[DRAFT] Exporting Accessible PDFs with InDesign

NYU Digital Accessibility

This is a living document. Feel free to make suggestions and comments, so that the instructions improve. Email <u>digital-accessibility@nyu.edu</u> if you want to contribute with editor permissions.

■ Essential InDesign Concepts for Beginners

Last updated: Jun 5, 2025

Contributors

- Marshall Sunnes, Senior Digital Accessibility Specialist (marshall.sunnes@nyu.edu)
- Karin Carlson (<u>karininwinnipeg@gmail.com</u>)
- Katie Diduch, Freelance UI/UX, Accessibility, and Print Designer (works with NYU Steinhardt) katie.diduch@gmail.com

Major steps

- Step 1: Starting a new document in InDesign
- Step 2: While composing the document
- Step 3: Exporting to PDF within InDesign
- Step 4: Within Acrobat Pro

Note:

Each step ends with a Checkpoint.

Ensure you have completed the checkpoint list before moving on to the next step.

Topics under investigation

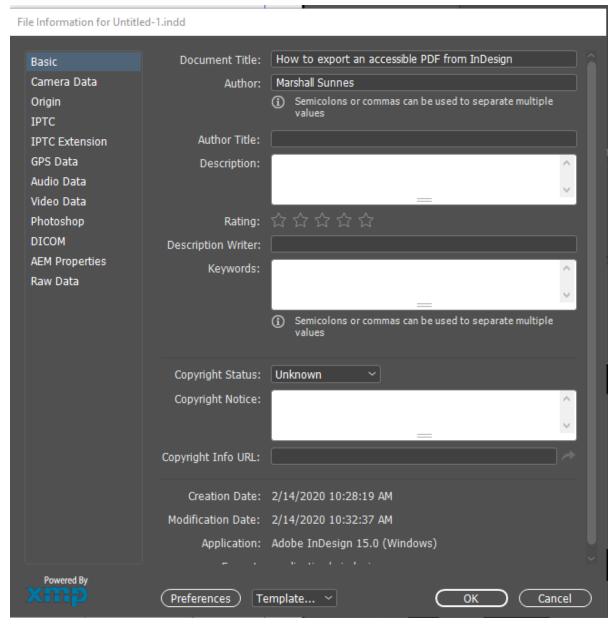
These are issues/topics that need updating or still need content:

- Fillable form elements
- Table lines not being artifacted correctly
- Spanned cells

Step 1: When starting a new document in InDesign

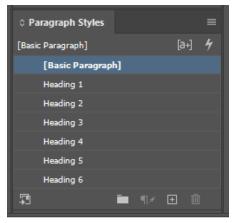
A. Set the title and the author for document

In File > File Info: type in the document title and author. This will transfer to the PDF (with the <u>correct export settings</u> later in the process) and will be the title that appears in the browser tab when the PDF opens, what search engines will discover, and what blind people hear when they open the PDF.



B. Set Paragraph Styles for headings

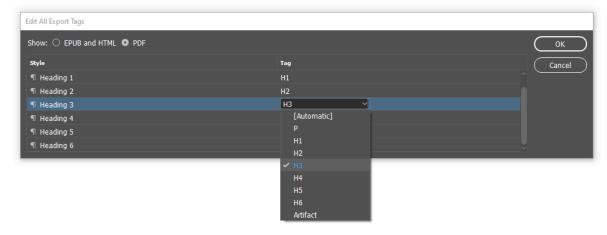
- 1. Ensure the Paragraph Styles panel is open (Type > Paragraph Styles)
- Input six separate text areas with "Heading 1", "Heading 2", etc for headings 1
 through 6 using the Typing Tool. Style the headings as you see fit. This will be
 the template for that heading level. (Hint: stick with names like "Heading 1")



C. Edit all export tags

Now that you have set your Paragraph Styles for headings, you need to set how those styles will export to the PDF tags.

- 1. Find the Paragraph Styles panel (Type > Paragraph Styles)
- 2. Select the pane fly-out menu (≡) > Edit All Export Tags
- 3. At the top of the Edit All Export Tags window, select the PDF option button.
- 4. For each style you created, select the corresponding Tag:



Note:

You can map multiple styles to a heading tag.

Checkpoint — "Step 1: Starting a new document in InDesign"

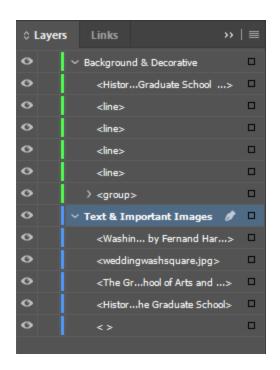
Before you begin composing your document, make sure you have:

- Set the title and author for the document
- Added Paragraph Styles for Headings 1 through 6
- Set your Export Tag settings

Step 2: While composing the document

A. Use a separate layer for your background content.

Although all content can be contained within the same layer, it may be beneficial to place background content in a separate layer from the text and important images. This helps avoid overlapping issues when ordering the layers content later. You may also choose to put all images in a separate layer group.



B. Use paragraph styles to mark headings

Use the paragraph styles to identify the major headings in the document as you compose.

Use heading styles to indicate text that is functioning as a heading; do not use heading styles to change the formatting of text if the text is not functioning as a heading:

- **Heading 1**: Title of the document (use once)
- Heading 2: Major topic/idea (can be used multiple times)
- Heading 3: Items that topically are children of heading 2 (can be used multiple times)

And so on...

To apply the heading style

Select the heading text > Paragraph Styles pane > select the appropriate heading style.

Note:

You can visually change how the heading looks after you set the paragraph style.

C. Use built-in lists

Make sure to use the <u>built-in lists that come with InDesign</u>. The time savings will be considerable.

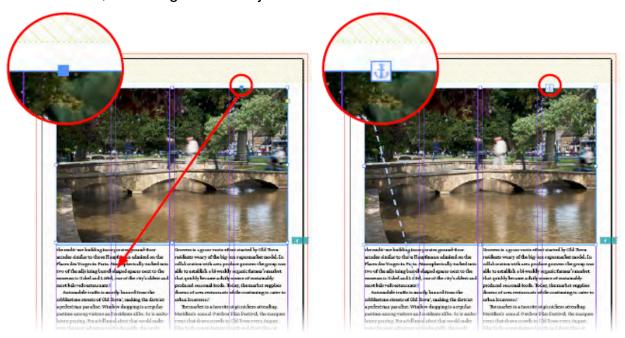
D. Use built-in tables

Make sure to use the <u>table options provided with InDesign</u>, in particular, always <u>use</u> <u>table headers</u>, and do not use tables as "layout" tables.

Even with best practices, you will still have to do some work in Acrobat Pro. To minimize how much work you need to do, avoid spanned (merged) cells. Spanned cells can be made accessible later, but it is usually not an easy process.

E. Anchor images into the text flow

InDesign allows you to insert machine-readable reference images in the text by anchoring. To anchor an object in an accessible location in the text flow without changing the original position of the object, click and hold the blue square, and then drag it to the desired location within the text and release. The blue square changes to an anchor icon, indicating that the object is anchored.



To anchor an object, drag the blue square on a frame (left) to the desired location in the text. When anchored (right), the blue square becomes an anchor icon.

Image source: Adobe "Creating Accessible PDFs"

F. Add alt-text to your essential images

You can <u>add alt-text</u> (<u>descriptions for the blind</u>) to any <u>image</u> you deem essential. To determine if an image is essential, ask yourself: "If the image were removed for all users, then would any critical information be lost?" If the answer is "yes", then provide alt-text for only that information that is lost. It is not necessary to provide aesthetic information if it is not critical, but also consider if an image adds to the tone of your document.

Examples of critical information/imagery:

- Dates
- Images of text not provided in the actual text
- Icons that indicate a warning or highlight something that isn't conveyed in the text
- Imagery that provides tone or meaning that is not otherwise conveyed in the text
- Logos of institutions, departments, and sponsors
- Photographs of people that do not have a text caption or label

Examples of non-critical information/imagery:

- Most stock photos
- Horizontal separators (unless they convey differences between two or more things)
- Clip art
- Background colors
- Purely aesthetic icons

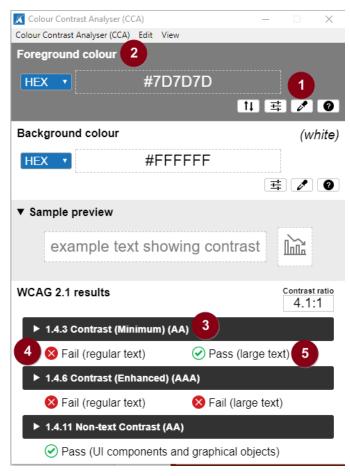
G. Use Table of Contents (TOC) feature (if applicable)

The <u>TOC feature in InDesign</u> uses the <u>paragraph styles</u> you created earlier to create the table of contents. Make sure to <u>use paragraph styles to mark headings</u> before using this feature.

H. Check the color contrast of the document

Use the <u>Colour Contrast Analyser</u> to check if the contrast between text and the background of text (including text in images) passes at a minimal level.

Interpreting the results of the Colour Contrast Analyser



- 1. Use the eyedropper for fast results, or input the HEX code from InDesign
- 2. Foreground means the text color
- 3. Your text content should at least comply with 1.4.3 (Minimum) (AA)
- 4. Regular text: <18pt or <14pt bold
- 5. Large text : ≥18pt or ≥14pt bold

Checkpoint — "Step 2: While composing the document"

Before you move on, make sure you have:

- Used a separate layer for background content
- Marked all headings with the correct paragraph style
- Used in-built lists (numbers and bullets)
- Used in-built tables
- Anchored images into the text flow
- Added alt-text to all essential images
- Used Table of Contents (TOC) feature (if applicable)
- Checked the document color contrast

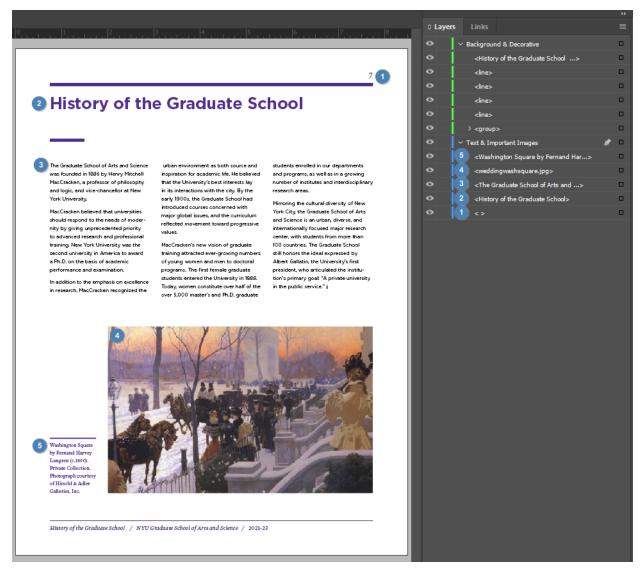
Step 3: Exporting to PDF within InDesign

A. Ensure Layers items are in the correct reading order

The reading order of a PDF is based on the layers within InDesign. This controls highlight order for the cursor within the PDF and the order assistive technologies like Text-to-Speech will read the PDF.

Ordering layers

In the Layers panel, content is the reverse of the expected reading order. In other words, what should be read first is the last layer item and the last item you would read is the first layer item. To arrange the elements in the proper reading order, select an element in the Layers panel and drag it to another spot.

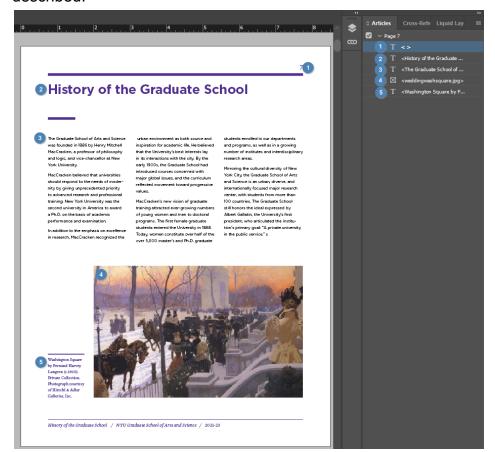


(full resolution image of layer figure)

B. Add content to Articles

Setting the reading order in the layers only the first part. You also need to identify the content that is available in the PDF tags. This is what assistive technologies on Screen Readers will be using to read the document.

- Open the Articles panel: Window > Articles
- 2. **Critical:** Select the pane fly-out menu () > Use for Reading Order in Tagged PDF should be checked. If you don't do this, then nothing will carry over.
- Create an article for each page: pane fly-out menu (=) > New Article.
 Note, what you name the article will not affect accessibility; it's just for your reference.
- 4. Drag content from the document into the Articles pane under each page article in the order it should read. Unlike the layers, the order in the Articles pane is top to bottom. This includes headings, text, lists, tables, images, and other content that needs to be read. Images: you only need to drag in the essential images you described.



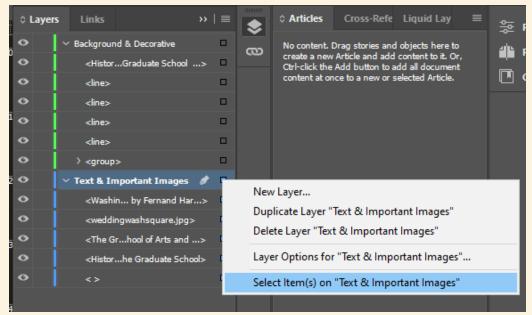
(full resolution image of article order)

Most items you drag in will have a "T" label, even if a heading style, list, or table.

Using layers to create Articles:

If you have set the correct reading order of your layers, then you can use the layer selector to efficiently drag content into the correct article order. Note that you should not use this technique if your layer contains background content.

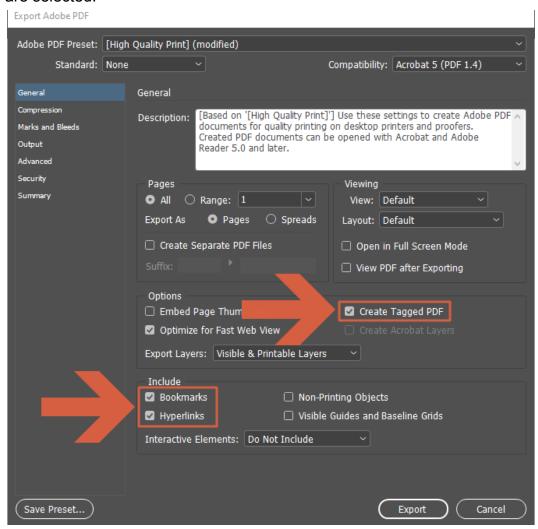
a. Select the layer group selector > Right click (options) menu > "Select Item(s) on..."



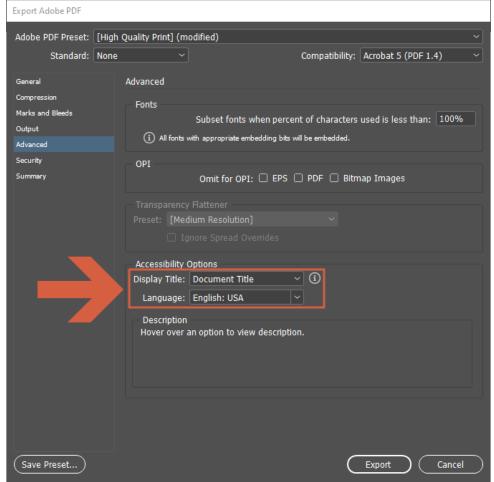
b. The content is now selected in the editor. Click the + Add button in the Articles pane.

C. Export to PDF

- When you export to PDF (File > Export), you can choose either Adobe PDF (Print) or Adobe PDF (Interactive).
- When using "Print" mode: In the Export Adobe PDF modal dialog > General tab, ensure that "Create Tagged PDF", "Bookmarks", and "Hyperlinks" checkboxes are selected.



In the Export Adobe PDF modal dialog > Advanced tab, ensure that Display
 Title is set to "Document Title" and Language is set to the appropriate language.



Note:

You can make these settings default by using the PDF preset within InDesign.

Checkpoint — "Step 3: Exporting to PDF within InDesign"

Before you move on, make sure:

- Ensure Layers items are in the correct reading order
- "Use for Reading Order in Tagged PDF" is checked
- All essential content is in the Articles pane and in order
- The correct settings are in place when exporting to PDF

Step 4: Within Acrobat Pro

A. Tables

Ensure that you have marked the column headers within InDesign.

Row headers

For complex tables, it is necessary to mark the header cell for each row. How to mark header rows in Acrobat Pro

- "Touchup Tool" is also known as the "Reading Order Tool":
 Tools > Accessibility, and then choose Reading Order in the right pane
- How to find the <u>Document Tags</u>

Spanned cells

How to make spanned cells accessible in Acrobat Pro.

B. Run the Accessibility Checker

Your last accessibility check will occur in the <u>Adobe Acrobat Pro Accessibility Checker</u>. If you followed the steps listed above, then there should be no outstanding accessibility issues. If there are no outstanding issues, then the document is ready to post on a public resource. Note that the document is not PDF-UA compliant using the Acrobat Pro Accessibility Checker.

Note:

Logical Reading Order and Color contrast will be flagged by the Adobe Acrobat Accessibility Checker each time the checker is run.

Checkpoint — "Step 4: Within Acrobat Pro"

Before you share the PDF, make sure to:

- Add row headers to tables
- Ensure spanned cells are made accessible
- Verify accessibility in the Acrobat Pro Accessibility Checker