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The Leader in Accessible Solutions

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Quick Guide for Creating Accessible PDFs

Setting a Logical Reading Order

Document content is read in the order in which the content appears in the **Tags** tree. It is best to only manipulate the tags in the **Tags** pane. Check the reading order by:

1. Open the **Tags** pane
2. Activate the context menu (or right click) of any tag and ensure **Highlight Content** is selected.
    a. Note the selected tag's content will be highlighted in the document area.
3. Use the **arrow keys** on the keyboard to navigate up and down and determine if the order of the content is in the visually implied order.

Applying Heading Structure

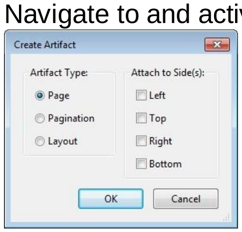
Headings identify sections of information. Headings also assist users navigate documents and understand the hierarchy of information. Headings should be ordered properly (using **H1** followed by **H2**, through **H6**). Not every emphasized phrase (bold, italicized, etc.) should be structured as a heading.

1. Locate the container tag (**P**, **Span**, etc.) containing the text that should be structured as a heading in the **Tags** pane.
2. Activate the context menu (or right click) of the container tag and select **Properties**.
3. In the **Object Properties** dialog, on the **Tag** tab from the **Type** drop down select the appropriate **Heading Level** tag type.

Handling Repetitive or Decorative Content

Non-distinct header and footer content, decorative images, drawing remnants and others should be labeled as artifacts.

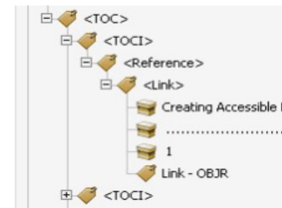
1. Locate the tag containing the decorative or repetitive content in the **Tags** pane. Select the tag containing the text to artifact, *not* the container (**P**, **Figure**, **Span**, etc.)
2. Activate the context menu (or right click) of the tag and select **Change Tag to Artifact**.
3. Navigate to and activate **OK** in the **Create Artifact** dialog.



Structuring Lists & Table of Contents (TOC)

It is important to structure lists properly to ensure proper relationships and hierarchy are provided. Bulleted or numbered lists should contain **L**, **LI**, **Lbl**, and **LBody** tags. The bullet or number text tag is placed as a child of the **Lbl** tag. The text of the item is placed as a child of the **LBody** tag.

Table of Contents need to have a **TOC**, **TOCI**, **Reference**, and **Link** structure for linked TOCs. The **item description, leader, page number and Link-OBJR** are placed as a child of the **Link** tag. Examples of proper list and TOC structure are provided.

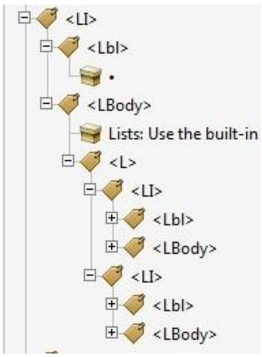


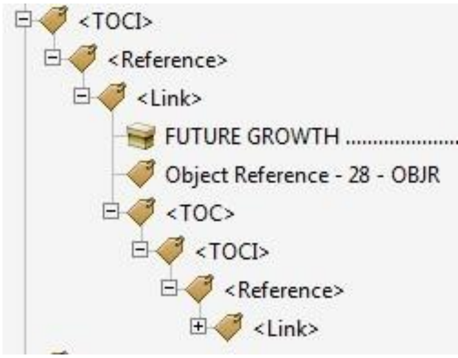
To create a list or table of contents structure:

1. In the **Tags** pane, activate the context menu (or right click) near a tag where the new list or TOC should be placed.
2. Select **New Tag**.
3. In the **New Tag** dialog, from the **Type** drop down select **List (L)** or **Table of Contents (TOC)**.
4. Activate the **OK** button.
5. Activate the context menu (or right click) of the newly created tag and select **New Tag**.
6. In the **New Tag** dialog, from the **Type** drop down select **List Item (LI)** or **Table of Contents Item (TOCI)**.
7. If necessary, move the new **LI** or **TOCI** tag beneath the **L** or **TOC** (respectively) as a child tag.
8. Repeat the steps to access the **New Tag** dialog and select **Label (Lbl)** and **List Item Body (LBody)** to complete a List structure. Select **Reference** then **Link** to complete a TOC structure.
9. Move the structure tags and the text content tags as necessary to match a similar outline as the example images.

Constructing a Sub-List

Often times lists and table of contents contain nested, or sub-list, items. These items must be properly placed in the structure to provide users with the correct hierarchy information. Sub-lists must have a new parent **L** or **TOC** tag as a sibling to the text tag in which the sub-item relates. Examples of proper structure follow.



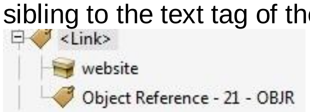


Use the steps provided in the **Structuring Lists and Table of Contents** section to create the structure for sub-lists. Arrange the tags as necessary to nest them properly and appear similar to the example images.

Creating Links

A link must have the structure of the **Link** tag with the text tag and a **Link-OBJR** tag nested as siblings beneath **Link**. If a link needs to be added navigate to the **Edit PDF** pane. Select **Link > Add / Edit Web or Document Link** tool, select the content to be linked and follow the **Create Link** wizard. Often content is clickable with a mouse but does not have the **Link-OBJR** structure in the tags. To tag unmarked links:

1. In the **Tags** pane, navigate to the text tag that is intended to be a link.
2. Activate the context menu (or right click) of the tag and select **Find**.
3. In the **Find Element** dialog, from the **Find** drop down select **Unmarked Links**.
4. Navigate to and activate the **Find** button.
5. Upon the desired content being highlighted, navigate to and activate the **Tag Element** button.
6. Navigate to and activate **Close**.
7. Confirm in the **Tags** pane that there is now a **Link-OBJR** tag as a sibling to the text tag of the link.



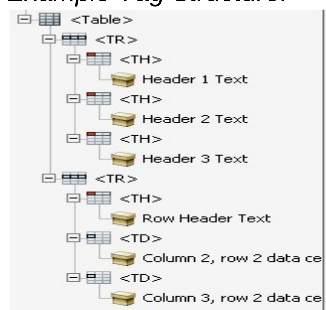
Designing Tables

Tables must have a tag structure that includes **Table**, **TR**, **TH**, and **TD** tags. **TH** is a row or column header. **TD** represents the data cells. There are two types of data tables. In a simple data table a data cell has a 1-to-1 relationship with a row and/or column header. In a complex table data cells can be related to two or more row and/or column headers.

Example Simple Data Table:

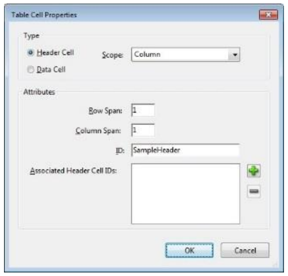
Header 1 Text	Header 2 Text	Header 3 Text
Row Header Text	Column 2, row 2 data cell text	Column 3, row 2 data cell text

Example Tag Structure:



Complex tables need to have **ID**s on the headers. The data cells need to list associated headers. The **Table Editor** can assist in identifying headers and associating them. Access the **Table Editor** and add header associations by:

1. Navigate to the **Accessibility** pane and activate **TouchUp Reading Order**.
2. Over the table structure, activate the context menu (or right click) and select **Table Editor**.
3. Select a table header cell, activate the context menu (or right click) and select **Table Cell Properties**.
4. In the **Table Cell Properties** dialog enter a name in the **ID** field. Then navigate to and activate the **OK** button.

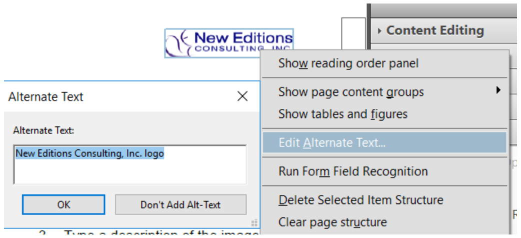


5. Repeat steps 4 & 5 for all Table Header cells.
6. For each data cell, select the cell and select **Table Cell Properties** from the context menu (or right click).
7. In the **Table Cell Properties** dialog select the **Add (+)** button for **Associated Header Cell IDs**.
8. Add the headers in a bottom to top order in which the headers need to be read.

Providing Alternate Text

Often times in Adobe Acrobat images, charts and graphs are presented as **<Figure>** tags. All meaningful images must provide a concise, meaningful description. A meaningful image is one that is important to understanding the surrounding content. Concise alternate text should not be more than 250 characters. Complex images (graphs, charts, schemas, etc.) need longer descriptions provided in surrounding text or in appendices. Alternate text can be added or edited through the **TouchUp Reading Order** (**TURO**) tool.

1. Open the **Accessibility** pane. Navigate to and select the **TouchUp Reading Order** tool.
2. In the main document, locate the image that needs alternate text or edits to the alternate text.
3. Activate the context menu (or right click) of the image and select **Edit Alternate Text** from the menu.
4. In the **Alternate Text** dialog, make the necessary changes or additions.



5. When finished, navigate to and activate the **OK** button.

Addressing Color & Contrast

Effective use of color will ensure that content is readable, accessible, and appealing.

1. Color should not be used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
   a. Example, graphs may need textured patterns to represent a data set (this must be done in the source application). Or important information should have textual representation before it such as an asterisk (*).
2. Verify text color provides enough contrast against the background color. There must be a minimum contrast ratio of **4.5:1**.
   a. Use **Edit PDF** to select the desired text.
   b. Then use the **Font Color** picker to choose an appropriate color against the background.

Making Fillable Forms

The structure of form fields is a **<Form>** tag with a nested **Field Name – OBJR** tag. In the **Tags** pane the form object tags for text fields need to appear after the tag containing the text label of the field. (Checkboxes and radio buttons should be positioned to the left of the labels, and thus before their text label in the tags.)

Providing Tooltips for Form Fields

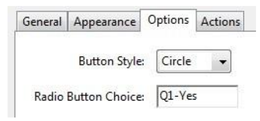
Tooltips identify the purpose of the field to users. It is important that any constraint, formatting or group information is included in the tooltip. For example, if a field is required that information needs to be part of the tooltip. If a block of fields relate to a shipping address and another block relates to billing, it is important to indicate the category before the field name – ex. “Billing – City”. To add tooltips:

1. Navigate to the **Prepare Forms** pane.
2. When the form editing mode becomes active, activate the context menu (or right click) of the desired form field and select **Properties**.
3. In the **Properties** dialog, on the **General** tab write a meaningful, concise description in the **Tooltip** field.
4. Navigate to and activate the **Close** button.

Grouping Radio Buttons

In order for radio buttons to perform as a related group they must have the same group name but unique choice names. For example, there could be multiple questions with 'yes' and 'no' radio buttons. To set up radio buttons:

1. Navigate to the **Prepare Forms** pane.
2. When the form editing mode becomes active, activate the context menu (or right click) of the desired radio button and select **Properties**.
3. In the **Properties** dialog, on the **General** tab write the same meaningful, concise description in the **Name** and **Tooltip** fields. Example: Question 1 or Gender.
4. Navigate to and activate the **Options** tab.
5. In the **Radio Button Choice** field and enter the specific answer option for the radio button. Example: Yes or Male. Assistive technology announces the **Tooltip** + **Radio Button Choice**.

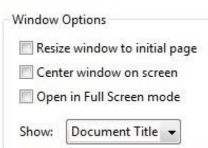


6. Navigate to and activate the **Close** button.

Using Document Properties

It is important that documents provide a meaningful title and set the appropriate language so that the document can be interpreted as intended.

1) Navigate to **File > Properties**.
   a) To set a descriptive title, ensure the **Description** tab is active.
      i) Locate the **Title** field and enter a phrase that describes the purpose of the document.
      ii) Navigate to and select the **Initial View** tab.
      iii) Locate the **Window Options > Show** drop down and select **Document Title** from the options.

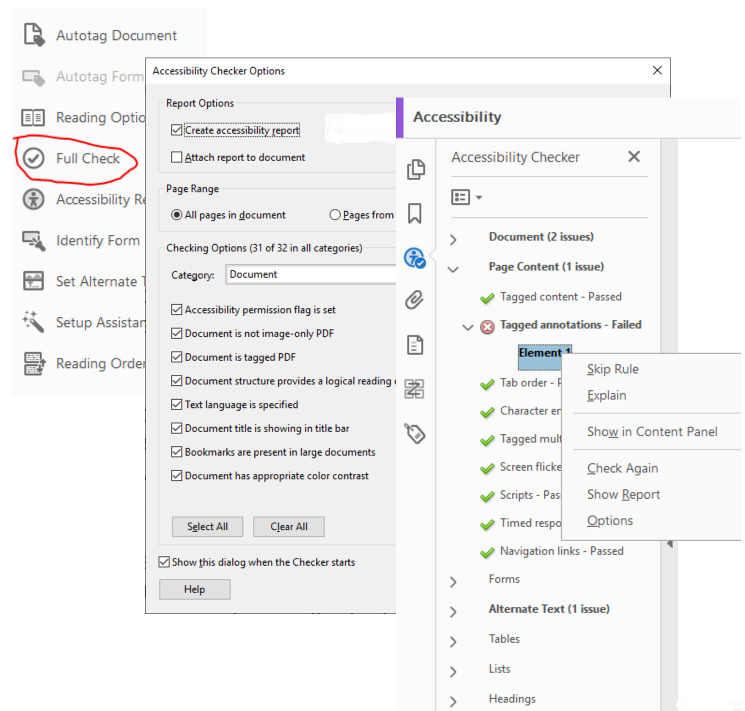


   b) To set the primary language of the document, navigate to and select the **Advanced** tab.
      i) Under **Reading Options** select the primary language of the document from the **Language** drop down.
2) Navigate to and activate the **OK** button.

Validate Accessibility with Full Check

Running the **Full Check** accessibility checker can help identify some accessibility issues; however, the checker cannot detect all potential issues. It is necessary to additionally perform a manual inspection of the **Tags** structure. To run **Full Check**:

1. Navigate to and expand the **Tools > Accessibility** pane.
2. Locate and activate **Full Check**.
3. In the **Accessibility Checker Options** dialog review the settings and make any necessary adjustments. Tip: The default settings usually provide sufficient results.
4. When ready, navigate to and activate the **Start Checking** button.
5. After the checker runs, results will appear in the **Accessibility Report** pane on the left.
6. Review the results and make any necessary modifications. Most changes will need to be made through the **Tags** pane.
   a. Activate the context menu (or right click) of an issue to **Explain**, **Check Again** or **Skip Rule**.



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