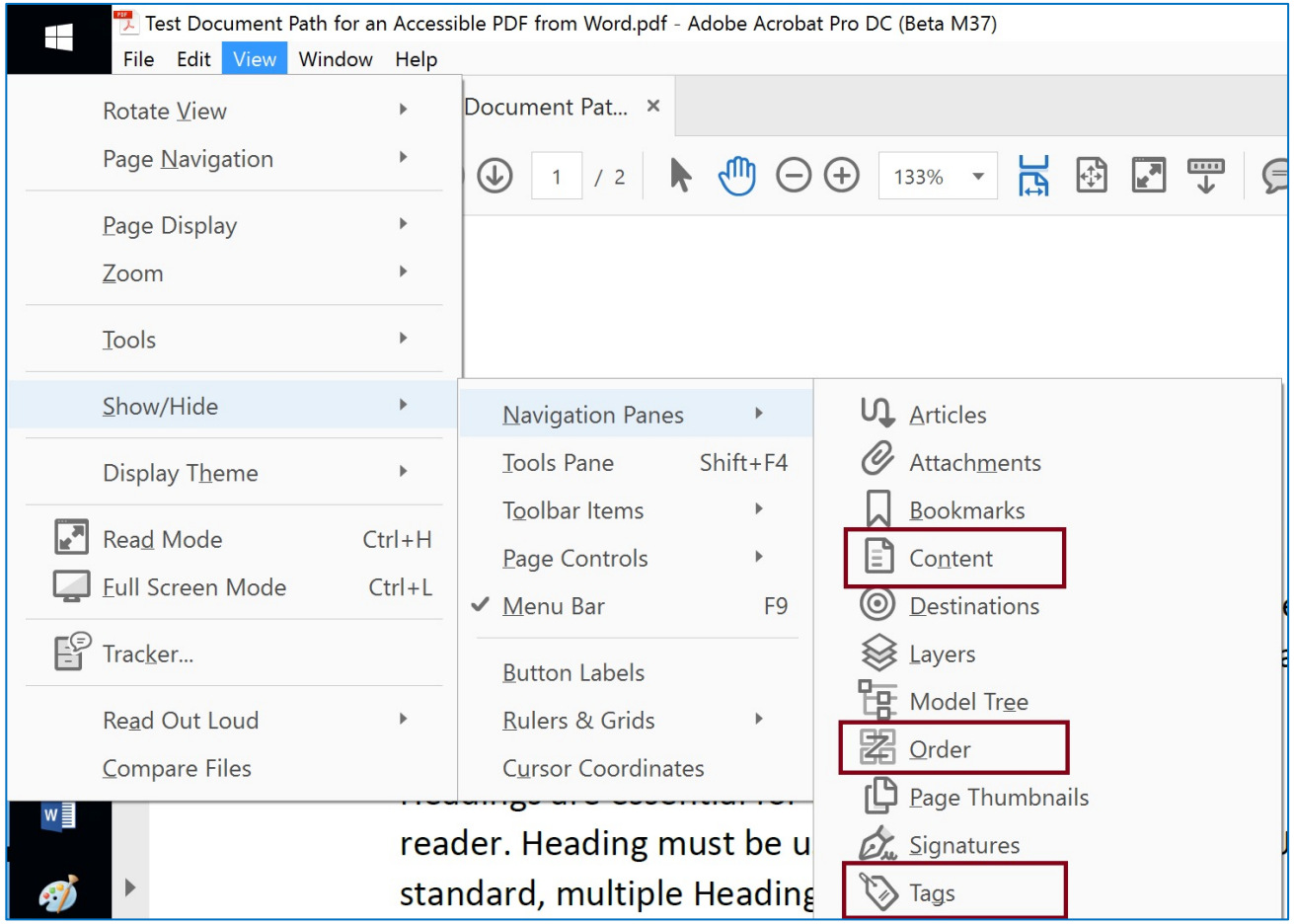
Short Approach

- Right Click on Navigation Pane
- Select: Tags, Content, and Order



Long Approach

- Go to: View > Show/Hide > Navigation Panes
- Add: Tags, Content, and Order



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Fixing Tags

- Content Shall be Tagged in the Logical Reading Order
- Common areas for review:
  1. Tables
  2. Figures
  3. Artifacts
  4. Lists
- Unique considerations depending on the source document and means of conversion:
  1. Scanned Document
  2. Role Mapping
  3. Links
  4. Form Fields

Note: Results depend on the conversion/tagging method

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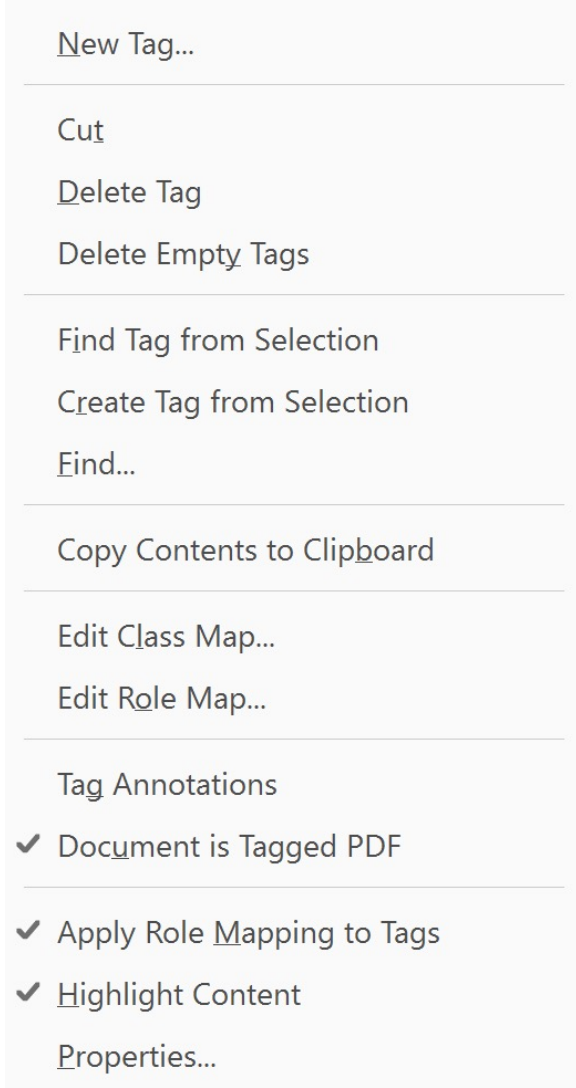
Editing in the Tag Tree – The Basics

Covered in specific exercises later.

1. New Tag
   - Select where you want the new tag inserted in the Tag Tree (inserts below selected tag)
   - Right click to open the Context Menu
   - Select “New Tag” and the tag type
2. Move Tags
   - “Drag and Drop” or “Cut and Paste”
3. Change Tag
   - F2



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Fixing Tags - Headings Basics

Heading Hierarchy - Use EX1 - Incorrect Heading Hierarchy

- PDF/UA allows for multiple H1 tags
- PDF/UA requires heading tags be in sequential order (WCAG does not)

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Fixing Tags – List Basics (Single level)

According to the PDF/UA ISO standard, a list must have the List <L> tag and List Item <LI> tags. They may also have the Label <Lbl> and List Body <Lbody> tags.

1. Open PDF document EX2 - Word Demo Doc with Errors
2. Open Tag Tree
3. Find mis-tagged list items (usually will have a <P> tag)
4. Create <L> tag
5. Change list items <P> tags to <LI> tags and make them children of the <L> Tag

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Lists – beyond the basics

Use PDF document EX3 - Complex List

- Correct so that the entire list is in one list <L> tag
- Fix sub-bullets (tagged at the same level)

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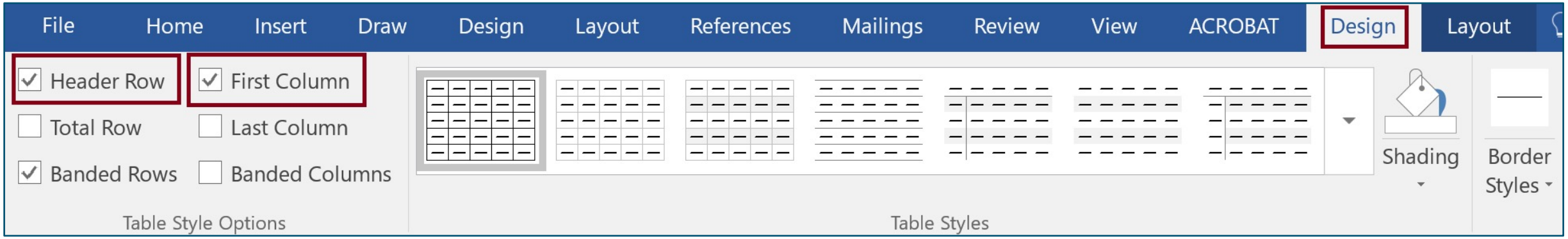
Table Header Cells - Office

Select in Word

- Header Row (Column Headers)
- First Column (Row Headers)



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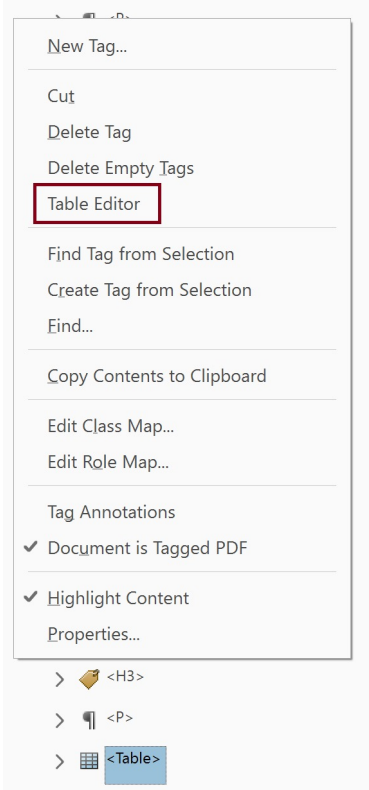
Fixing Tags – Basic Table

Column and Row Headers need to be tagged with the <TH> tag and data cells with the <TD> tag

1. Use PDF document to PDF EX2 - Word Demo Doc with Errors
2. Open Table Editor (context menu in Tag Tree or Reading Order tool)



3. Select and change <TH> tags to <TD> tags and add Scope

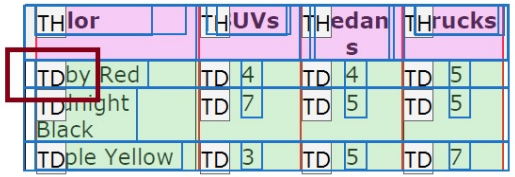


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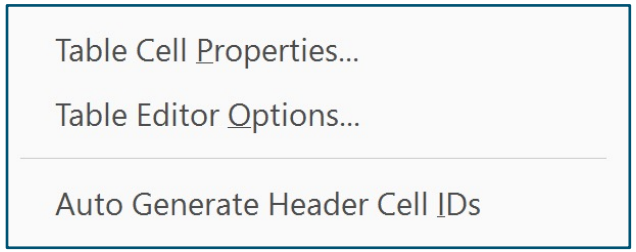
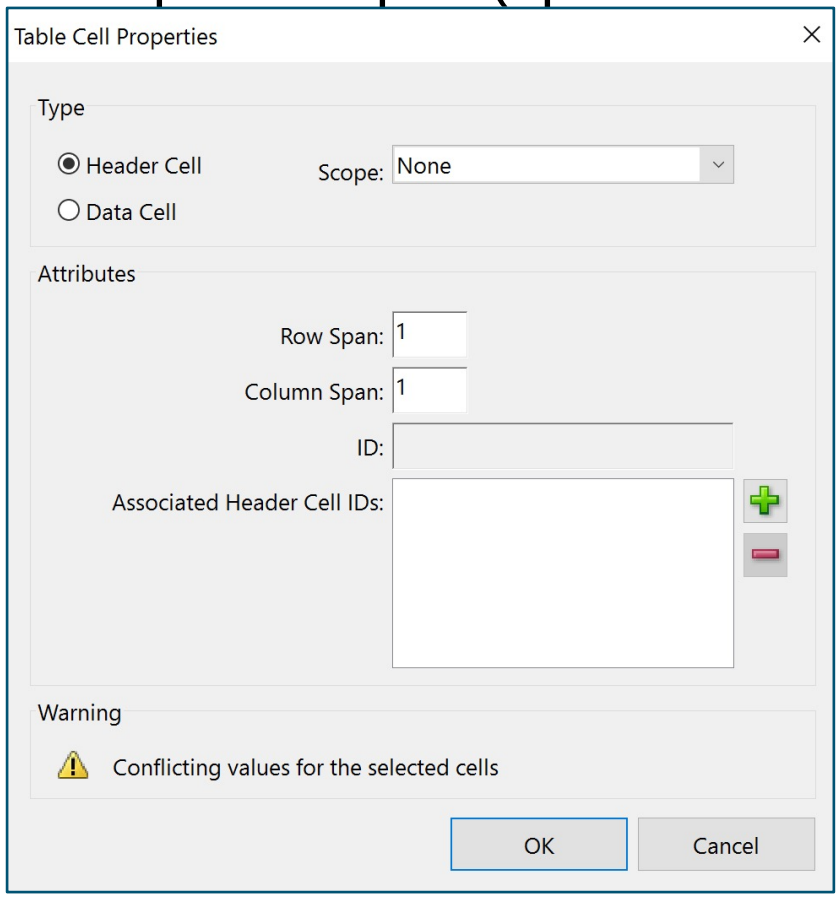
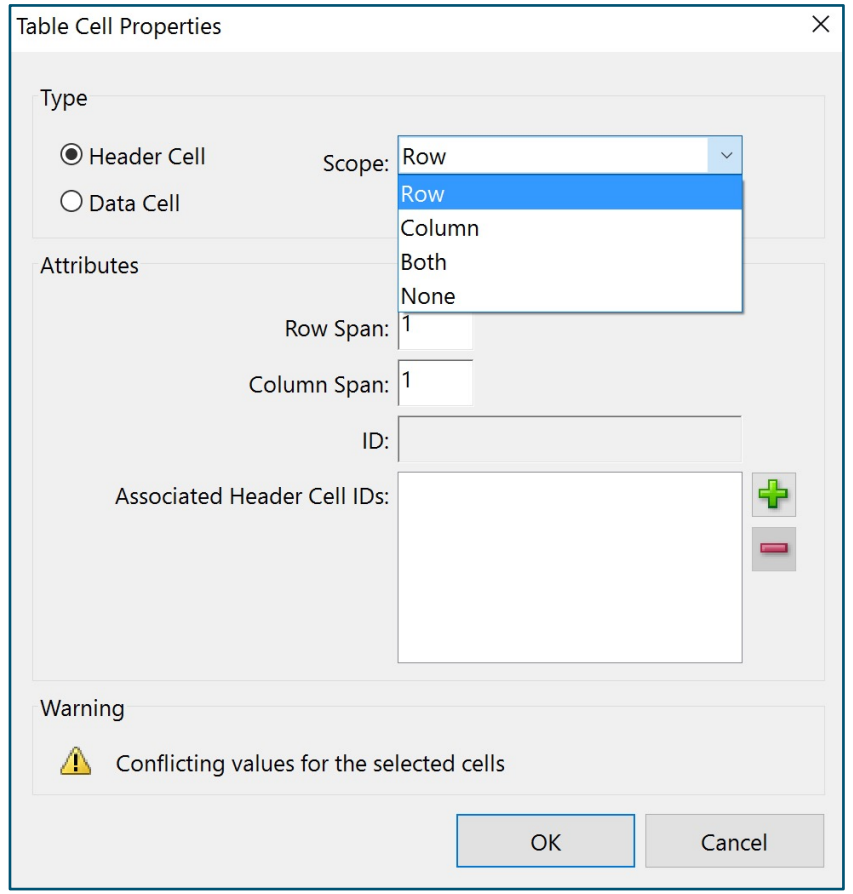
Table Header Cells - Acrobat

Select Header Cell radio button for a <TH> tag

- Row Headers should have a scope of “Row”
- Merged Headers need both Scope and Span (Span for number or rows or columns







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Tables with Merged Cells

Use document EX2 - Word Demo Doc with Errors

- Add scope and span to merged cells
- Match scope and span

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Artifacts

An artifact is content that does not provide meaningful information such as decorative images or line spaces. Artifacts should not be present in the Tag Tree.

Use PDF document EX2 - Word Demo Doc with Errors

1. Go to the Tag Tree
2. Look for empty <P> tags
3. Access the Reading Order tool from the Tag Panel
4. Select item number for content to be artifacted
5. Select “Background/Artifact” from the Reading Order tool
6. Note empty <P> tag is now gone and reading order number has shifted down.

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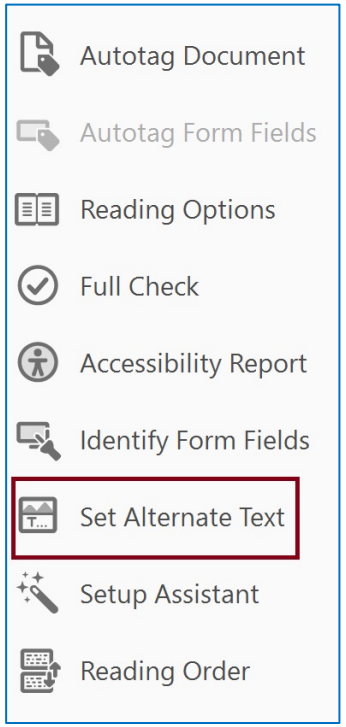
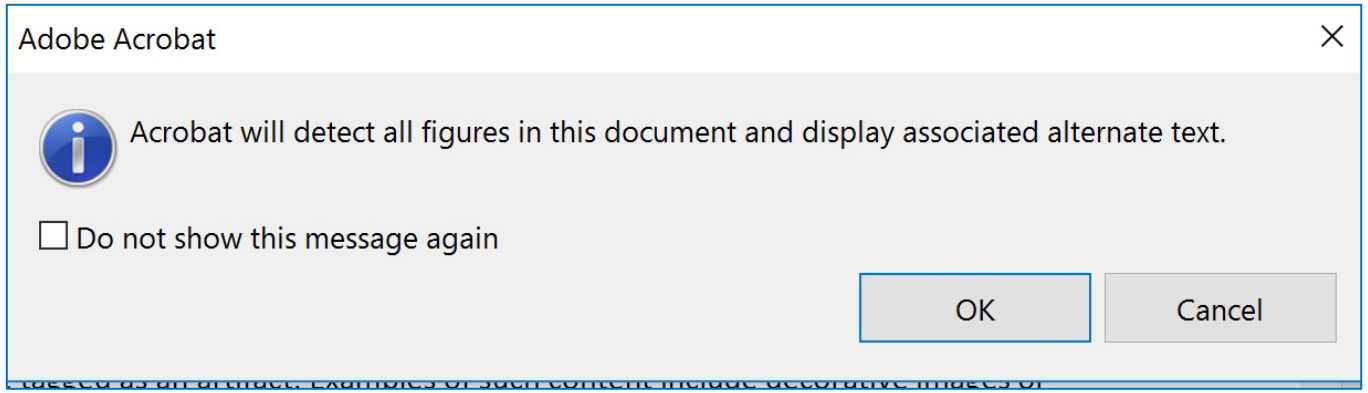
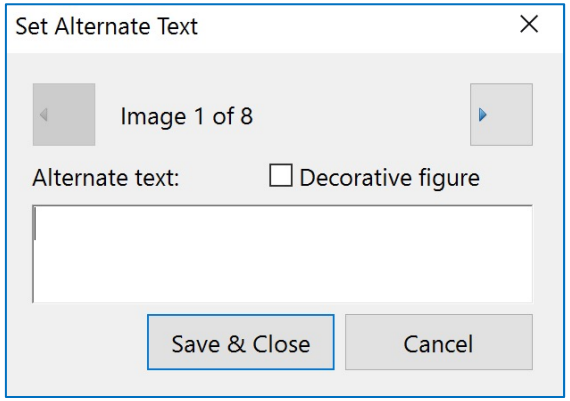
Images

1. Use PDF document EX2 - Word Demo Doc with Errors
2. Figures with Captions (Artifact?)
3. Without Captions (Alternative Text)
   - Select the Accessibility Tool







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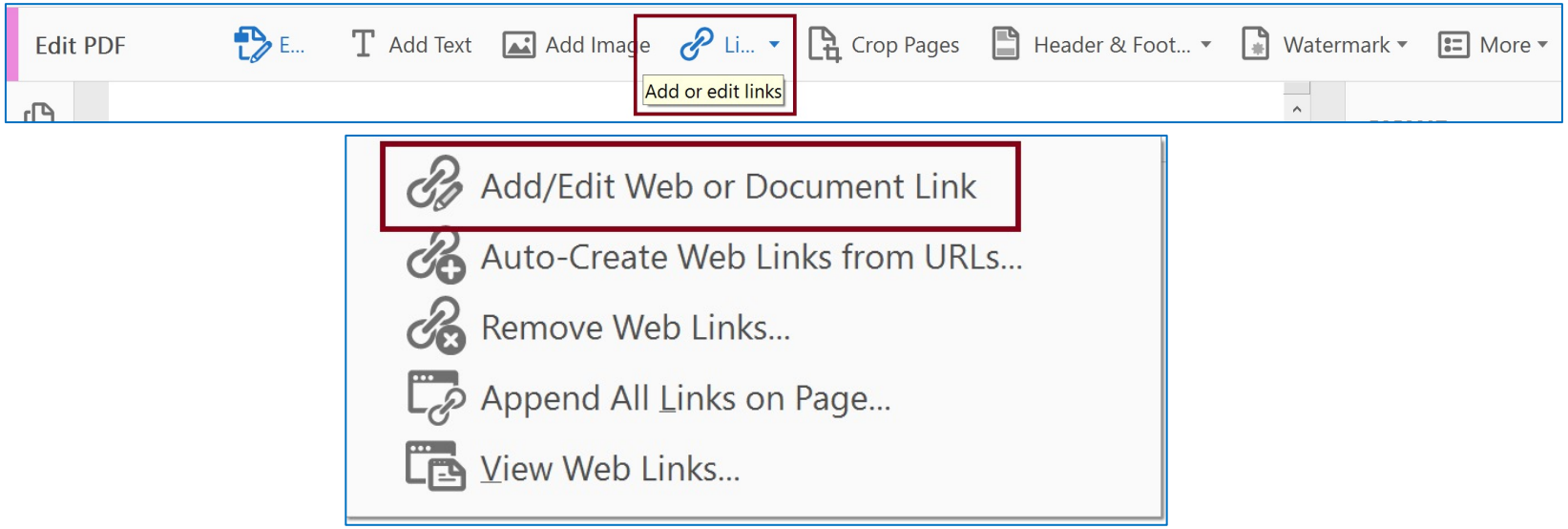
Links

1. Convert EX4 - Links with PDF Maker
   - delete tags and
   - re-add tags (best for forms – see hierarchy)
2. Convert EX4 - Links with Print and
   - Add links (similar to scanned doc), only need short URL.
   - Select content and go to context menu (right click) or use Edit Tool



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Training Options and Materials

- Webinars

  https://events-ar.adobeconnect.com/content/connect/c1/881497641/en/events/catalog.html?OWASP_CSRFTOKEN=1e73e0edb7545f3f9fdd08e895e134213f26efe05c1067bb15b4fc6234076238

- Webinar Recordings

  http://adobe.lookbookhq.com/acrobataccessibility

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Acrobat Pro DC Helpful Links and Resources

- Acrobat DC Accessibility
  https://www.adobe.com/accessibility/products/acrobat.html
- Adobe Acrobat DC Accessibility Features
  https://www.adobe.com/accessibility/products/acrobat/acrobat-accessibility-features.html
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Adobe Accessibility Resources

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PDF Standards

ISO 32000 (free)

ISO 14289 (PDF/UA) (purchase)

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