

## **Purdue Ag Communication**

### **Guidelines for Creating ADA-compliant PDFs**

*Before you start, remember:*

- It is almost always best to do as much in the layout program (InDesign, Word) as possible before exporting to PDF.
- TAGS (XML) are the most critical part of the design process. They tell the assistive devices what to read and in what order to read it. A Tag Master file is available to load into your template.

Use Style Sheets as normal to create layouts; tags should closely follow the styles.

- ALL parts and pieces of a publication MUST be designated with tags, even non-reading graphic elements. Any non-tagged element in the final PDF could trigger a problem warning in the final accessibility check.
- All photos and graphics *must* have ALT TAGS added to them (it is best to do this in the layout program, although it is possible to add them in Acrobat Pro).
- Tagged text can be verified both on the page layouts (colored brackets) and in the PAGE EDITOR mode.
- Text should be kept all one container or as few containers as possible. Photos would work best if placed as anchored objects if possible.
- TABLES should be kept as text (from Word or Excel) and not as a graphic. They have their own special tag.

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*Recommended procedures:*

#### **In InDesign**

1. If you are using a pre-existing template, take a few minutes to tag any template elements. If a banner is composed of many elements, you might consider consolidating these into one graphic element (PhotoShop) and placing into permanent position in the template.
2. Import the text and place in one, continuous container (InDesign) if possible (this process is more critical in creating epubs). Follow normal layout procedures, assigning styles to components.
3. Load tags into template pallet and assign them as text elements as close to the style elements as possible.
4. Add photos and graphics (anchored objects must be used for epubs). Add XML tags.
5. Assign ALT TAGS to photos and graphics using the STRUCTURE window, select the FIGURE icon, right-click NEW ATTRIBUTE, then type "Alt" (caps and lower-case) and the photo caption. (manually or "Map Tags to Styles")
6. Save and export to PDF. Make sure that the "Create tagged PDF" box is checked (other choices are made as for your normal PDF output based on final purpose). Remember to make sure ALL elements are tagged before exporting.

## In Adobe Acrobat Pro

1. Open the PDF file and notice the numbered boxes around the different parts. Under the TOOLS menu, open up the ACCESSIBILITY tab. Select the TOUCH UP READING ORDER tab to display the Touch Up navigation panel. Click on the SHOW ORDER PANEL and the left side of the PDF window will open up.
2. Evaluate the order of the content that has been read from the InDesign file and adjust by dropping and dragging in the ORDER panel. Notice that elements tagged as ARTIFACTS do not have any boxes around them. Check that all valid content is designated and all non-reading elements are unboxed.
3. You can eliminate any backgrounds or non-reading elements at this point by clicking the TOUCH UP ORDER icon (upper right) on the TOUCH UP READING ORDER panel, drawing a box around element, and choosing the BACKGROUND tag in the panel.

You can also add elements that you may have missed in the layout file by selecting them (same as above) and tagging using the selections in the TOUCH UP READING ORDER panel. After these adjustments, reorder as necessary using the ORDER panel on the left.

4. ALT TAGS can be modified in Acrobat by selecting the TOUCH UP TOOL in the upper right corner of the TOUCH UP READING ORDER panel and clicking in the ORDER NUMBER box of a figure, right clicking your mouse, and selecting EDIT ALT TEXT...
5. On the left navigation window, select the TAGS icon and look at how the flow is mapped with the tags that you added. If you have any tables, look under the TAGS icon to see that they are treated as TABLES. You can test that later.
6. After all has been adjusted, two finishing steps are required in order for the PDF file to be viewed/read as ADA accessible:
  - A) **Designate a language** - under main Acrobat FILE MENU, pull down to properties and select the ADVANCED tab. Under the READING OPTIONS/LANGUAGE section (very bottom), scroll through the drop-down menu and select ENGLISH.
  - B) **Specify document structure** - click the top PAGE THUMBNAILS icon in the left navigation panel and select all pages (shift + click or rubber band). Right click your mouse and select PAGE PROPERTIES... Under TAB ORDER, select USE DOCUMENT STRUCTURE radio button to specify the overall order to be followed by the assistive device.
7. After all has been completed, be sure to use the SAVE AS option found under the FILE menu to be sure that your PDF has been fully optimized.

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## ADA Compliant Testing (in Acrobat)

- Under the ACCESSABILITY TAB on the right navigation (TOOLS) menu, select FULL CHECK, then click the START CHECKING button on the bottom right. If all is successful, you should see:

“THE CHECKER FOUND NO PROBLEMS IN THIS DOCUMENT”

- For an additional test to review your results, go under the main VIEW MENU and select READ OUT LOUD and ACTIVATE READ OUT LOUD.

## **ADA Compliant PDF Retrofitting**

- There are two ways to retrofit an existing PDF document:
  - automatically with hands-on adjustments, and
  - manually building the selections and order

### ***Automatic Procedure***

1. Open the PDF file to be tagged, the STRUCTURE PANEL (by clicking on the ORDER or TAGS panel on the upper left), and the ACCESSIBILITY PANEL (under TOOLS MENU on the upper right).

Notice, as you look at the TAGS and ORDER panels, that there is no information like the PDF exported from InDesign/Word that has been tagged.

2. You can add TAGS automatically by going under the TOOLS/ACCESSIBILITY menus and selecting ADD TAGS TO DOCUMENT. This tool reads the containers from the original layout program and makes guesses as to the possible order of the content.

Notice that a recognition report is generated and gives you all of the problems that the file currently has (not-so-great guesses, but it's a start).

3. Select the ORDER PANEL and see that the auto structure has been documented. Click on the TAGS PANEL and see that an outline has also been created.

Under the ACCESSABILITY MENU, select TOUCH UP READING ORDER to show the READING ORDER PANEL.

4. Return to the ORDER PANEL on the left and proceed to adjust the reading flow of the content by dragging items into the order that you want. You can change your mind and reorder items as much as you want.

Notice that as you combine separate- but-close items, they may combine into a single box. Also, remember to select and label non-reading items with the BACKGROUND tag.

When the auto tagging feature is used, it frequently makes for a lot of reworking. To do this, select the TOUCH UP READING ORDER TOOL ICON (in the upper right corner of the floating panel of the same name) and add or delete containers.

### ***Manual Procedure***

1. 1. Open the PDF file to be tagged, the STRUCTURE PANEL (by clicking on the ORDER or TAGS panel on the upper left), and the ACCESSIBILITY PANEL (under TOOLS MENU on the upper right).

Notice, as you look at the TAGS and ORDER panels, that there is no information like the PDF exported from InDesign/Word that has been tagged.

2. You can add TAGS manually by going under the TOUCH UP READING ORDER PANEL and selecting the TOUCH UP READING ORDER TOOL ICON (in the upper right corner of the floating panel of the same name) and add or delete containers.

Then reorder them as necessary in the ORDER PANEL on the left.

3. To delete existing containers, select the number box of the item, right click your mouse, and select either DELETE SELECTED ITEM STRUCTURE to undesignate it, or select EDIT ALTERNATE TEXT to add your ALT TAGS.
  4. After all has been adjusted, two finishing steps are required in order for the PDF file to be viewed/read as ADA accessible:
    - A) **Designate a language** - under main Acrobat FILE MENU, pull down to properties and select the ADVANCED tab. Under the READING OPTIONS/LANGUAGE section (very bottom), scroll through the drop-down menu and select ENGLISH.
    - B) **Specify document structure** - click the top PAGE THUMBNAI LS icon in the left navigation panel and select all pages (shift + click or rubber band). Right click your mouse and select PAGE PROPERTIES... Under TAB ORDER, select USE DOCUMENT STRUCTURE radio button to specify the overall order to be followed by the assistivve devise.
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