

## PDF Accessibility with Adobe Acrobat DC



One of the questions I get asked most during my workshops is, “What can I do with all of my PDF files?” It’s a good question to ask as the push recently has been to convert all PDF documents into Microsoft Word files. There are a multitude of reasons for this but let’s examine just a few.

Table 1 Word vs Acrobat

Microsoft Word	Adobe Acrobat DC
<ul style="list-style-type: none"><li>• Has multiple easy-to-use tools to program accessibility into your documents.</li><li>• Can be exported into many different formats and still maintain accessibility (including PDF).</li><li>• Works with a multitude of assistive technologies.</li><li>• There are many word processors which can work with and open Microsoft Word files.</li></ul>	<ul style="list-style-type: none"><li>• Can often be saved as images of text causing an immense barrier to accessibility.</li><li>• There are much fewer PDF editors available on the market.</li><li>• Is difficult to navigate for accessibility editing and can present challenges one wouldn’t find when editing in Microsoft Word.</li></ul>

With this information in mind, it’s no surprise the aforementioned trend exists; however, if you still want to try your luck at PDF editing, I hope the following guide will start you off on the right track.

### Exporting from Word to PDF

One strategy to navigating PDF accessibility is to instead create your documents in Microsoft Word, program them accessibly there, and export them to a PDF file. To do this, follow the steps to make an accessible Word document, then do the following:

1. In Microsoft Word, go to *File*.
2. Select *Export*.
3. Select *Create Adobe PDF*.
4. In the Save window which opens, select *Options*.
5. In the Options window, check the box for *Enable Accessibility and Reflow with tagged Adobe PDF*.
6. Select *OK*, then select *Save*.

The resultant PDF file will maintain all of your accessibility edits you made in Microsoft Word and will interact appropriately with assistive technology. If you are not starting with a Word document, you can create accessibility by interacting with the Order and Tags menu panes in Adobe Acrobat DC to ensure your content is 100% accessible.

## Order

In the Order menu pane, you will be able to designate most of your Tags as well as set the read order for the document. To open the Order menu pane, select *View*, then *Show/Hide*, then *Navigation Panes*, and finally *Order*. Once you have the Order menu pane open, your first goal will be to identify each item on each page:

1. In the Order menu pane, right-click on the page you are working on and select *Show reading order panel*.
2. Use the cursor to highlight items on the page (headers, images, paragraphs, etc.).
3. Once you have a single item highlighted, designate it appropriately using the Reading Order Panel.
4. Continue to do this for all items on the page.

Once all items on a page have been identified, you will need to verify the order. Each item should have a number designating when it will be read to a user of assistive technology. This will also affect the order in which text is selected with a cursor. If an item is out of order it's important that you do not move items up the list. This is because of an issue in Acrobat where items will visually appear or disappear around the static image layer on the surface of each page, so be sure to follow the steps below if an item is out of order:

1. Close the reading order panel.
2. In the Order menu pane, click and drag the first item to be read down to the bottom of the list for that page.
3. Continue by dragging the second item to the end of the list, then the third, and so on.
4. Once every item has been dragged to the bottom of the list, the last item should be there while the first item you dragged down should now be at the top.

Note:

Because of this unfriendly user interface and the inconsistency of interactions, it is recommended that you save your progress often (try doing so after each page). Many of the changes you can make to a PDF document won't behave as desired and oftentimes cannot be undone. Saving at least once every page allows you to review, and if something is amiss, you haven't lost a significant amount of work.

## Tags

The Tags menu pane allows you to edit the Tags you have already designated in the document. Some of the most commonly used items and their associated tags include:

- Paragraphs (<P>) (also known as *Text* in the Order pane)
- Headers (<H1>, <H2>, <H3>, etc.)
- Figures (<Figure>)
- Tables (<Table>, <TR>, <TH>, <TD>)
- Lists (<L>, <LI>, <LBody>)

If used appropriately, these tags can refine the structure of the PDF document and allow accessible navigation of its content. It's a good practice to review the tags generated during the Order process. To assist you in this, right-click on any of the tags in the Tags menu pane and ensure the option for *Highlight Content* is check marked. If it is, then you should see boxes form around the item(s) associated with each tag.

## Headers

Most of your headers should be set during the Order process; however, if you find any of your tags are incorrect, simply select the tag you want to change, then left-click it once more and it will allow you to edit it. Some basic rules for appropriate header structure are as follows:

- Only one Header level 1 per document, the title.
- Generally, Headers level 2 are used for section breaks while Headers level 3 are used for sub-section breaks.
- More specifically, the hierarchy of headers should never skip any levels. Headers level 2 follow the Header level 1. Headers level 3 follow after headers level 2, so on and so forth.

## Alt-text

To designate Alt-text, you will be working in the Tags menu pane using the following steps:

1. Find the image in the Tags menu pane. (<Figure>, <Inline Shape>, or <Image>)
2. Right click on the tag and go to *Properties...*
3. In the Properties... window which appears, type your alt-text into the Alternate Text: text box.
4. Select Close to save.

Remember that alt-text should be as concise as possible, while still fully describing the image in its context.

## Tables

Tables can be problematic if used incorrectly. For one, tables should only be used to display statistics in a logical column and row structure. They should never be used just to format text. Secondly, tables should be simple with complete rows and columns and no split cells. Finally, all tables should have a top row set as a table header, as well as a far left column set as a table header if appropriate.

To set a table in Acrobat first try to select the whole table with the Order menu pane, and in the Reading order panel designate it as a table. This may identify all of the cells correctly and save you some time. If it fails to accurately detect the table cells (i.e. it has designated a single cell as multiple or vice versa) then delete table cells from the Order pane and start again. This time, instead of selecting the whole table, select each cell and designate

them individually as a *Cell* using the Reading order panel. Once completed, you should find a series of <TD> tags in the Tags menu pane. The steps for appropriately formatting the table are as follows:

1. Just above the first <TD> tag, right-click and select *New Tag*.
2. In the window which opens, use the drop-down menu to select *Table*. You should now see an empty <Table> tag.
3. Just below this new tag, add another new tag, this time for a Table row (<TR>).
4. Click and drag this <TR> tag to the text that reads "<Table>". If done correctly, the <TR> tag should now be nested within the <Table> tag and the <Table> tag should have a minus sign beside it designating it as a collapsible element.
5. Next drag each <TD> tag from the first row into this <TR> tag. When attaching the row's second cell and beyond, drag the <TD> to the icon to the left of the <TD> tag before it. This will allow for the tag to follow the previous one instead of being nested within it.
6. For the first row, each of the <TD> tags should be changed to <TH> tags. The same should be done for each <TD> tag in the first column if a header column is relevant.
7. Repeat steps 3-5 (and the latter step of 6 if necessary) for the remaining rows until every cell is accounted for. If there are any blank cells, be sure to add a new <TD> and place it in line where appropriate, so each row has the same amount of items.

## Lists

List items in Acrobat will first have to be designated as *Text* (<P>) in the Order menu pane. In the Tags menu pane find those tags and complete the following steps:

1. Right-click just above the first list item tags (currently formatted as <P>) and select *New Tag*.
2. In the window that opens, use the drop-down menu to select *List*. You should now see an empty <L> tag.
3. Just below this new tag, add another new tag, this time a List Item (<LI>).
4. Then just below the new <LI> tag, create another new tag, a List Item Body (<LBody>).
5. Drag this <LBody> tag to the text that reads "<LI>", then drag the <LI> tag to the text that reads "<L>". If done correctly, the <LBody> tag should now be nested within the <LI> tag which is further nested into the <L> tag, and both the <L> tag and <LI> tag should have a minus sign beside them designating them as collapsible elements.
6. Expand the <P> tag of the first list item.
7. Drag the content of the item within the <P> tag into the <LBody> tag.
8. Repeat steps 3-7 for each list item.
9. Remove any empty left over <P> tags by selecting them in the Tags menu pane and pressing the *Delete* key on your keyboard.

## Document Properties

Finally, to set the title and language of your document, follow these steps:

1. Go to the top menu and select *File*.
2. Then, select *Properties...*
3. In the new window which appears there are various tabs to choose from. For the title of your document go to the *Description* tab.
4. In the Text box labeled *Title*, write an appropriate and concise title.
5. For setting the language, in the same window go to the tab labeled *Advanced*.
6. Here you will find an option near the bottom to select a language for the whole document.

## Conclusion

And there you have it! Adobe Acrobat DC can be a difficult program to navigate when it comes to accessibility; however, if you keep at it and practice regularly you can indeed make even a PDF file completely accessible. Reference the order and tags in this document in Adobe Acrobat DC for exemplary formatting.