

Create accessible documents with Adobe Acrobat Pro Document Cloud

RGAA Resources

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1. Introduction

1. Foreword

French law n° 2005-102, of 11 February 2005, for equality of rights and opportunities, participation and citizenship of people with disabilities, makes accessibility a requirement for all public online communication services, for the State, local and regional authorities and the public institutions that depend on them.

The RGAA (General Accessibility Framework for Administrations) aims to promote accessibility of the contents available in digital form. In 2014, the RGAA was redesigned to be up-to-date and more operational. The French administrations currently ought to refer to the RGAA 3.

To meet the needs of diverse groups and contexts, three levels of compliance have been defined: A (lowest), AA and AAA. The level legally expected is level double-A (AA). Success criteria associated with the AAA level may be taken into account in certain contexts where possible and relevant.

2. The RGAA and office documents

The RGAA applies to any document or application available online: websites, Intranet and web applications, but also the contents downloadable as separate files.

In the Consultation category of the RGAA, criterion 13.7¹ (Level A) states that "each office document that can be downloaded [must] have an accessible version if necessary". Compliance with this criterion can be achieved in particular by providing an accessible HTML version or by making the document accessible in the format proposed for download.

This companion guide presents the considerations and principles for creating an accessible document with Adobe Acrobat Pro Document Cloud, along with non-normative guidance and procedures for implementing them. Each chapter is divided into topics and incorporates a reference to the corresponding RGAA criteria.

3. Who is this guide for?

These guides are intended for all professionals in government departments, local authorities, agencies, public institutions, public enterprises or anyone wishing to:

- Produce accessible office documents;
- Improve the accessibility of existing office documents;
- Test the level of accessibility of office documents already created.

4. Technical devices used to access content

A document is accessible if it can be accessed by any user, regardless of the computer tool being used. More and more users are using assistive technologies to overcome barriers to accessing office documents or web content. These technical solutions include

- Software assistive technologies (screen readers, voice recognition / dictation software, etc.);
- Hardware assistive technologies (adapted mice, trackballs, Braille displays, etc.).

Content and applications must be compatible with these various assistive technologies, their functionalities and uses.

5. About this translation

The original document, in French, refers to Adobe Acrobat Pro Document Cloud in the version available at the time of writing (February 2016). At the time of translation (August 2017), the current release (2017) may show slight variations. This translation takes this fact into account and is based on the features of the 2017 release where applicable.

¹ URL: https://disic.github.io/rgaa_referentiel_en/criteria.html#crit-13-7

6. Conventions

This document indicates keyboard shortcuts for commands used in Adobe Acrobat Pro Document Cloud. In the Windows operating systems family, the CTRL (Control) key is used as a modifier for many shortcuts. In the MacOS system, the equivalent modifier key is CMD (Command, represented by the ⌘ symbol). In the rest of this document, for clarity, only the Windows shortcut (with CTRL) will be mentioned. Mac users are invited to replace it with CMD.

Texts in bold generally refer to commands and menus available in the user interface. Indications like “**File > Save**” must be understood as “Open the File menu, and then select the Save item in this menu”.

Mentions like “Right-click on...” actually refer to opening a contextual menu, associated with an item. On most systems, this is usually done by clicking on the item with the right button of a mouse or a trackpad. Another method, on Windows, consists in pressing the “Menu” key on the keyboard. On MacOS based systems, pressing the CTRL key and the left button simultaneously has the same effect. Unfortunately, there is no easy way to activate a contextual menu through a keyboard on a Mac.

2. Getting familiar with PDF and Adobe Acrobat Pro DC

1. PDF and assistive technologies

Portable Document Format (PDF) is a format developed by Adobe Systems. It preserves the formatting as the author defined it, regardless of the application or the platform used to read it.

PDF tags reflect the structure of the document. A tag tree represents the organizational structure of the document and allows assistive technologies to determine the order, presentation and interpretation of its content. The relationship between the various elements of the document and the properties associated with these elements (for example, replacement text for images conveying information) must be defined in this tree.

2. Creating accessible PDF documents with office applications

In most cases, creating PDF files from a document made accessible in an authoring application (Microsoft Word, LibreOffice Writer, etc.) leads to better accessibility than a full rework in Acrobat downstream. By creating PDF documents from structured office documents, the total time required to mark up the document will be considerably reduced. For this reason and as far as possible, it is preferable to return to the source file, to structure it, and improve its accessibility with the original authoring application.

Tagging is the first condition of accessibility. Adding tags can be done automatically when exporting the document to PDF in the authoring application if you check the markup option for accessibility. For more information on creating accessible desktop documents, see our other guides for different authoring applications (LibreOffice 5.2 and Microsoft Office 2016).

If a properly structured document in an authoring application will benefit from better accessibility when exported in PDF format, it is necessary to verify that the document has been properly marked up automatically. Assessment work, and possible corrections of loss of information or conversion errors, with Adobe Acrobat Pro, are required.

3. Visualizing the PDF document structure

Creating an accessible PDF document involves giving it a structure and a reading order that can be used by assistive technologies. A PDF document can be interpreted in 3 ways:

- Visually: the visual order in which sighted readers scan a document
- Structurally (tags): the order in which assistive technologies scan the document
- Reflow Order: The order used by Adobe to feed the "Reflow" or "Audio Playback" options.

While the three visions of the document must logically match, this is not always the case. Only the structural order, that is, the tags, reflects the true structure of the document. The tags identify the contents of the PDF (document title, chapters, sections, headings, lists, etc.), define a reading order, and facilitate navigation in the document. PDF tags exist only for accessibility purposes and have no visible effect on the PDF file.

4. Main tools to work on the accessibility of a PDF document

The latest versions of Adobe Acrobat Pro DC provide an Accessibility action to guide the user through the steps necessary to make a PDF file accessible. The tool allows you to quickly populate certain properties (title, subject, language, etc.), assign replacement texts to images conveying information, and tag form fields. Although this tool can save time for a number of steps, it does not guarantee and verify the quality of the generated markup. For this reason, this tool will not be covered in this guide.

Tool	Used to
 The icon for the Reading Order tool, showing a document with a curved arrow pointing to the right, indicating a sequence or flow.	<ul style="list-style-type: none">• Tag form fields• Assign a replacement text to illustrations• Fix simple tables• Remove any superfluous (decorative) content from the tree

Tool	Used to
 Tags panel	<ul style="list-style-type: none"> · Correctly tag complex tables · Tag paragraphs, lists and sections using different languages · Remove obsolete tags · Add replacement texts to links
 Content panel	<ul style="list-style-type: none"> · Modify the reading order of some objects in the page
 Order panel	<ul style="list-style-type: none"> · Deprecated because it can cause a visual overlap of page elements

The Tags panel is the most important tool to work with the accessibility of a PDF document because it allows you to view, add, or edit tags in the document tree accurately. This tag tree reflects the order in which the document is read by assistive technologies and contains all of the elements of which the document is composed.

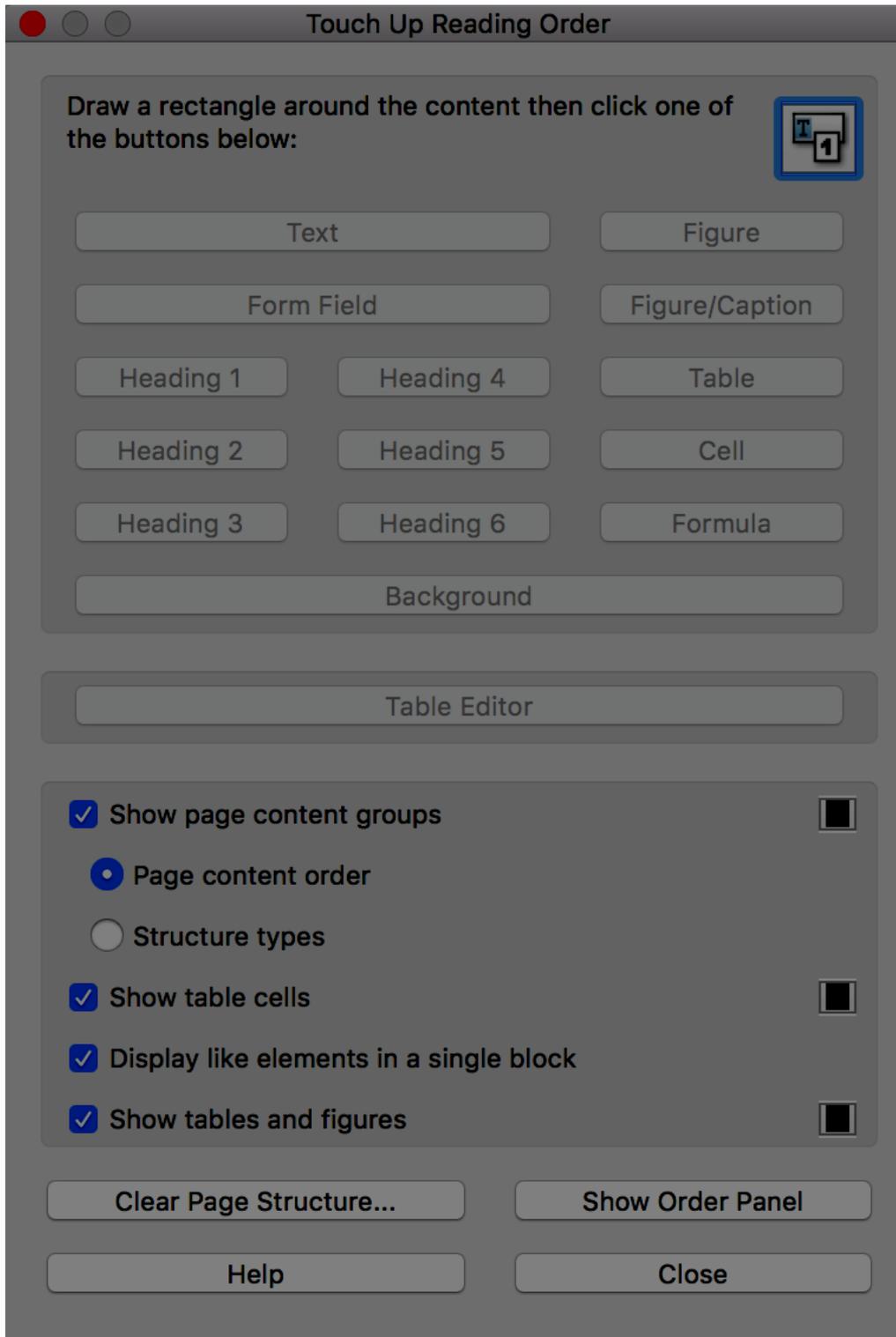
Caution!

The manipulation of the structure of the PDF file via the three tools introduced above presents a significant risk of damaging the file, because the operations performed are irreversible (the Cancel feature is not available). Therefore, you should consider saving a backup copy before you begin working on the accessibility of the PDF file, and creating a new version before each new tagging step.

1. The Touch Up Reading Order tool

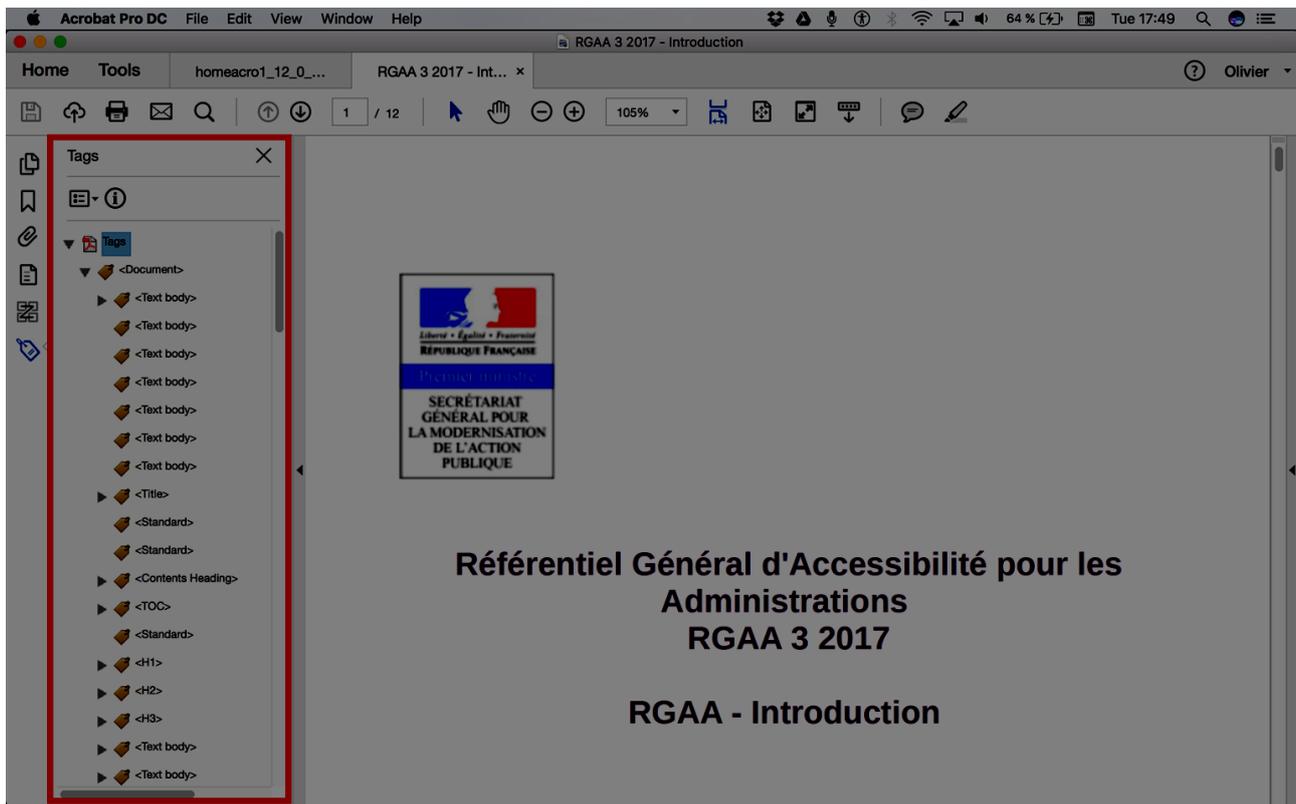
To open the Touch Up Reading Order tool:

1. Go to **Tools > Accessibility**.
2. In the tools list displayed, select **Reading Order**.



1. The Tags panel

To view the Tags panel, select **View > Show/Hide > Navigation panes > Tags**.



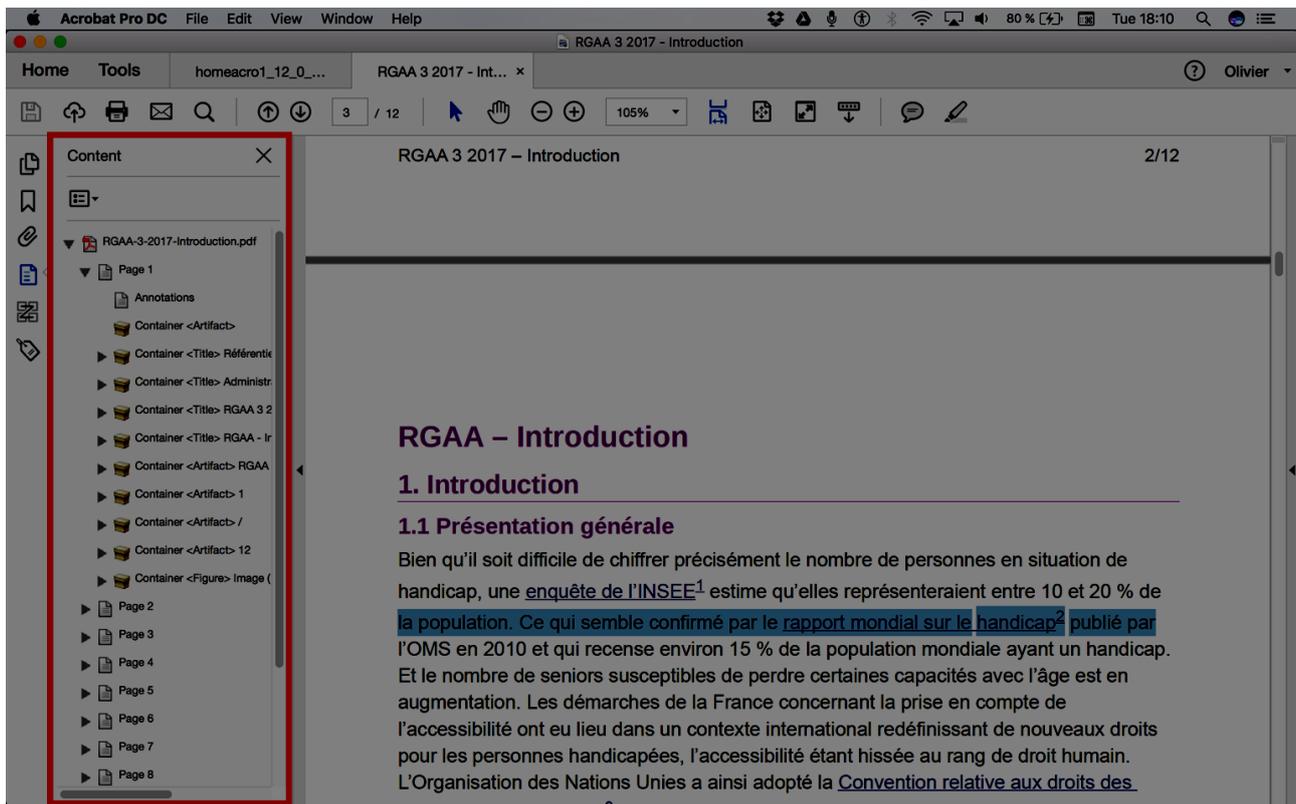
To locate the contents in the tree, highlight the content in the view pane and in the Tags navigation panel select the **Find Tag From Selection** option. The tag corresponding to the selection is then opened and selected.

2. The Content panel

The Content panel shows a global view of the content objects, tagged and untagged, that compose the PDF document, organized according to their display order.

To view the Content panel:

1. Select **View > Show/Hide > Navigation panes > Content**.
2. Develop the document name to view the pages and objects it is composed of.



Note: The contents in one or more containers bearing the same name as tag names, are tagged. Contents directly at the document root are non-tagged contents.

3. Evaluating the complexity of a PDF document

Note: The contents in one or more containers bearing the same name as tag names, are tagged. Contents directly at the document root are non-tagged contents.

Before starting to work on the accessibility of the PDF document, it is necessary to analyze the contents of the document in order to assess their complexity. Understanding the characteristics of the document, and what types of barriers to access can result from them, it is possible to know which tools to deploy, and which techniques to apply to solve these problems, while estimating the time needed to make the document accessible. The more complex the document, the longer it will take to produce an accessible document.

As a first step, it is necessary to verify the presence of tags in the PDF document:

1. Go to **View > Show / Hide > Navigation Panes > Tags**.
2. If tags are present, the tree view is displayed in the navigation pane that appears on the left side of the screen. If there is no tag, "No Tags available" is displayed.

If no tag is present, you must tag the document first.

1. Tagging an untagged PDF document

Tagging allows to identify and structure all the contents presented in a PDF document, in order to make them accessible and understandable to assistive technologies.

The first element of the tree is the tags root, which is the parent of all the other tags. Structural elements (articles, sections, parts, etc.) are listed as containers (parent tags) and may include several child tags (lists, illustrations, tables, etc.).

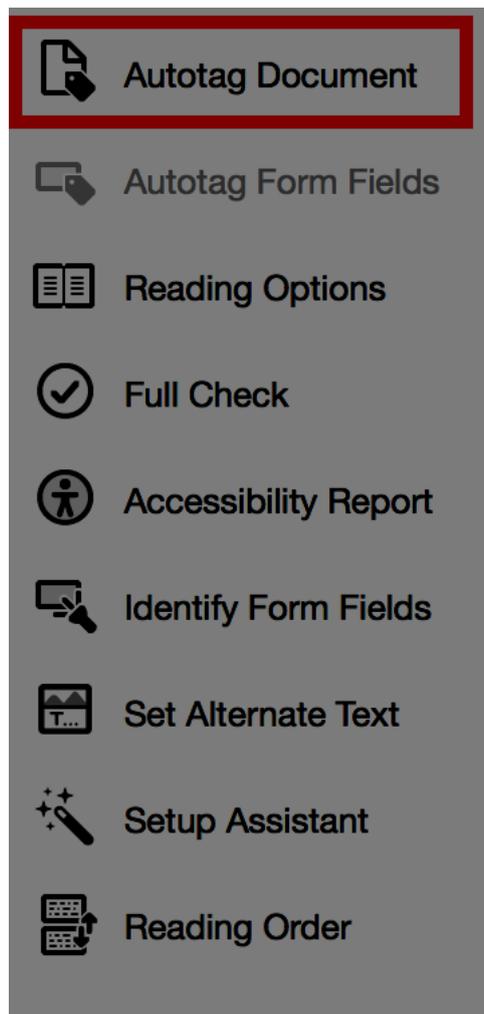
The PDF tags scheme is not restricted, but to ensure a correct interpretation of the contents, the use of standard tags is necessary. The list of the most frequently used PDF tags is given in the **Main tags used** appendix.

1. Automatic tagging of a simple non-tagged document

Adobe Acrobat provides a feature to automatically tag non-tagged documents. Applied to simple documents composed mainly of text and images, this feature can save time. However, for more complex documents, the generated markup is not of very good quality and a manual correction can be a waste of time. In these cases, manual tagging from the start should be preferred.

To tag a simple, non-tagged PDF document automatically:

1. Go to **Tools > Accessibility > Autotag Document**.



2. A “Recognition report” is displayed in a panel on the left side of the screen. The report indicates the elements in the document that may not be correctly tagged. This report is temporary and can’t be saved nor reloaded.

Accessibility ▾

Recognition Report ✕

Add Tags Report for Acr87166331027347

Summary

- [Introduction](#)
- [1 figures missing AltText](#)
- [Hints for Repair](#)

Accessibility

The checker found 1 Figure(s) which might not be accessible because they do not contain either an AltText or ActualText string. ([How To Fix AltText Tagging](#))

- [Figure missing AltText on page 1.](#)

Introduction

This confidence report is intended to help find places in

The recognition report is a good starting point for identifying and correcting markup errors, but further manual analysis is required to ensure that the entire markup is representative of the content presented in the PDF document. In addition, some content may be assigned erroneous tags that clutter the tree and alter the reading order.

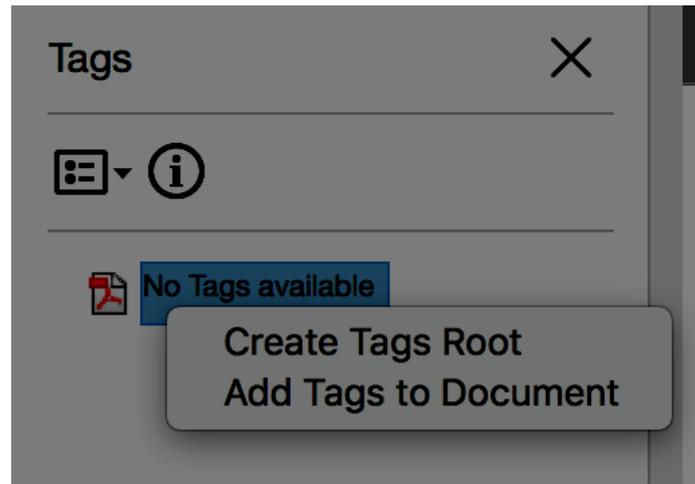
1. Manuel tagging of a complex non-tagged document

In order to ensure that the structure and reading order of complex document elements are correctly interpreted, and avoid rendering issues by assistive technologies, manual markup should be performed according to the techniques described in this guide, using tools provided by Adobe Acrobat Pro.

1. Creating the tags root

Before you start creating tags, you must create a tag root of tags that is the parent of all the tags in the document. To create the root:

1. In the Tags navigation pane, select **No Tags available**.
2. Right-click and select **Create Tags Root**.

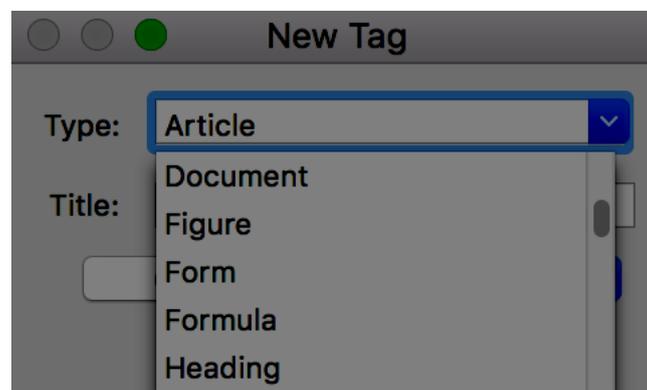


2. Creating empty tags

Before starting to tag, it is important to be aware of the different contents as well as the list of the different types of tags available (see **Main tags used**).

To create an empty tag:

1. In the **Tags** navigation pane, select the parent node in the tree view (the icon that is at the same level as the child tag you want to create).
2. In the **Options** local menu, click **New Tag**.
3. Select the desired tag type from the list.



4. If you it helps, give a title to the tag to identify it more easily in the tag tree (this title will not be read by assistive technologies).
5. Click **OK**.

When a tag is selected in the tree, the created tag is added after the selected tag. If no tag is selected, the new tag is added to the end of the tree.

3. Inserting content in a tag

To add content to an empty tag:

1. In the **Tags** navigation pane, select the tag.
2. In the **View** pane, click on the **Selection** icon in the toolbar, and select the text or object you want to tag

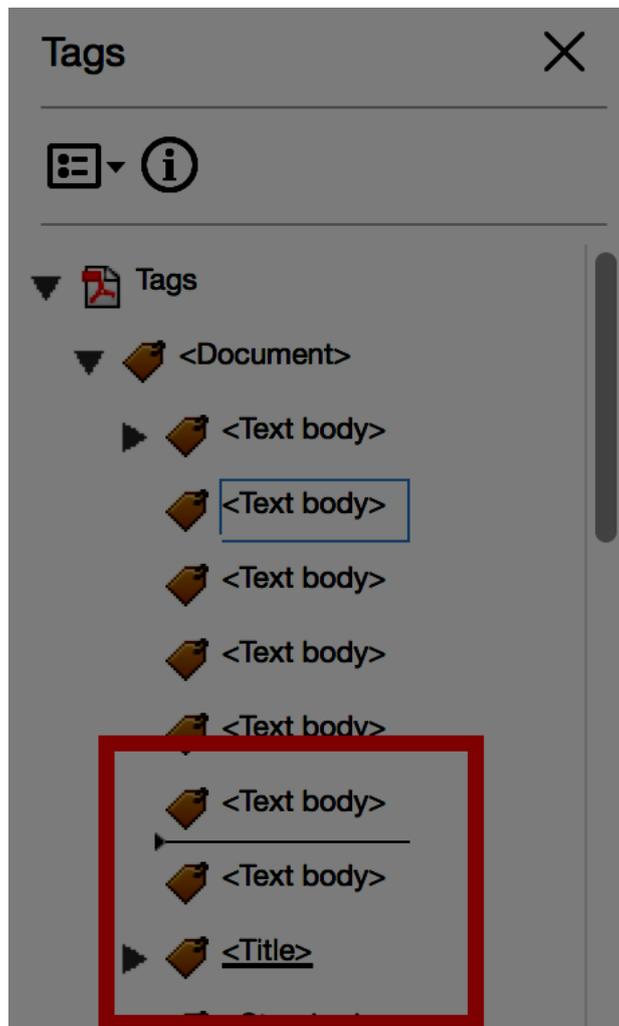


3. In the **Tags** navigation pane, right-click on the empty tag and select **Create Tag from Selection** (this actually means that the tag will be filled with the selected content).

4. Moving a tag

To move a tag:

1. Open the tags root in order to display the whole tree.
2. Select the tag icon of the element you want to move.
3. Drag the tag and drop it into the desired location (a line is displayed to show possible locations).



5. Modifying a tag

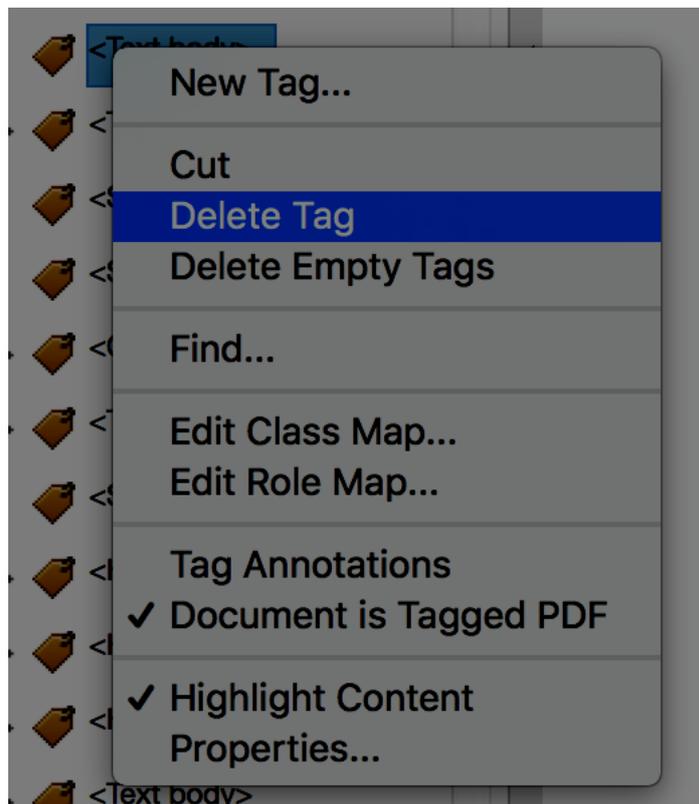
To change the type of tag:

1. Open the branch of the tree you want to modify.
2. Select the element, then go to **Options > Properties**
3. Choose a new type of element in the **Type** drop-down list, then click on **Close**.

6. Deleting a tag

To delete a tag:

1. Select the tag you want to remove.
2. In the **Tags** navigation pane, select **Options > Delete Tag**.



When a tag is deleted, its content remains visible in the document, but will not be read by screen readers.

7. Defining a global tags structure

When all tags in the document are created and assigned to content, it is recommended, for very long or very complex documents, to use the `<Part>` tag to organize tags in pages or chapters containing multiple pages. These tags will be used to provide a global structure for the document, but can also be used to create bookmarks that allow users to navigate through the document structure via the Bookmarks panel (see [Bookmarks](#)). The elements composing the part must be positioned as its children in the tags tree.

This solution is only recommended for long or complex documents, because creating and manipulating tags manually can lead to errors. For most documents, defining heading tags (`<H1>`, `<H2>`, etc.) is sufficient to ensure correct navigation.

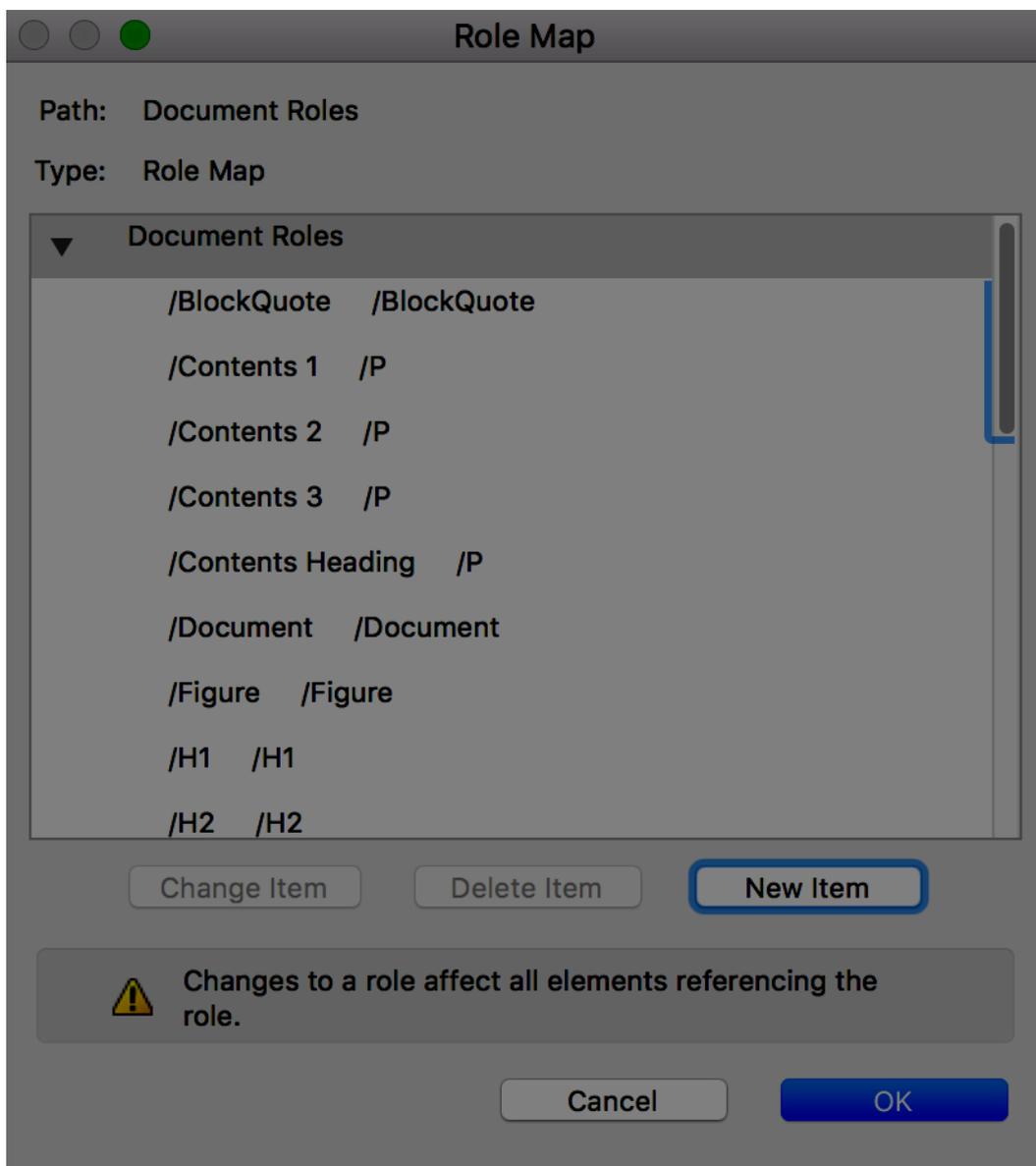
5. Fixing a tagged document

When a PDF document is generated from a text editor or other document authoring software, the generated tags do not always have names that are consistent with those provided by Adobe Acrobat (you can find <Contents 1> instead of <P> for paragraphs, for example).

Adobe Acrobat Pro DC provides a tool for defining the Adobe mappings of non-standard tags via a role mapping table.

To map roles:

1. Open the **Tag** navigation panel.
2. In the **Options**, select **Edit Role Map**.
3. In the **Role Map** dialog box, open the document tags root and verify that the proposed mapping is correct. To fix a mapping, select the item from the list and click the **Change Item** button. Type the name of the corresponding Adobe tag (see **Main tags used**) and click **OK**.



6. Giving an alternative to non-textual elements

1. Applicable RGAA criteria

Category	criteria
Images	<p>Criterion 1.1 [A] Does each image have a text alternative?</p> <p>Criterion 1.2 [A] For each decorative image with a text alternative, is this alternative empty?</p> <p>Criterion 1.3 [A] For each image conveying information with a text alternative, is this alternative relevant (except in particular cases)?</p> <p>Criterion 1.6 [A] Does each image conveying information have a detailed description if necessary?</p> <p>Criterion 1.7 [A] For each image conveying information with a detailed description, is this description relevant?</p> <p>Criterion 1.8 [AA] When an alternate mechanism is missing, each image of text conveying information must be replaced with styled text, if possible. Has this rule been followed (except in particular cases)?</p> <p>Criterion 1.9 [AAA] Each image of text conveying information must be replaced with styled text. Has this rule been followed (except in particular cases)?</p> <p>Criterion 1.10 [A] Is each image caption correctly associated with the corresponding image, if necessary?</p>
Colors	<p>Criterion 3.1 [A] On each Web page, information must not be conveyed through color only. Has this rule been followed?</p> <p>Criterion 3.2 [A] On each Web page, information must not be conveyed through color only. Has this rule been implemented in a relevant way?</p> <p>Criterion 3.3 [AA] On each Web page, is the contrast between the text and background colors sufficient (except in particular cases)?</p> <p>Criterion 3.4 [AAA] On each Web page, is the contrast between the text and background colors enhanced (except in particular cases)?</p>
Links	<p>Criterion 6.1 [A] Is each link explicit (except in particular cases)?</p> <p>Criterion 6.2 [A] For each link with a link title, is this title relevant?</p> <p>Criterion 6.3 [AAA] Is each link text alone explicit out of context (except in particular cases)?</p> <p>Criterion 6.4 [A] For each web page, does each identical link have the same purpose and target?</p> <p>Criterion 6.5 [A] On each Web page, does each link, except in anchors, have a text?</p>
Consultation	<p>Criterion 13.11 [A] On each Web page, does each cryptic content (ASCII art, emoticon, leetspeak) have an alternative?</p> <p>Criterion 13.12 [A] On each Web page, for each cryptic content (ASCII art, emoticon, leetspeak) with an alternative, is this alternative relevant?</p>

	<p>Criterion 13.15 [A] On each Web page, are sudden changes in luminosity or flashing effects used appropriately?</p> <p>Criterion 13.16 [AAA] On each Web page, do the sudden changes in luminosity or flashing effects have a frequency lower than or equal to 3 per second?</p> <p>Criterion 13.17 [A] On each Web page, can each moving or blinking content be controlled by the user?</p>
Multimedia	<p>Criterion 4.1 [A] Does each prerecorded time-based media have a text transcript or an audio description if necessary (except in particular cases)?</p> <p>Criterion 4.2 [A] For each prerecorded time-based media with a text transcript or a synchronized audio description, are these relevant (except in particular cases)?</p> <p>Criterion 4.3 [A] Does each prerecorded synchronized time-based media have synchronized captions if necessary (except in particular cases)?</p> <p>Criterion 4.4 [A] For each prerecorded synchronized time-based media with synchronized captions, are these captions relevant?</p> <p>Criterion 4.5 [AA] Does each live time-based media have synchronized captions or a text transcript if necessary (except in particular cases)?</p> <p>Criterion 4.6 [AA] Are each synchronized captions or text transcript, provided for live time-based media, relevant?</p> <p>Criterion 4.7 [AA] Does each prerecorded time-based media have a synchronized audio description if necessary (except in particular cases)?</p> <p>Criterion 4.8 [AA] For each prerecorded time-based media with a synchronized audio description, is this audio description relevant?</p> <p>Criterion 4.9 [AAA] Does each prerecorded time-based media have a sign language interpretation (except in particular cases) if necessary?</p> <p>Criterion 4.10 [AAA] For each prerecorded time-based media with a sign language interpretation, is this interpretation relevant?</p> <p>Criterion 4.11 [AAA] Does each prerecorded time-based media have a synchronized extended audio description if necessary (except in particular cases)?</p> <p>Criterion 4.12 [AAA] For each prerecorded time-based media with a synchronized extended audio description, is this audio description relevant?</p> <p>Criterion 4.13 [AAA] Does each synchronized or video-only time-based media have a text transcript (except in particular cases)?</p> <p>Criterion 4.14 [AAA] For each synchronized or video-only time-based media with a text transcript, is this text transcript relevant?</p> <p>Criterion 4.15 [A] Can each time-based media be clearly identified (except in particular cases)?</p> <p>Criterion 4.16 [A] Does each non time-based media have, if necessary, an alternative (except in particular cases)?</p> <p>Criterion 4.17 [A] For each non time-based media with an alternative, is this alternative relevant?</p>

Criterion 4.18 [A] Can each autoplaying sound be controlled by the user?

Criterion 4.19 [AAA] For each prerecorded audio-only time-based media, are the dialogues audible enough (except in particular cases)?

Criterion 4.20 [A] Can each time-based media be, if necessary, controlled either through a keyboard or a mouse?

Criterion 4.21 [A] Can each non time-based media be controlled either through a keyboard or a mouse?

Criterion 4.22 [A] Is each time-based media and each non time-based media compatible with assistive technologies (except in particular cases)?

2. Introduction

Non-textual elements are becoming increasingly important in office documents. Photos, maps, graphics and mathematical formulas enrich documents and convey information to readers.

For non-textual elements that convey information not presented as text in their proximity, this information must be described in a replacement text. Without proper description, these elements can't be perceived by assistive technologies, that will signal the presence of a graphic element without any other information.

Adobe Acrobat Pro includes tools to create a replacement text that will be returned to the reader by assistive technologies.

3. Images and charts

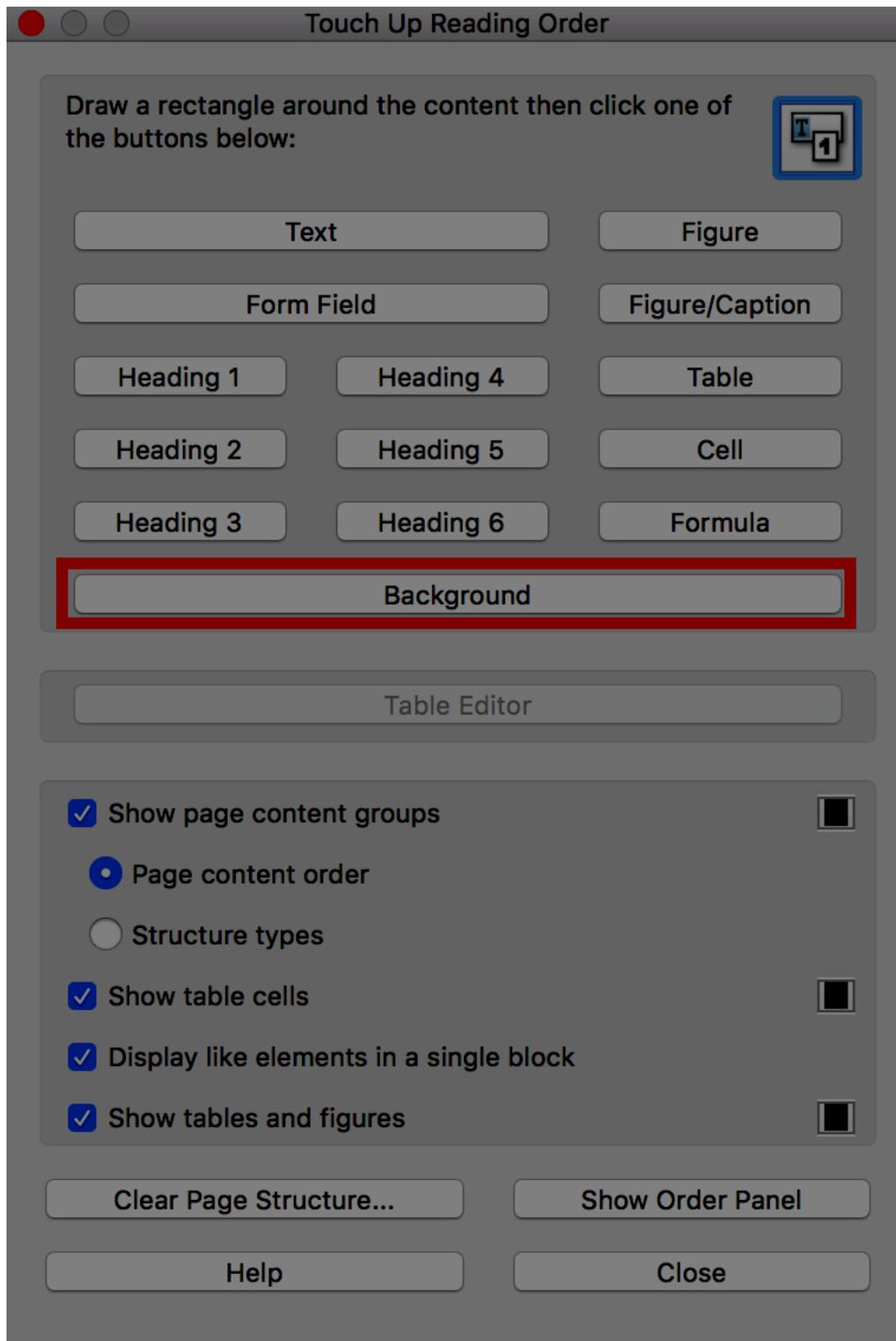
You should ask yourself 3 questions before choosing the text that will be rendered in place of the image:

- Is the image purely decorative, not conveying any information and having no function?
- Does the item convey information?
- Does the image have a function (for example, a picture serving as a link)?

If the image is purely decorative, this must be explicitly mentioned, in order to avoid it being rendered by screen readers.

To mark an image as decorative, and remove it from the tags tree:

1. Open the **Touch Up Reading Order** tool.
2. Check that the **Show page content groups** and **Show tables and figures** options are selected.
3. Draw a rectangle around the image that must be marked as decorative.
4. In the **Touch Up Reading Order** dialog box, click on **Background**.



If the image conveys information, it must be tagged as <Figure> and be associated with a replacement text. This alternative, which also serves as a title, must succinctly describe the information conveyed by the image and its meaning in the context.

For an image that serves as a hyperlink, the replacement text must help the user understand the function and the destination of the link. The conditions for returning this replacement text require that it be as short as possible (a maximum length of 80 characters is strongly recommended).

A replacement text should not:

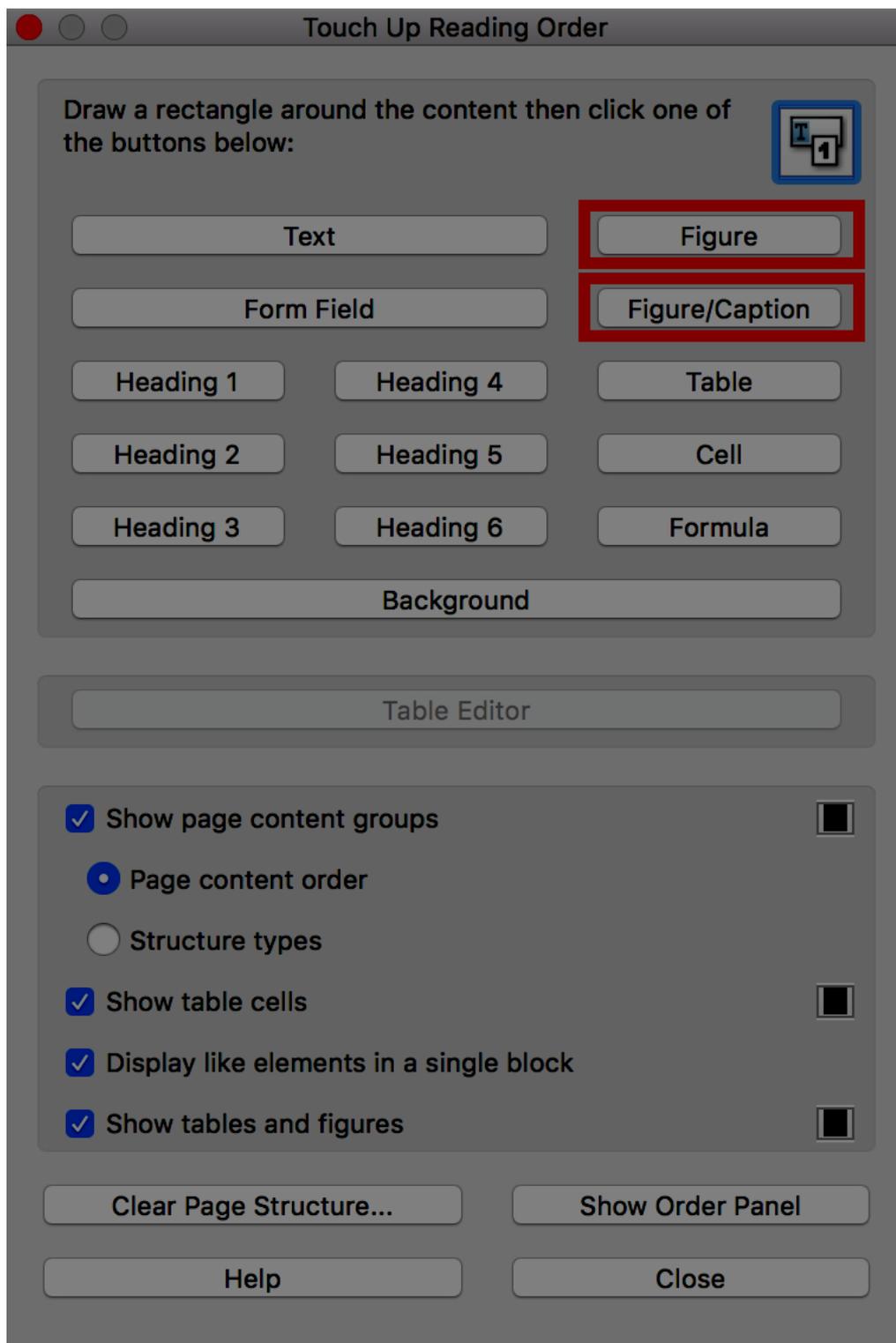
- Duplicate information in the caption;

- Include copyright information (for example, for a photo, the name of the copyright holder and the date of the picture)
- Start with "picture of..." or "photo of...".

If it's not already the case, follow these steps to tag the image as a <Figure>:

1. Open the **Touch Up Reading Order** tool.
2. Draw a rectangle around the image conveying information.
3. In the **Touch Up Reading Order** dialog box, click on **Figure** (this command assigns a <Figure> tag to the image). If the image is associated with a caption, draw the rectangle around the illustration and the caption simultaneously, and click the **Figure / Caption** button (this command assigns a <Figure> tag that contains the image and a <Caption> tag which contains the caption itself).

To
an
text to
image:



associate
alternate
the

1. In the **View** pane, right-click on the image, then select **Edit**

Alternate Text...

2. Enter an alternate text and click **OK**.

If an alternate text is assigned to text elements, only the alternate text will be read by assistive technologies.

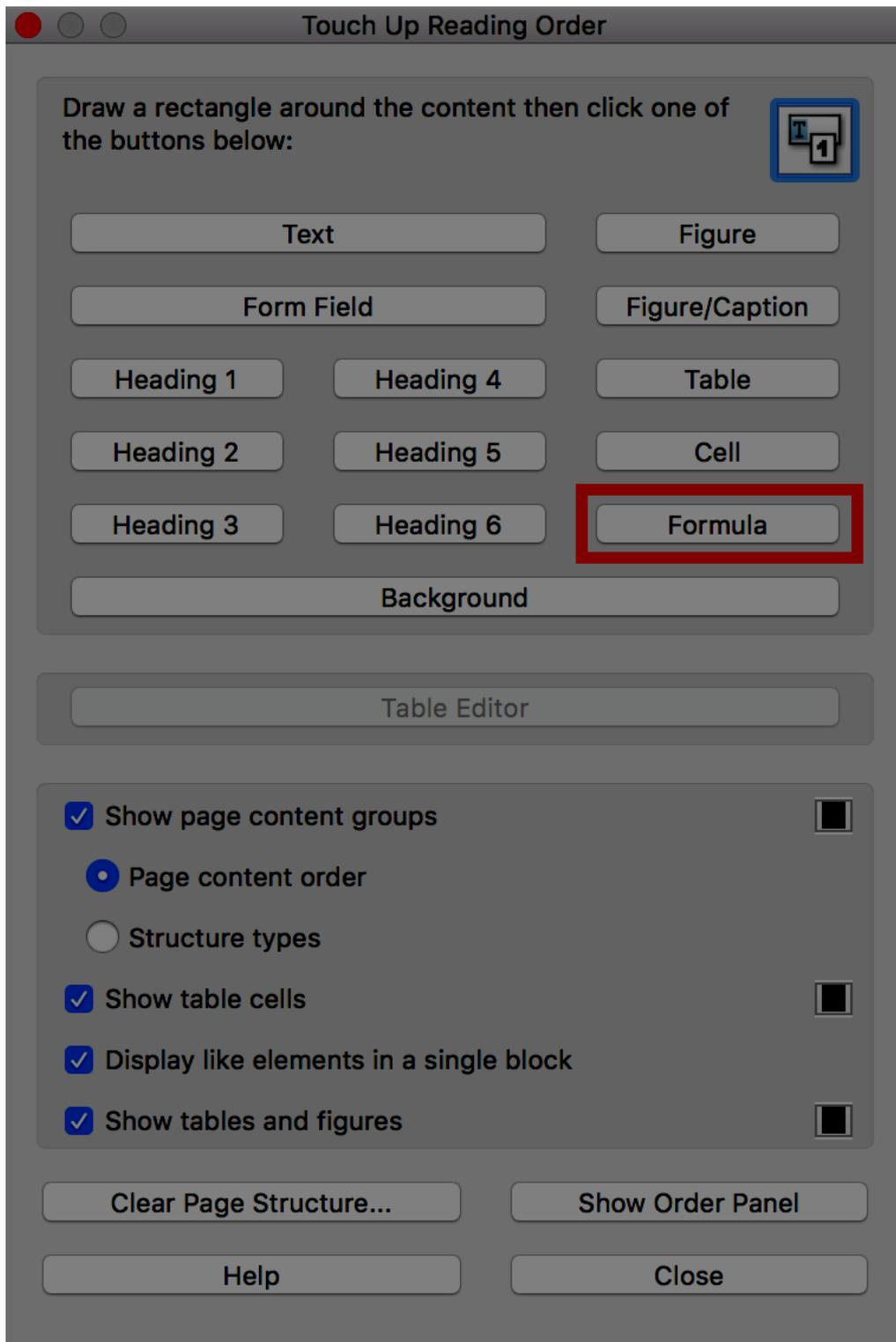
4. Mathematical formulas

Adobe Acrobat Pro provides a tag to describe a formatting specific to mathematical formulas: <formula>. To designate a text as a mathematical formula:

1. Open the **Touch Up Reading Order** tool.

2. Draw a rectangle around the formula.
3. In the **Touch Up Reading Order** dialog box, click on **Formula**.

Adobe does not the format It is



Acrobat support MathML correctly.

necessary to write the formula "in full", as it would be pronounced by a vocal synthesis. For example: "sum of 1 to n of x squared". See this article on Equations in PDF on WebAccessibility.com².

²https://www.webaccessibility.com/best_practices.php?technology_platform_id=57

5. Multimedia files

Adobe Acrobat Pro Document Cloud supports the MP3, MOV and SWF formats, but the FLV and FV4 formats are not supported anymore.

To insert a multimedia file in a PDF document:

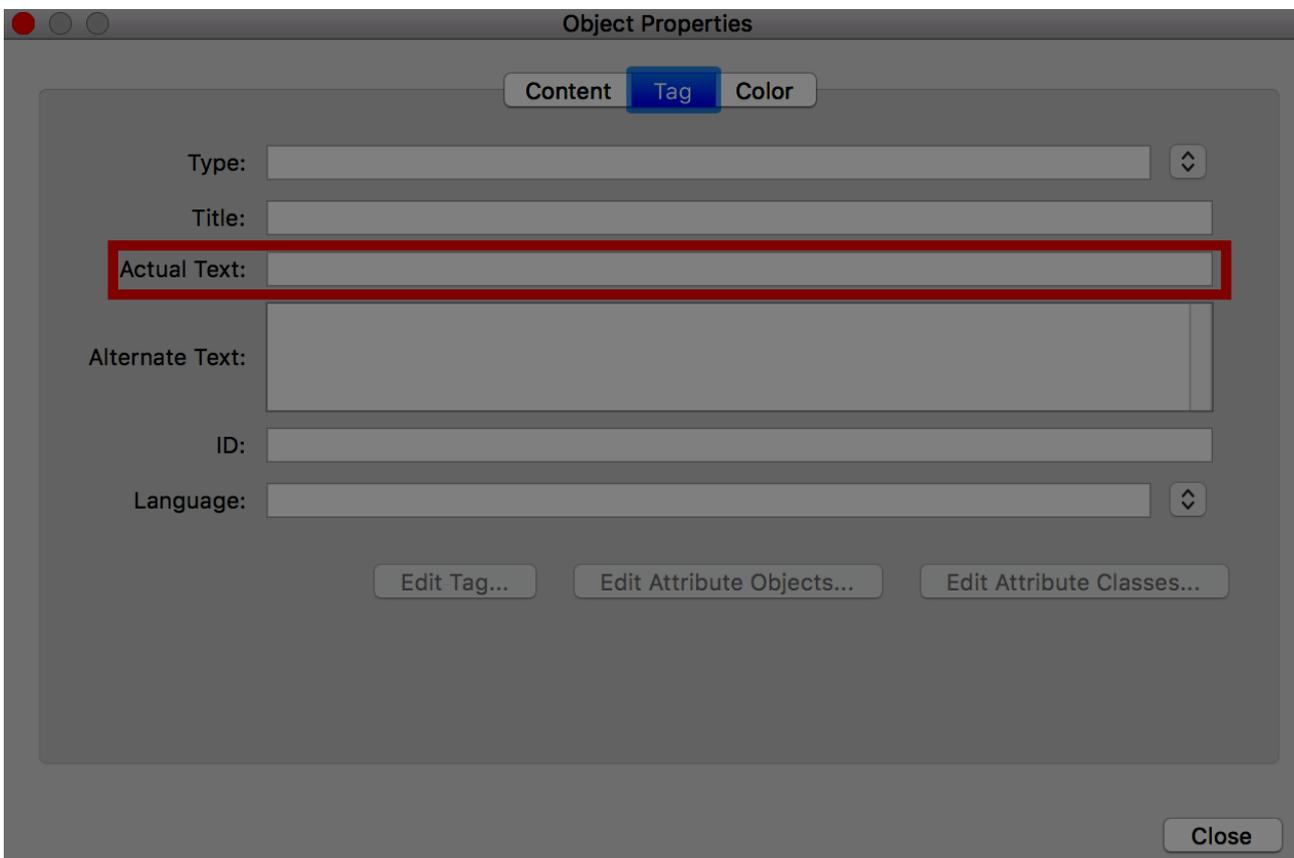
1. Go to **Tools > Rich Media**, then click on the **Add Sound**, **Add SWF**, or **Add Video** button.



2. Draw an area in the page with the mouse. The multimedia file will be inserted there.
3. In the dialog box, add a URL in the **File** field or click on **Browse (Choose on MacOS)** to find the multimedia file on your computer, then click **Open**.
4. If necessary, check **Show Advanced Options** then click **OK**.

A replacement text must accompany any video or audio clip. To assign a replacement text:

1. In the **Tags** panel, in the tags tree, locate the multimedia file.
2. Right-click on the tag and select **Properties**.
3. Under the **Tag** tab of the **Object Properties** dialog box, enter a replacement text in the **Actual Text** field.
4. Click **Close**.



It is also necessary to provide a transcript for any video or audio sequence, and to ensure that the videos include closed or open captions.

The purpose of a transcription is to provide a coherent alternative to multimedia content. Readers must have access to all the information conveyed by the video or audio file, including the dialogues between the participating protagonists, the location, the main actions and the atmosphere.

The transcript may be proposed next to the media file, or in an annex, via a hypertext link. If it's not the case yet, a transcript can be created with a text processing software like Microsoft Word or LibreOffice Writer, for example. It can be saved as PDF, and its pages added at the end of the document. Then, insert a bookmark linking to the transcript, next to the video or audio object (see [Bookmarks](#)).

To merge a transcript with a PDF document:

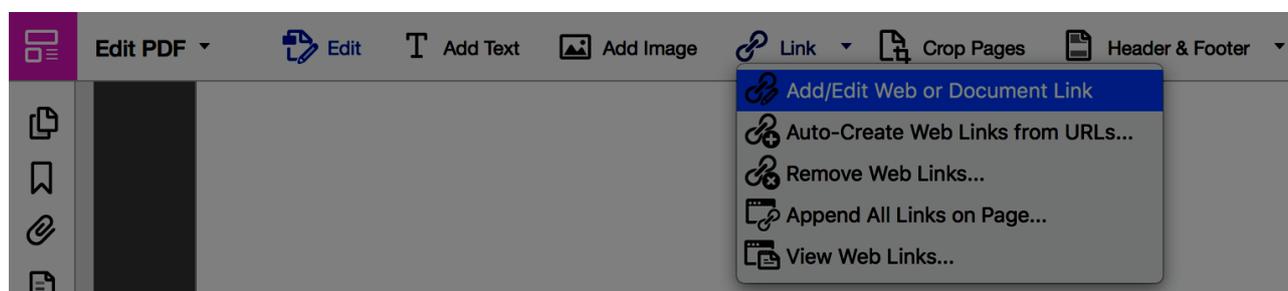
1. Close the two documents to be merged.
2. Open Adobe Acrobat Pro DC and go to the **Tools** menu.
3. Select the **Combine Files** option.
4. Click on **Add Files**, then select the PDF document that contains the video and the PDF document that contains the transcript.
5. If necessary, rearrange the files and pages by dragging and dropping, or deleting the pages that are not to be included in the new combined file by clicking on the **Remove** button.
6. Once the page order is correct, click the **Combine** button.
7. Save the new document created by Adobe Acrobat Pro.

6. Link text

Hyperlinks allow users to navigate within the document and navigate to external resources. Links in the form of a URL will be announced in full by assistive technologies. Explicit texts should be used to make links comprehensible in their context, i.e. the sentence, paragraph, or list element, where they are located.

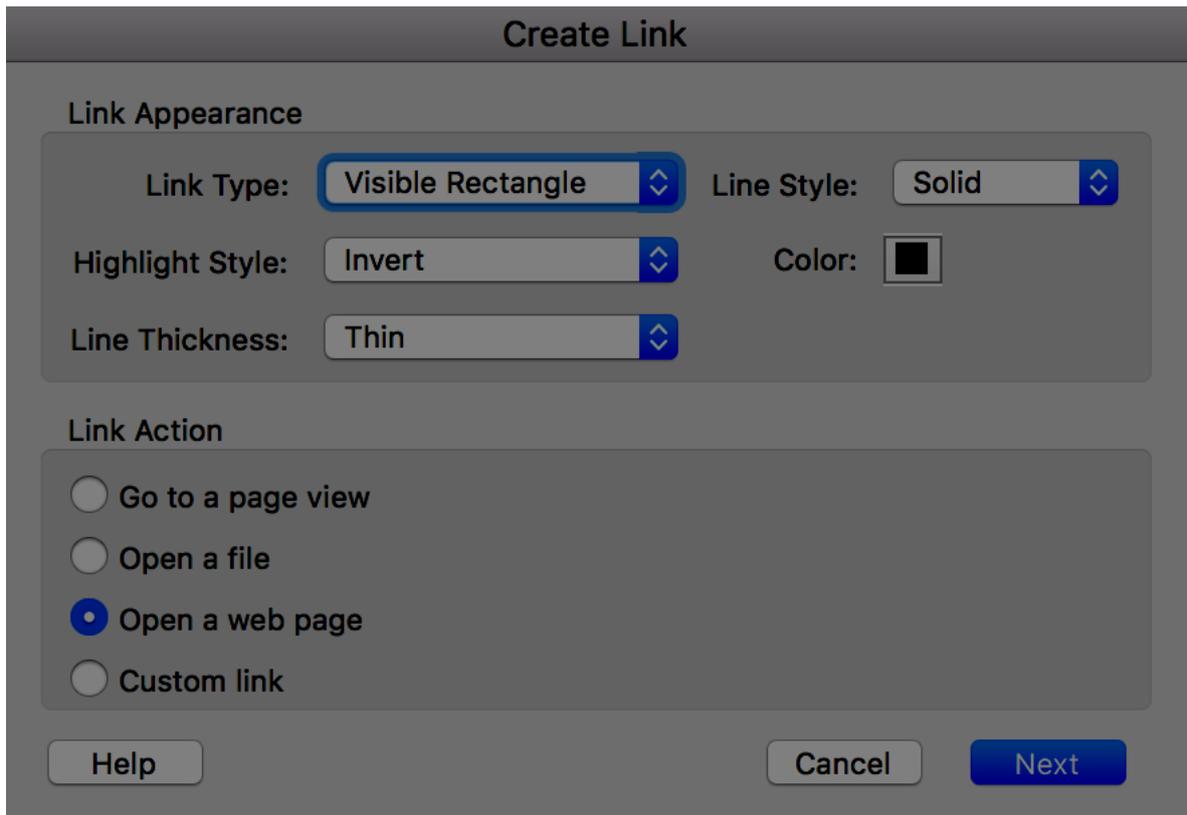
To turn a text into a link:

1. Go to **Tools > Edit PDF**.
2. Click the **Link** icon and select **Add/Edit Web or Document Link**.



3. With the pointer, draw a rectangle around the area where you want to create a link.
4. In the **Create Link** dialog box, define the appearance of the link.

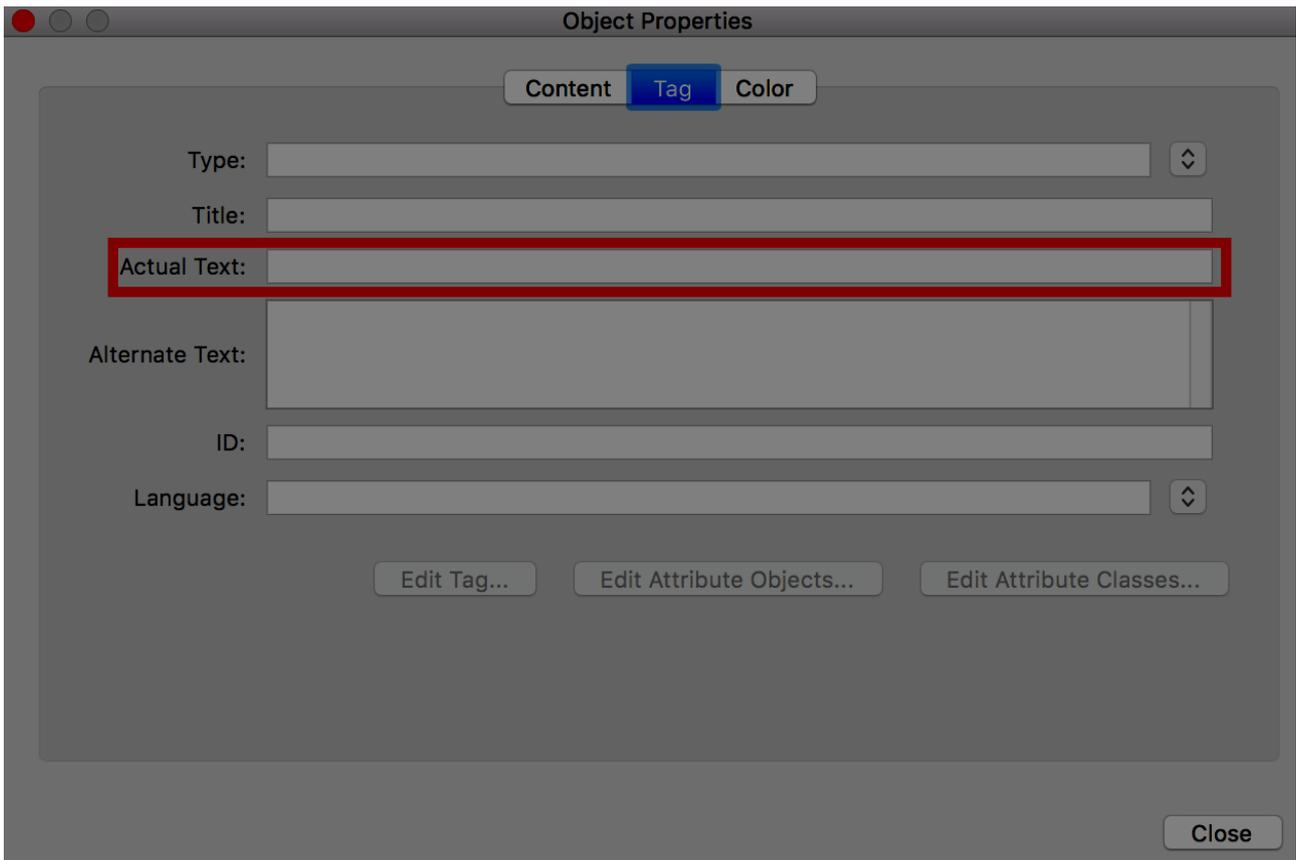
5. In the **Link Action** area, select the target type and click **Next**.



6. For external links, in the **Edit URL** dialog box, enter the URL of the target Web page.
7. Click **OK**.

To add a link text:

1. In the **Tags** panel, in the tags tree, locate the link.
2. Right-click on the <Link> tag (or the <Figure> tag in the case of an image-link) and select **Properties**.
3. Under the **Tag** tab of the **Object Properties** dialog box, enter a replacement text in the **Actual Text** field (or **Alternate Text** for image-links).



4. Click **Close**.

7. Structuring the document appropriately

1. Applicable RGAA criteria

Category	criteria
Tables	<p>Criterion 5.1 [A] Does each complex data table have a summary?</p> <p>Criterion 5.2 [A] For each complex data table with a summary, is this summary relevant?</p> <p>Criterion 5.3 [A] For each layout table, is the linearized content still understandable (except in particular cases)?</p> <p>Criterion 5.4 [A] Does each data table have a title?</p> <p>Criterion 5.5 [A] For each data table with a title, is this title relevant?</p> <p>Criterion 5.6 [A] For each data table, are each column header and each row header correctly identified?</p> <p>Criterion 5.7 [A] For each data table, is each cell associated with its header cell using the appropriate technique?</p> <p>Criterion 5.8 [A] Each layout table must not use elements intended for data tables . Has this rule been followed?</p>
Mandatory elements	<p>Criterion 8.3 [A] On each Web page, is the default human language identifiable?</p> <p>Criterion 8.4 [A] For each Web page with a default human language, is the language code appropriate?</p> <p>Criterion 8.7 [AA] On each Web page, is each change in the human language identified via the source code (except in particular cases)?</p> <p>Criterion 8.8 [AA] On each Web page, is each change in human language relevant?</p> <p>Criterion 8.10 [A] On each Web page, are changes in reading direction identified?</p>
Information structure	<p>Criterion 9.1 [A] On each Web page, is information structured by the appropriate use of headings?</p> <p>Criterion 9.2 [A] On each Web page, is the document outline coherent?</p> <p>Criterion 9.3 [A] On each Web page, is each list structured appropriately?</p> <p>Criterion 9.4 [AAA] On each Web page, does the first occurrence of each abbreviation help to know its meaning?</p> <p>Criterion 9.5 [AAA] On each Web page, is the meaning of each abbreviation relevant?</p> <p>Criterion 9.6 [A] On each Web page, is each quotation identified properly?</p>
Navigation	<p>Criterion 12.13 [A] On each Web page, is tabbing order consistent?</p>
Consultation	<p>Criterion 13.9 [AAA] On each Web page, are unusual expressions, idioms or jargon made explicit?</p>

Criterion 13.10 [AAA] On each Web page, for each expression used in an unusual or restricted way, each idiom or jargon with a definition, is this definition relevant?

Criterion 13.13 [AAA] On each Web page, for each word whose meaning cannot be understood without knowing the pronunciation, is this pronunciation specified?

Criterion 13.14 [AAA] On each Web page, does each text that requires a reading ability more advanced than the lower secondary education level have an alternative version?

2. Introduction

The notion of structure is central to any document. In a PDF document, this structure must be represented via the tags that convey to the reader a primary hierarchy of the content.

Provided they are correctly tagged, and in a logical order, headings, paragraphs, lists, tables, and other structuring elements allow readers to navigate inside the document and find the information they need.

3. Document title

The “heading” tag (<H>) identifies the document title (generally present on the first page of the document).

This tag must appear only once in a given PDF document.

4. Table of contents

Tags for tables of contents are nested tags: each chapter or subchapter heading is contained in a <TOCI> tag. All <TOCI> tags are grouped in a single <TOC> tag.

When the table of contents has been created correctly in the source document, hypertext links that allow readers to access the contents of the table are preserved when exporting the PDF file.

The image shows a PDF viewer interface with a 'Tags' panel on the left and a document page on the right. The 'Tags' panel displays a tree structure of HTML tags. The root tag is <TOC>, which contains a <TOCI> tag. This <TOCI> tag contains several <Link> tags, each followed by a tag. The tags contain the text of the table of contents entries. The document page on the right shows the rendered table of contents, titled 'Table des matières', with entries such as 'Préface / Dominique Burger, UPMC-INSERM, BrailleNet' and 'Introduction / Olivier Nourry, Smile'.

Table des matières	
Préface / Dominique Burger, UPMC-INSERM, BrailleNet	3
Introduction / Olivier Nourry, Smile	5
Chapitre 1 : Le cadre normatif.....	6
<i>Présentation d'ATAG 2.0, les recommandations du W3C pour l'accessibilité des CMS / Jean-Pierre Villain, Access42</i>	6
Chapitre 2 : La politique d'accessibilité de trois grands CMS.....	10
<i>Adapter un CMS pour répondre au besoin - retour d'expérience avec eZ Publish / Christophe Caron, Telmedia*</i>	10
<i>L'accessibilité à grande échelle : Comment WordPress intègre l'accessibilité à son processus de développement / Olivier Nourry, Smile</i>	16
<i>Des solutions accessibles grâce à Drupal / Mike Gifford, OpenConcept</i>	21
Chapitre 3 : L'amélioration de l'accessibilité d'un CMS	25
<i>L'accessibilité via les thèmes enfants dans WordPress / Gaël Poupard, Kosmos</i>	25
<i>L'accessibilité dans le monde Joomla ! / Ariane Andurand, C3RB Informatique</i>	28
Chapitre 4 : Etude comparative de la capacité des CMS à produire des contenus accessibles Olivier Nourry, Smile ; Claire Bizingre, Accesbilis ; Edouard Cunibil, Happyculture ScopARL ; Jacques Pyrat, Pyrat.net ; Mickael Ruzafa, C3rb informatique.....	30
Glossaire.....	37
Les partenaires.....	39

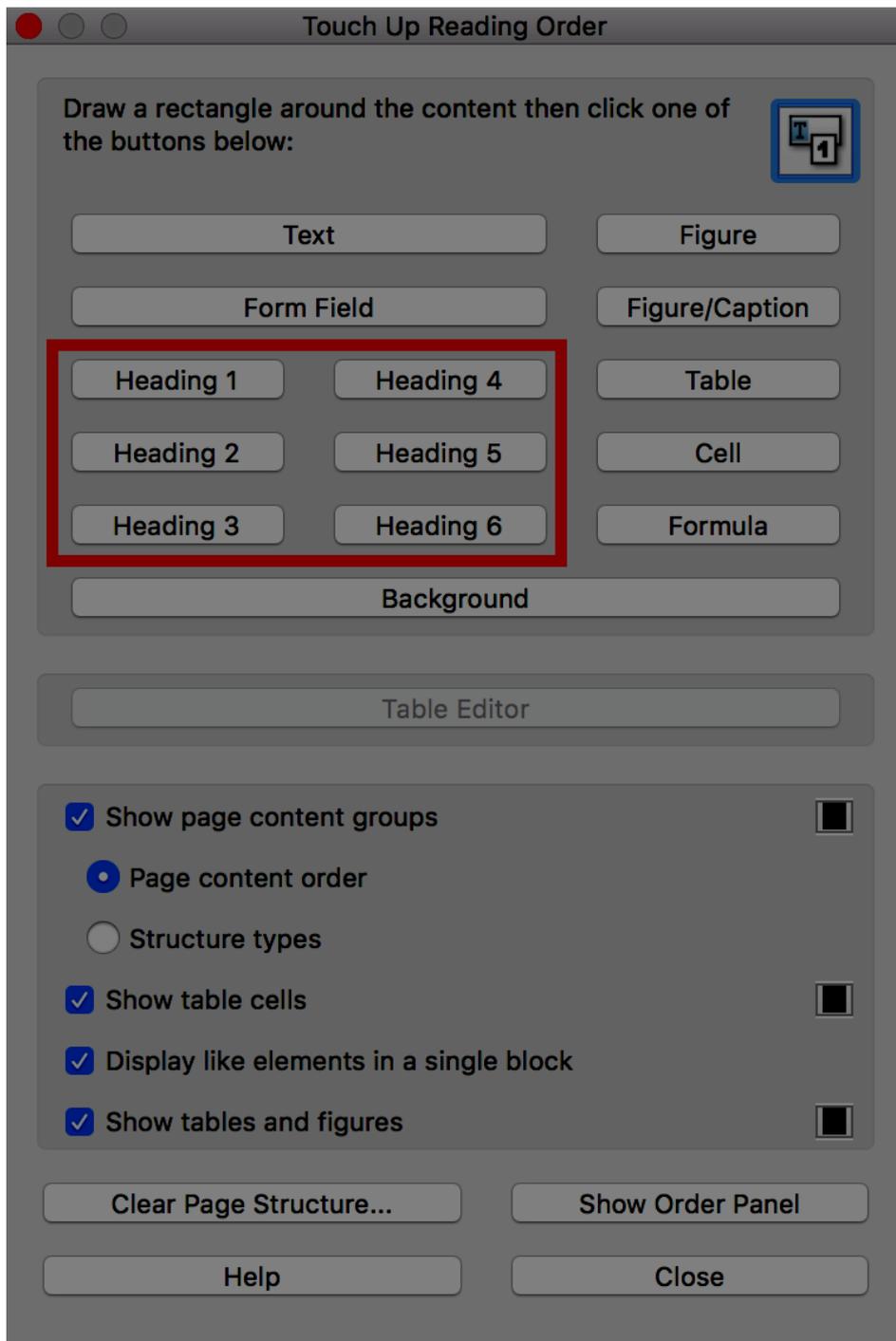
If the table is not tagged, after creating the <TOC> and <TOCI> tags and assigning the contents of the table to these tags, iACR 7.5 At is necessary to create hyperlinks to make the table interactive (see [Links](#)).

5. Headings

To help readers navigate through the document, the headings must be correctly tagged with the appropriate level (<H1> to <H6>).



If the PDF document is already tagged, the Acrobat Touch Up Reading Order tool allows you to assign heading tags to headings (see The Touch Up Reading Order tool).



If an image (<Figure>) is used as a heading, the tag itself must be embedded in a heading tag with appropriate alternate text (see **Giving an alternative to non-textual elements**).

6. Paragraphs

Any text that can not be identified by a particular tag must be marked as "Paragraph" (<P>).

Documents formatted using layout tables require a re-tagging work, because a tabular structure can interfere with reading. Table cells must be replaced by paragraphs.

When auto-tagging from authoring software (Word, Writer, etc.) it is possible that repeating empty <p> tags are generated, if the author used a carriage return to create blank spaces. These tags are to be deleted because a succession of empty paragraphs can clutter the reading of the document for users of screen readers or text-to-speech devices.

7. Lists

Lists tagged as paragraphs will not be rendered properly because they will be interpreted as a sequence of separate paragraphs. It is therefore imperative to assign appropriate markup to the lists.

List tags are nested tags. The list elements () are grouped together in a single <L>.



For bulleted lists, the bullet itself must be tagged as an artifact (Background). For numbered lists, the number must be kept in the tags.

List item body (<LBody>) and Label (<Lbl>) tags can exist in PDF documents exported from authoring software. They do not interfere with reading, but they do not need to be added manually.

8. Columns

To make columns distinct from each other, and easy navigable, the content of each column must be tagged separately.

9. Footnotes

The <Note> tag marks footnotes.

Note calls must be marked with a , with a replacement text indicating that it is a note (for example, "See note 19").

The position of the <Note> tag can be changed from the logical reading order of the page, so that it is located just after the paragraph or the note call.

10. Quotes

The <Quote> tag allows you to specify quotes within a paragraph.

Blocks containing quotes must be identified by the <Blockquote> tag.

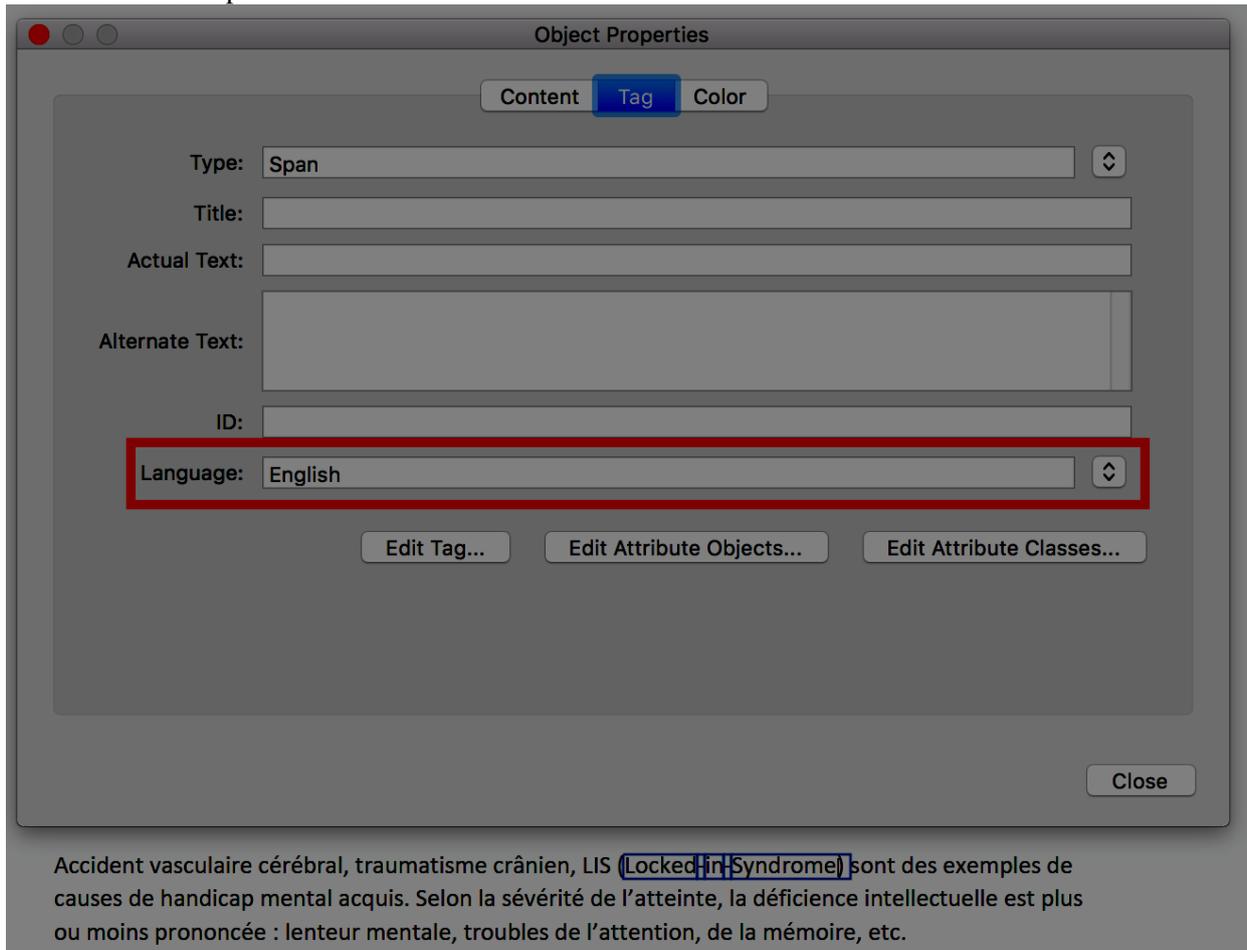
11. Words or groups of words in a foreign language

Words in a foreign language must be correctly marked so that the text-to-speech devices pronounce them correctly.

To report a language change that applies to the entire content of a tag:

1. In the **Tags** navigation panel select the tag that contains text in another language.
2. Go to **Options> Properties**.

3. Under the **Tag** tab of the **Object Properties** dialog box, in the **Language** box, select a language from the drop-down menu.



4. Click **Close**.

The contents of all child tags in this tag will be assigned the selected language.

When it comes to words, or groups of words, that do not correspond to the entire content of the tag, you must isolate them with the tag in order to be able to assign them a language:

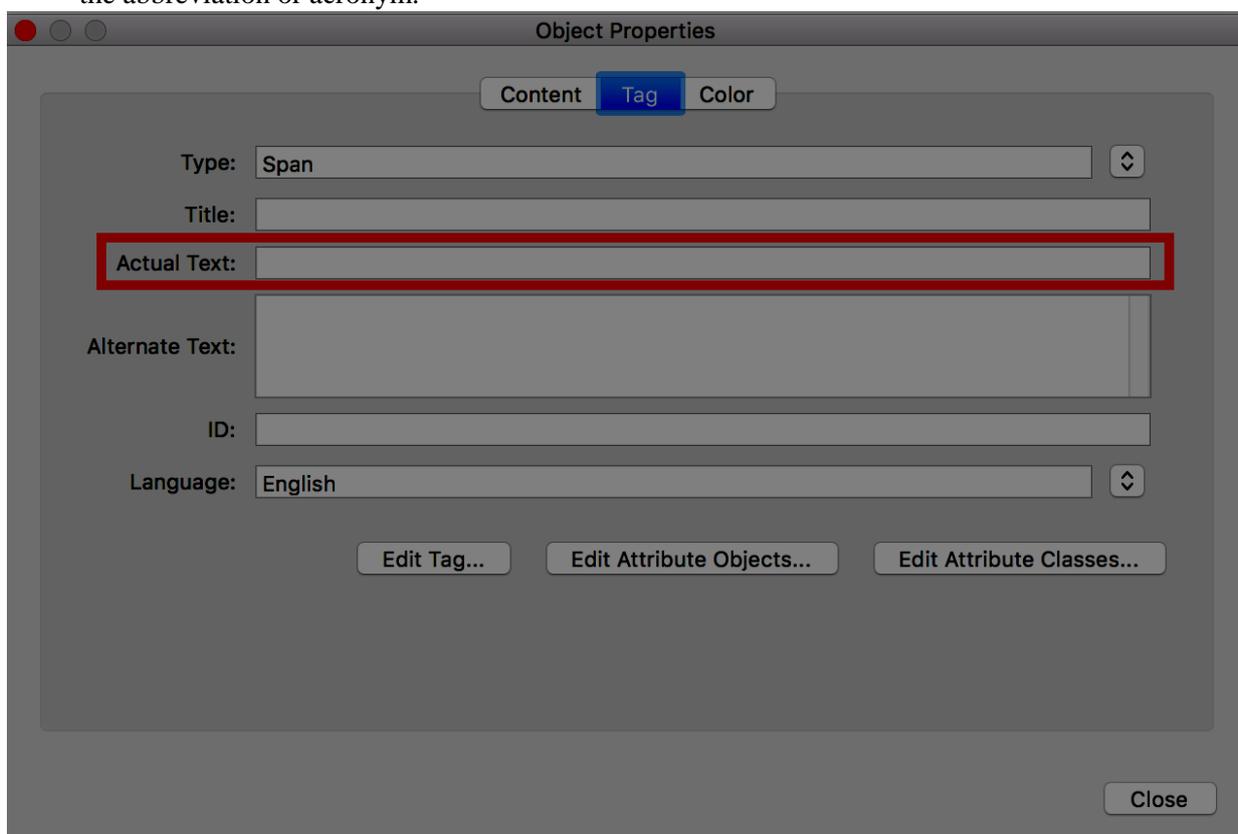
1. In the **Tags** navigation pane select the tag that contains the text with a word or a group of words in another language.
2. Go to **Options> New Tag**.
3. From the **Type** drop-down list select **Span** and click **OK**.
4. In the **Tags** navigation panel select the new tag.
5. In the **View** pane, activate the **Selection** tool on the toolbar, and select the word or group of words in another language.
6. In the **Tags** navigation pane, open the **Options** menu and select **Create Tag from Selection**.
7. Select the new tag and set the language by following the steps outlined above.
8. Check that the tag order is correct.

12. Abbreviations and acronyms

If the meaning of abbreviations or acronyms is not explained in the text, it shall be indicated by a replacement text.

In the case of words, or groups of words, that do not correspond to the entire contents of the bounding tag, they must be isolated with the tag in order to be able to attribute meaning to it:

1. In the **Tags** navigation panel select the tag that contains the abbreviation or acronym.
2. If the content of the tag is not limited to the abbreviation or acronym, go to **Options> New Tag**, and from the Type drop-down list select **Span** and click **OK**. In the **Tags** navigation panel select the new tag. In the **View** panel, activate the **Selection** tool in the toolbar and select the abbreviation or acronym. In the **Tags** navigation pane, open the **Options** menu and select **Create Tag from Selection**.
3. Select the tag that contains the abbreviation or acronym.
4. In the **Tags** panel, go to **Options> Properties**.
5. In the **Object Properties** dialog box, under the Tag tab, in the Actual Text box, enter the meaning of the abbreviation or acronym.



6. Close the dialog box.

13. Tables

Tables constitute a complex environment for users of assistive technologies because the organization of information and the relationships between them can't be perceived and scanned quickly.

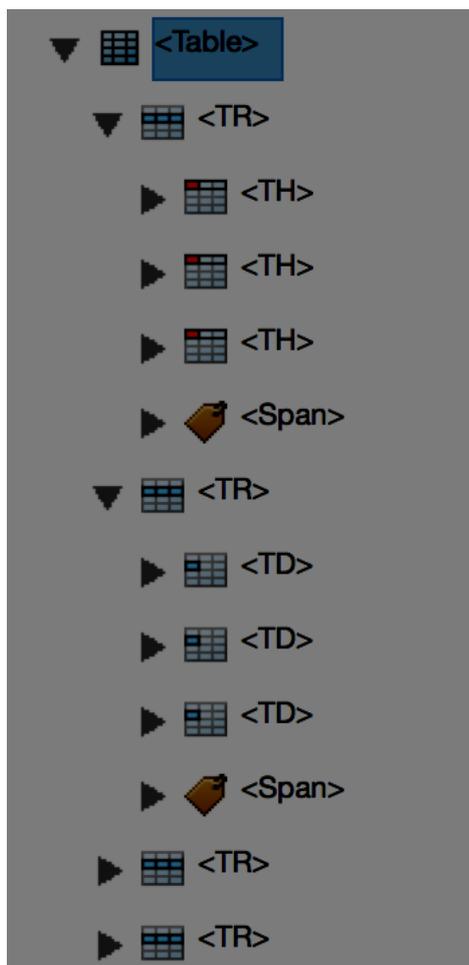
Tables used for layout purposes only must be removed because a tabular structure can interfere with reading. Table cells must be replaced by paragraphs (<P>), see **Main tags used**.

For data tables, it is necessary to ensure that each data cell in the table can be correctly linked to the header cell(s) that make it meaningful.

To achieve the best possible results when tagging a table, when you create the source document in authoring software like Microsoft Word or LibreOffice Writer, you must use the table creation features.

1. Analyzing the existing markup of a table

The `<Table>` tag must encompass `<TD>` (Table Data) or `<TH>` (Table Header) cells grouped by row in `<TR>` (Table Row) tags.



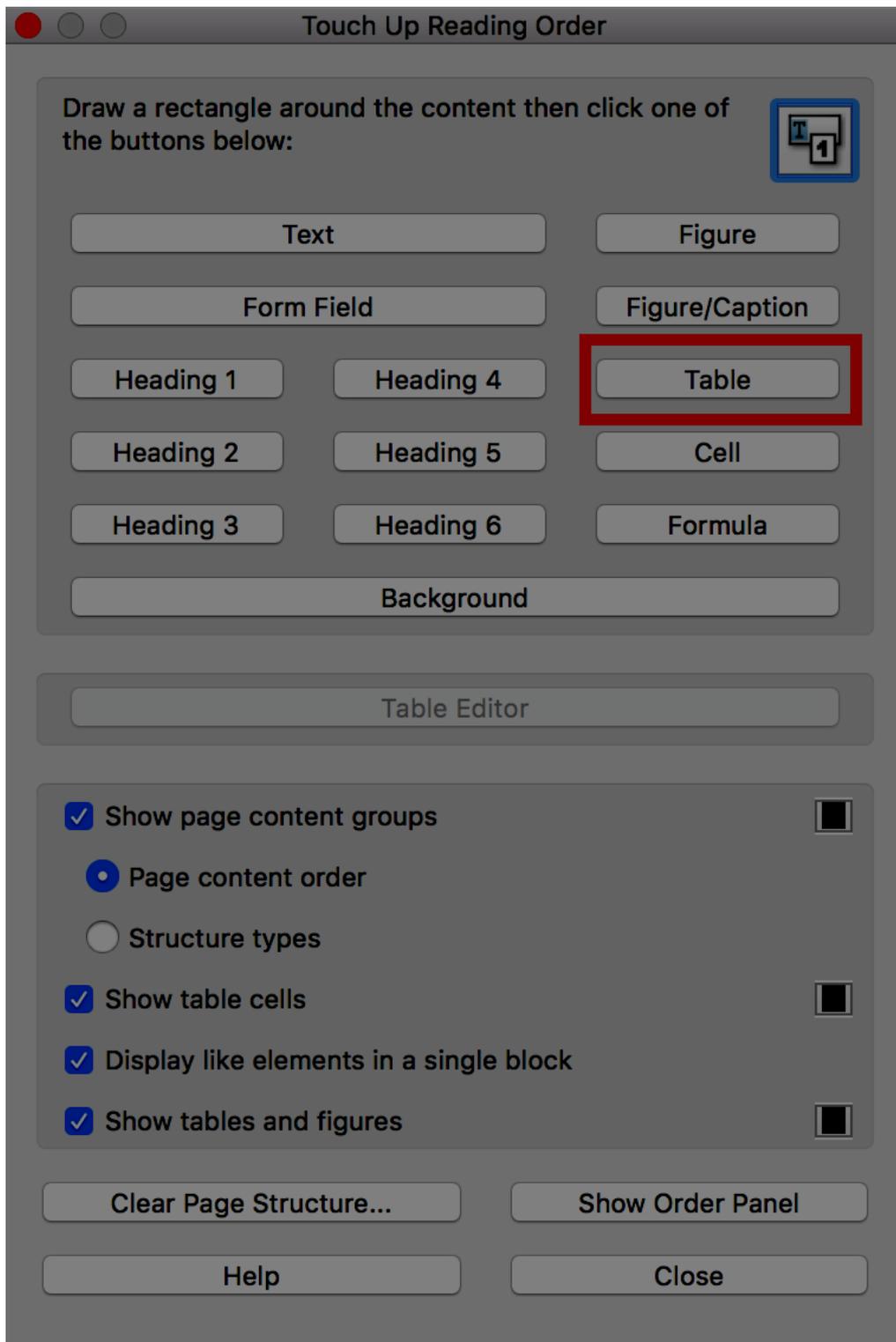
The **Tags** panel lets you expand the root of the tags to see if the cells in the table are properly defined, before making changes to table elements.

2. Modification of table markup, and non-supported tags

8. Simple tables

If the `<Table>` tag is missing, or if it is not structured as it should be, the **Touch Up Reading Order** tool can be used to define an appropriate structure for simple tables:

1. Open the **Touch Up Reading Order** dialog box.
2. Select the entire table in the **View** pane.
3. Click **Table**.



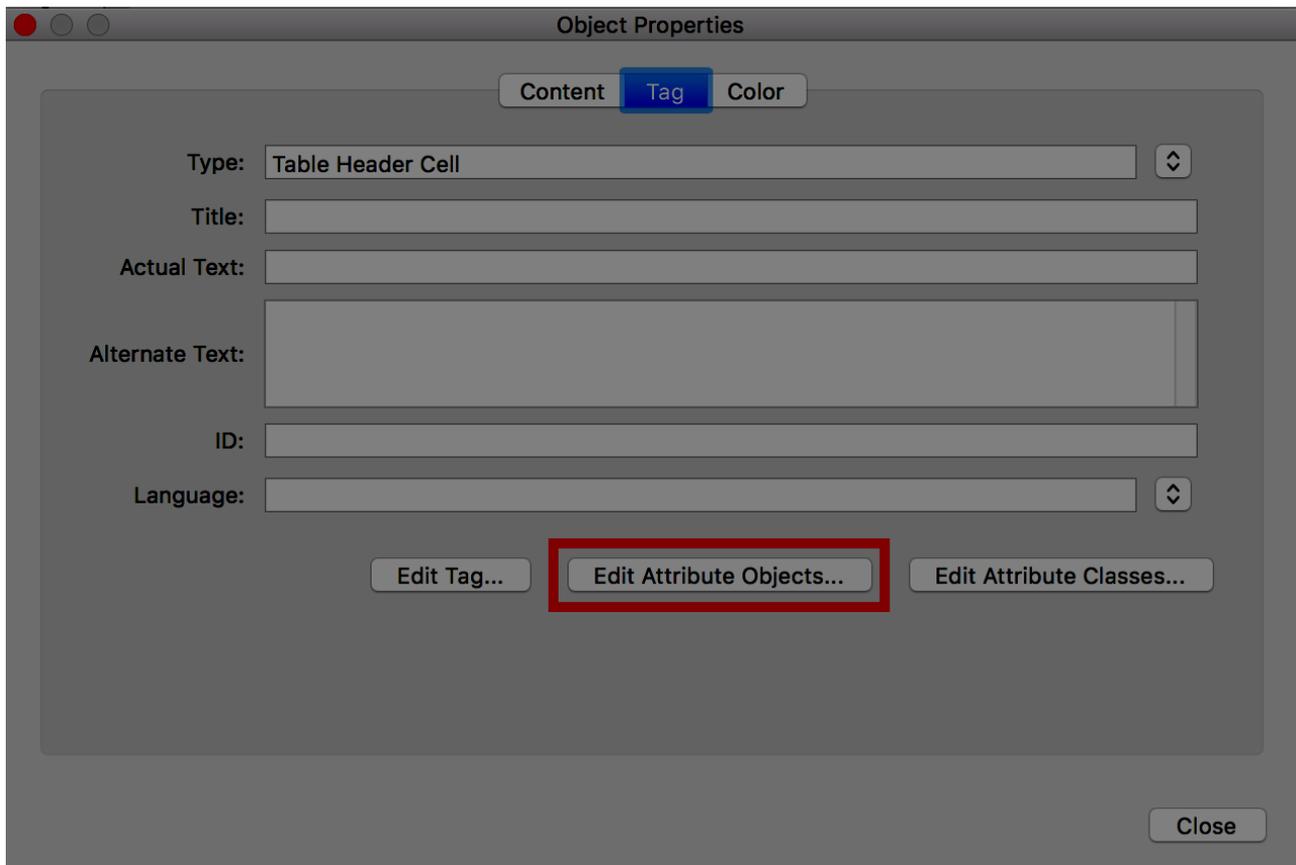
If this technique does not work (the `<TR>` and `<TD>` tags are not created for all content), each tag must be created and associated one by one to cells. This procedure of adding tags is a tedious task and can be time-consuming.

For the tables that are already tagged, a verification work is necessary to ensure that the contents are correctly identified and distributed in a coherent structure. Some cells can be identified as headers (`<TH>`) while they are data cells (`<TD>`), or vice versa. Some content spread across multiple cells may be erroneously merged into a single tag. All these anomalies are to be corrected manually via the **Tags** navigation panel.

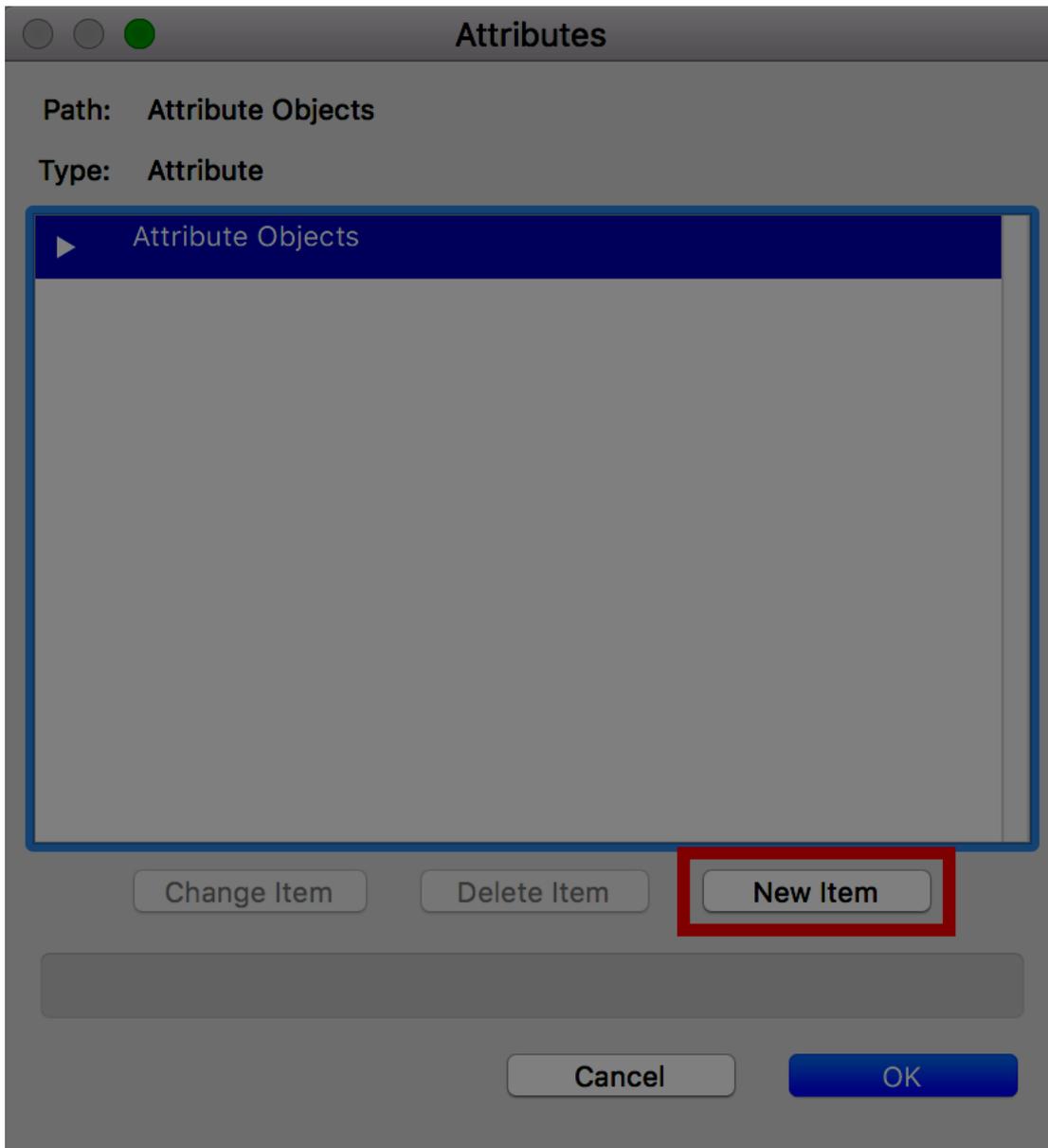
9. Complex tables

When the table contains headers that span multiple columns, you must define the ColSpan and RowSpan attributes of these rows so that the headers and associated data are accessible and consistent.

1. In the **Tags** panel, select a <TD> or <TH> element.
2. From the **Options** menu, choose **Properties**.
3. In the **Properties** dialog box, under the **Tag** tab, click **Edit Attribute Objects**.



4. Select the attribute objects, and then click **New Item**.



5. Expand the new dictionary, select the **Layout** attribute, and click **Change Item**.
6. Change the **Layout** value to **Table**.
7. Select the attribute objects dictionary, and then click **New Item**.
8. In the **Add Key and Value** dialog box, type **ColSpan** or **RowSpan** in the **Key** box. Specify the number of merged columns or rows in the **Value** box. Choose **Integer** from the **Value Type** drop-down menu, and then click **OK**.

3. Text alternatives

A text alternative is necessary to present the function of the data table in its context. Often a detailed description of the highlights, or a summary of the data presented in the table is required (see [Images and charts](#)).

8. Creating accessible forms

1. Applicable RGAA criteria

Category	Criteria
Forms	Criterion 11.1 [A] Does each form field have a label?
	Criterion 11.2 [A] Is each label associated with a form field relevant?
	Criterion 11.3 [AA] On a given page, or set of pages, all form fields with similar functions must have consistent labels. Has this rule been followed?
	Criterion 11.4 [A] In each form, are each label and its related control positioned next to each other?
	Criterion 11.5 [A] In each form, is the information of same nature grouped together, if necessary?
	Criterion 11.6 [A] In each form, does each form field grouping have a legend?
	Criterion 11.7 [A] In each form, is each legend, related to a form field grouping, relevant?
	Criterion 11.8 [A] In each form, is each selection list structured in a relevant way?
	Criterion 11.9 [A] In each form, is the text of each button relevant?
	Criterion 11.10 [A] In each form, is the input control used in a relevant way?
	Criterion 11.11 [AA] In each form, is input control accompanied, if necessary, by suggestions helping with the correction of input errors?
	Criterion 11.12 [AA] For each form, can financial, legal or personal data be changed, updated or retrieved by the user?
	Criterion 11.13 [AAA] For each form, can all data be changed, updated or recovered by the user?
	Criterion 11.14 [AAA] For each form, is input assistance available?
	Criterion 11.15 [AAA] For each form, is each input assistance relevant?

2. Introduction

A form is an input space, which can have several "fields" where the user can enter text, check boxes, select from a list of predefined terms, press buttons, and so on.

Well-designed forms will be accessible to users of assistive technology, provided they follow a few simple rules:

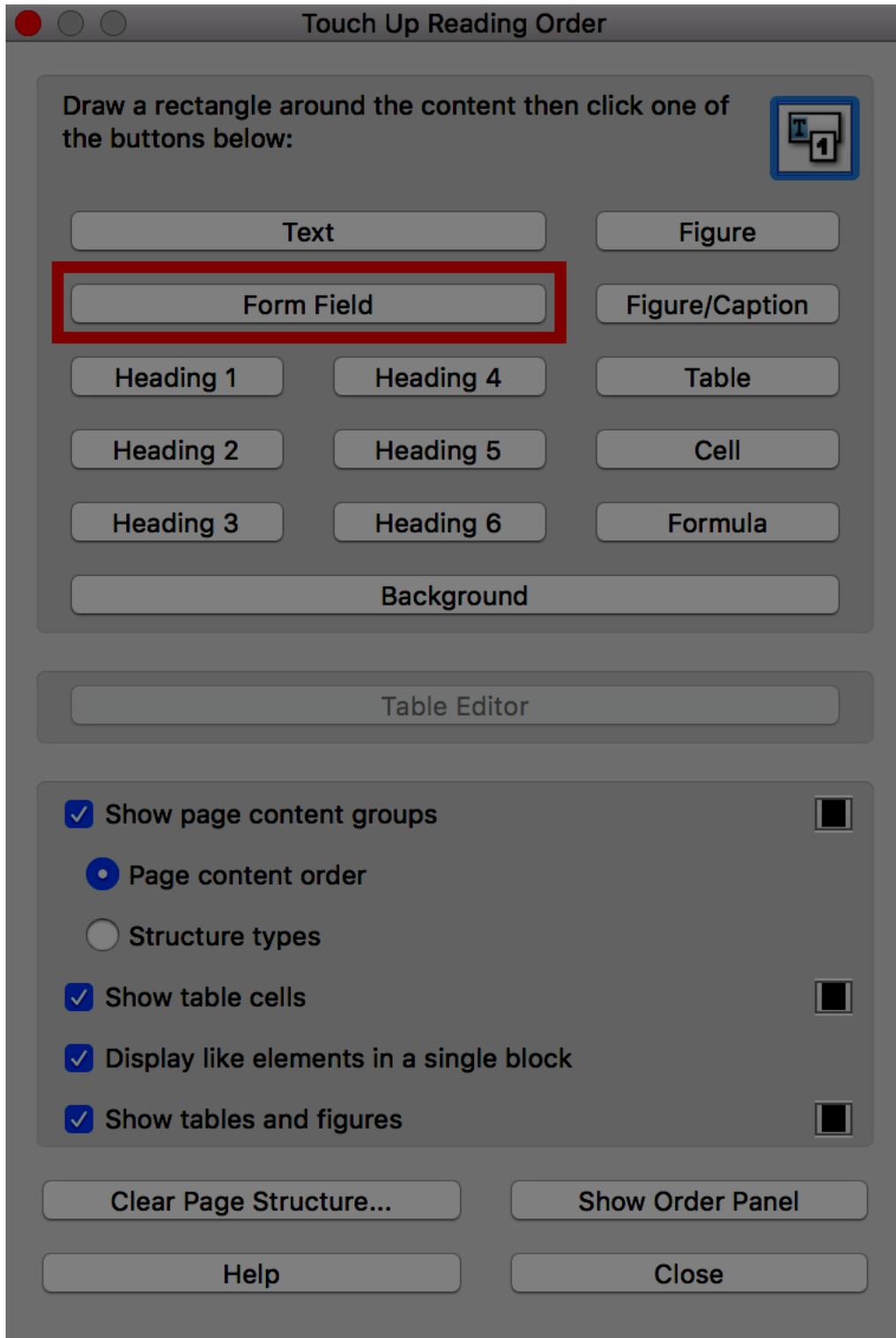
- The focus path (tab order) must be logical and understandable;
- Each form field must be identified;
- Short instructions, or examples of expected input, must be provided;
- Form fields must be editable.

All form fields must appear logically in the tags tree, and the user must have access to information through tooltips.

3. Tagging forms

Each field of the form must be identified with the <Form> tag and inserted into a paragraph tag (<P>). A paragraph can contain multiple <Form> tags.

If the PDF form is already tagged, the **Touch Up Reading Order** tool allows you to tag the fields appropriately (see The Touch Up Reading Order tool).



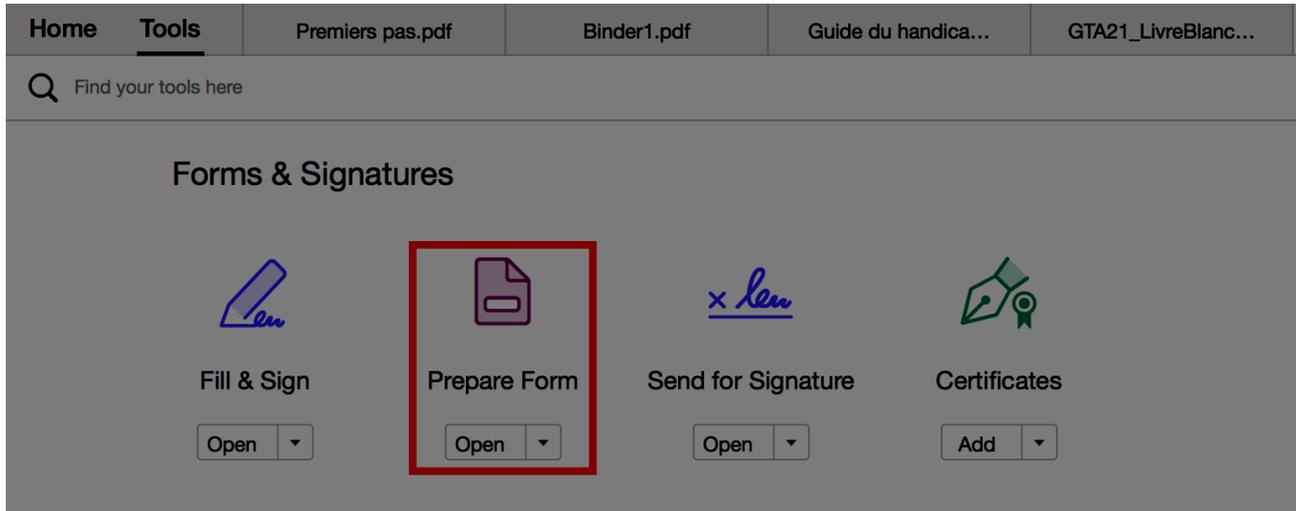
Forms formatted using presentation tables must be reworked and tagged again, because a tabular structure can interfere with reading. Table cells must be replaced with paragraphs (see **Main tags used**).

4. Identifying fields

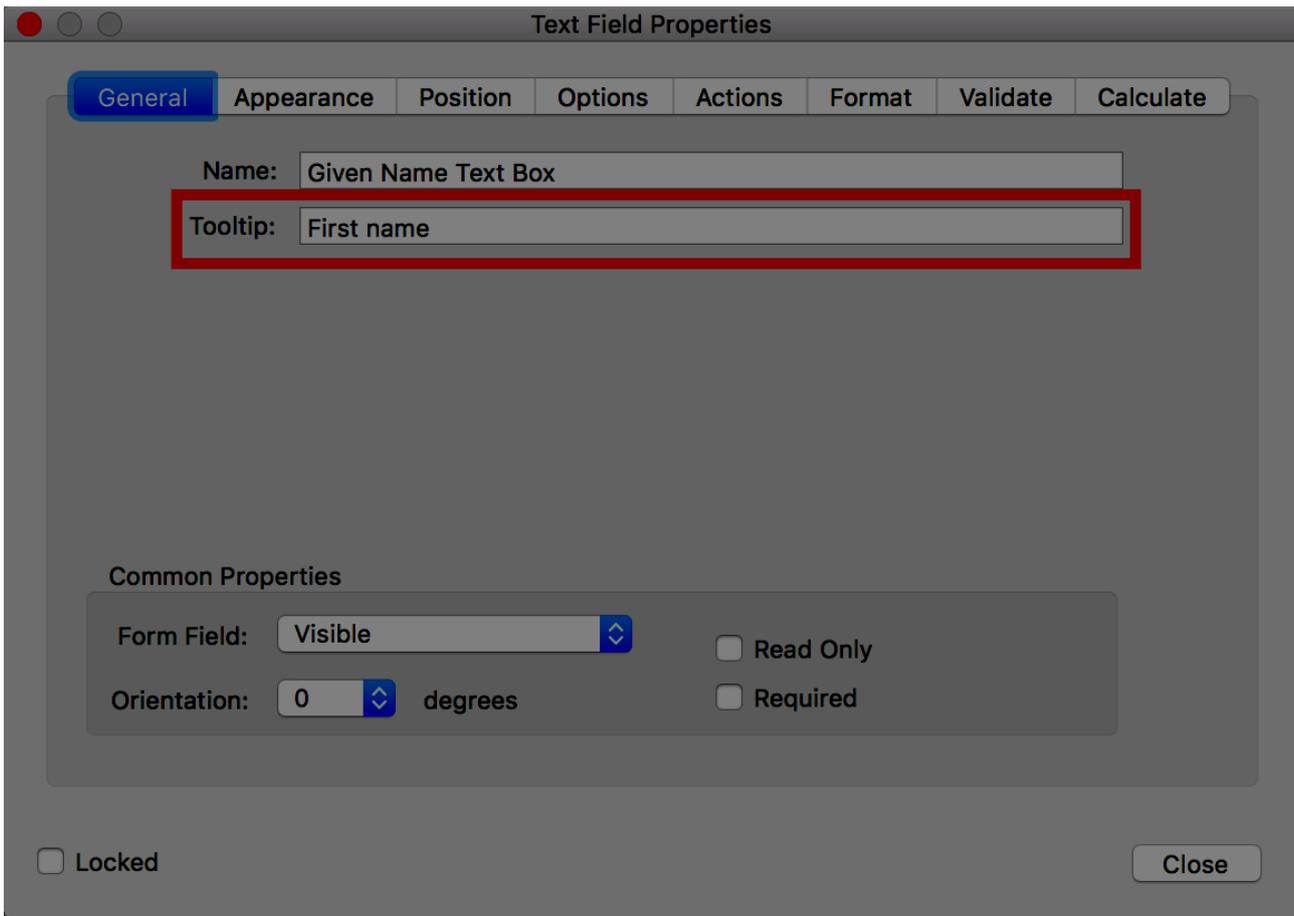
For screen reader users, only the tooltip - directly connected to the field - will be read when the the cursor on the field. For this reason, non-tagged field labels must remain as such, and tagged labels must be turned into background content (<Artifact>). The information contained in the label will be copied in the tooltip.

To add a tooltip:

1. Open the **Prepare Form** tool (**Tools> Prepare Form**).



2. Double-click the form field to which you want to add instructional text.



3. Under the **General** tab of the **Text Field Properties** dialog box, in the **Tooltip** text box, enter the field label, followed, if necessary, by instructional text.
4. Click **Close**.

For check boxes, the tooltip must repeat the question, followed by the answer (example: What is your nationality? American; What is your nationality? Canadian; etc.).

5. Proposing instructional or help texts

For some fields, in addition to the label, you must provide in the tooltip instructional text that specify the nature or format of the expected input, in order to avoid any ambiguity. Example: "e-mail (example: yourname@company.com)".

6. Defining and testing the tab order

Once the form is tagged, you must test the tab order, using the keyboard commands to make sure it is fully accessible. The following commands allow you to browse the form using the keyboard:

- **Tab** to activate next field;
- **Shift + Tab** to activate the previous field;
- **Spacebar** to select options;
- **Arrow keys** to select options presented as radio buttons or items in a list.

To fix tabbing order issues that may affect the understanding of the form, see **Reading order**.

9. Reading order

Assistive technologies scan the document in a linear fashion. In documents with a complex layout, the different contents do not necessarily appear on the page in a logical order. A heading, for example, may be in the middle of a page, whereas it must be read before the content it is associated with.

In a first step, it is necessary to analyze the document page by page and to decide which modifications are necessary in order for the reading order to be coherent.

1. Defining the reading order with the Touch Up Reading Order tool

The Touch Up Reading Order tool is intended to provide a quick and easy way to fix reading order issues. In the **Touch Up Reading Order** dialog box, a **Show Order Panel** button displays the contents of the document as gray blocks numbered according to their position in the reading order. Normally, the reading order of these areas can be fixed by dragging the highlighted areas into the **Order** panel.

However, according to some experts, using the Touch Up Reading Order tool to redefine a reading order is risky, because some markup errors may result. Tags can be moved unwillingly into other tags, for example, and the order of visual overlay of the contents can also be changed. The impossibility to define the order for some embedded tags, handled by the tool as blocks, may also affect the accessibility of the document. For these reasons, it is recommended to use the **Tags** navigation panel to set the reading order.

2. Defining the reading order with the Tags navigation pane

Assistive technologies read tags from top to bottom in the tag tree.

To change the reading order of the page contents, open the **Tags** navigation pane and move the tags to their correct location (see [Moving a tag](#)).

10. Creating navigation aids

1. Applicable RGAA criteria

Category	Criteria
Navigation	Criterion 12.7 [AA] On each page within a collection of pages, are links facilitating navigation available?

2. Introduction

A document is not necessarily read in a linear fashion. Provided that the document is well structured and enriched with navigation elements, users have the ability to move quickly to content inside and outside the document.

3. Bookmarks

A bookmark is a link giving access to a location, an object, or a selection of text in the document. Rather than scrolling through the document to find the text, the user can access it directly using the Bookmarks navigation panel.

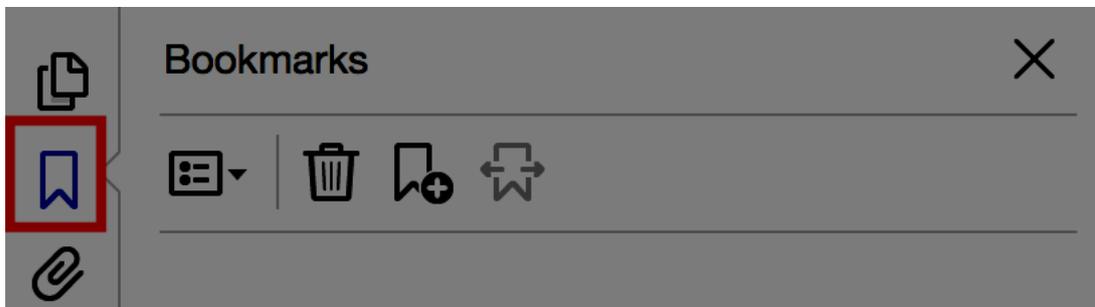
When the source documents contain bookmarks, these bookmarks are often tagged and therefore preserved when creating PDF files.

It is also possible to automatically generate bookmarks from headings, for example, provided that the document is correctly tagged upstream.

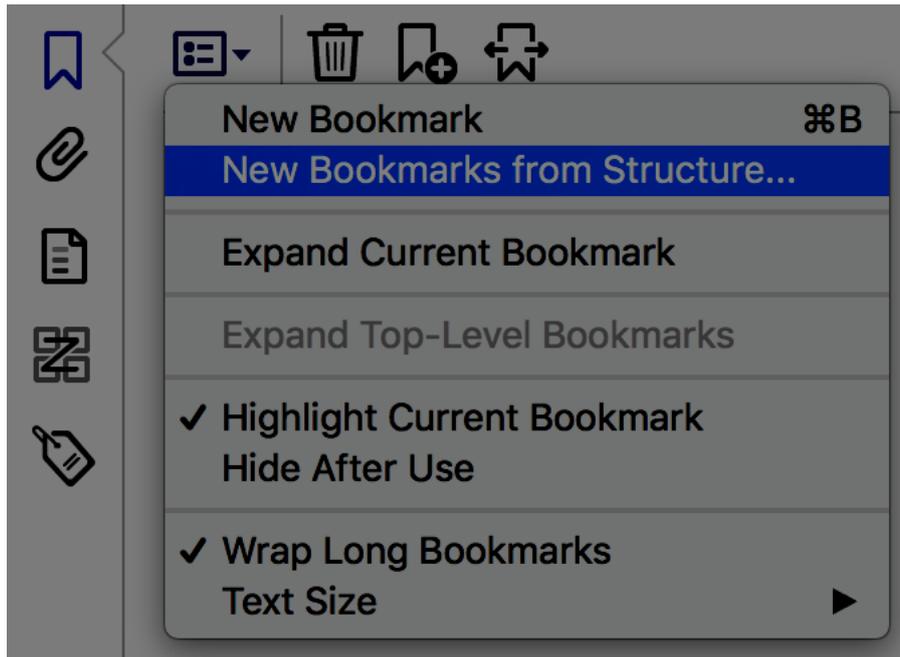
Bookmarks can also trigger actions, such as sending a form.

1. Generating tags automatically, from headings or parts of the document

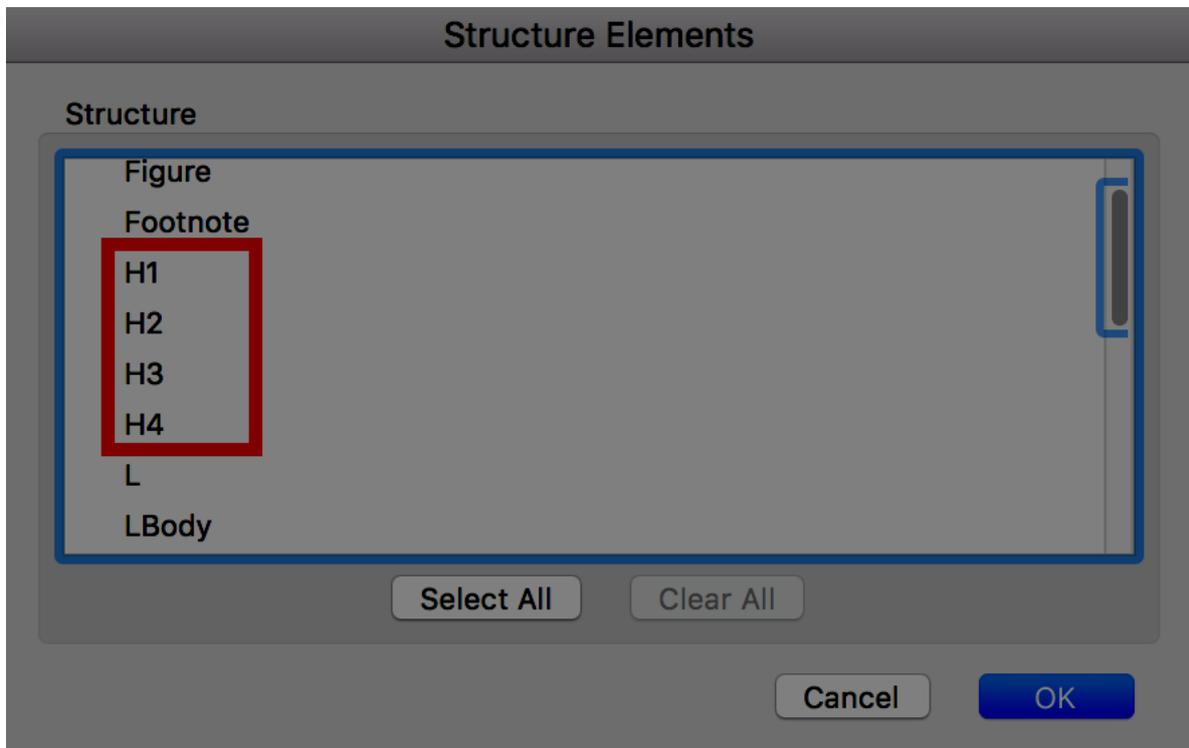
1. Open the **Bookmarks** navigation pane.



2. Go to **Options > New Bookmark from Structure**.



3. In the list of tags that appears, select the <H1> to <H6> tags, or the <Part> tags. The name of the bookmarks is made up from the content of the tags, or from the name of the tags, if you have named them.



1. Creating a new bookmark

1. Click the **Bookmarks** button on the left to open the **Bookmarks** navigation panel.

2. In the **View** pane, go to the page to which the bookmark will refer. If the bookmark should point to a specific text, drag the mouse to select the text. The selected text becomes the title of the new bookmark (it is possible to modify this title). To associate a bookmark with an image, click the desired image or draw a rectangle around it.
3. Click the bookmark located just before where you want to insert the new bookmark (otherwise the new bookmark is automatically added to the end of the bookmarks list).
4. In the **Bookmarks** navigation pane, click **Options > New bookmark** (or click the **New bookmark** icon).
5. In the **Bookmarks** navigation pane, type or change the name of the new bookmark.
6. In some cases, when the bookmark name is too long for example, it is truncated. In this case it is advisable to edit the bookmark name manually to fix it.

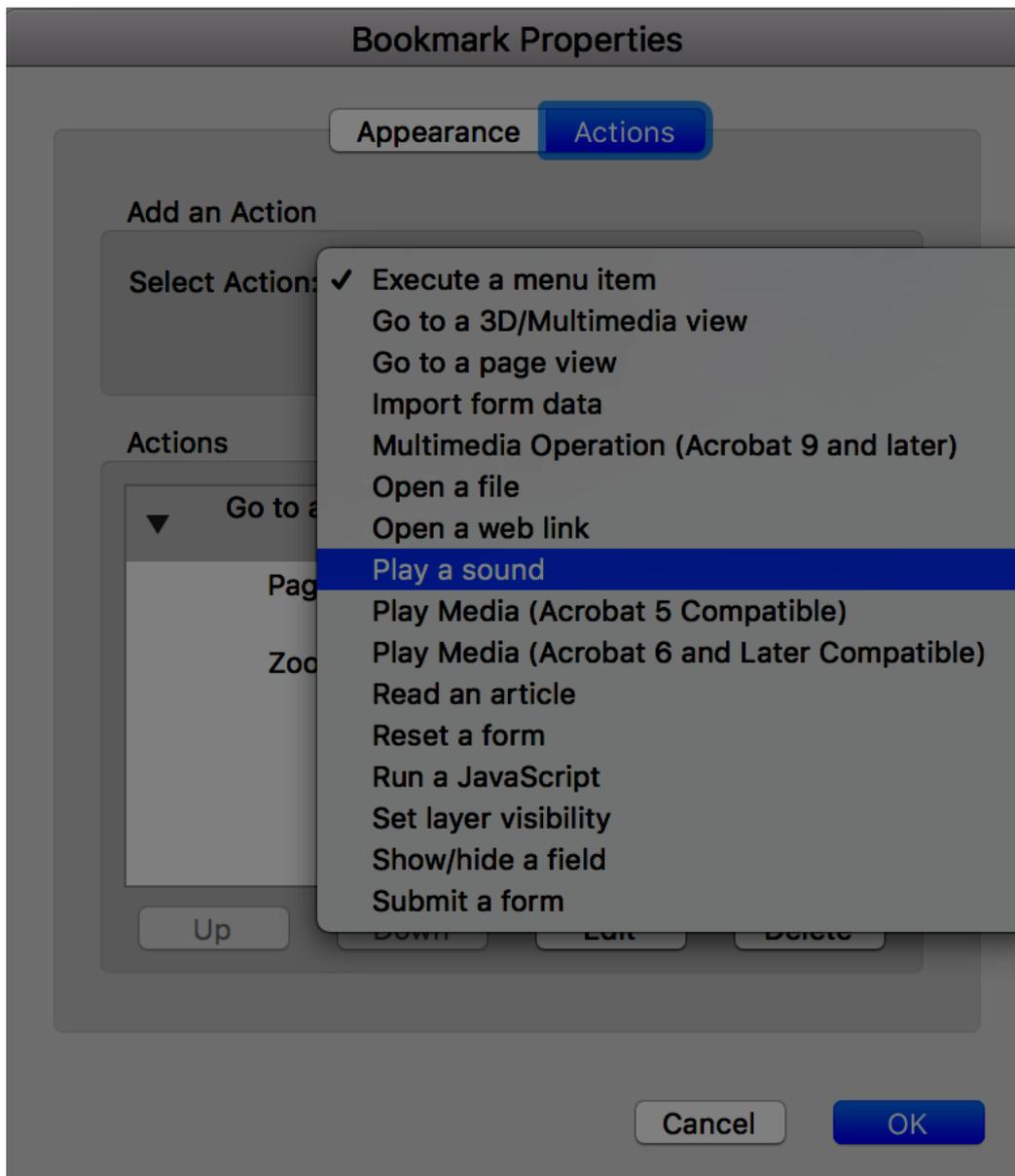
To delete a bookmark, select the bookmark(s), then go to **Options > Delete Bookmark(s)** or press the Delete key (Caution: this deletes its child bookmarks too).

3. Modifying the destination of a bookmark

1. In the **Bookmarks** panel, select a bookmark.
2. In the **View** pane, choose the new location to which the bookmark will refer.
3. From the **Options** menu, choose Set Bookmark Destination.

4. Adding an action to a bookmark

1. In the **Bookmarks** panel, select a bookmark.
2. Go to **Options > Properties**.
3. In the **Bookmark Properties** dialog box, click on **Actions**.
4. Choose an action in the **Select Action** menu, then click **Add**.



4. Links

Hyperlinks allow users to navigate within the document and to external resources.

When the links have been correctly designed in the source document, they are usually preserved when exporting the PDF file. However, it should be checked that the markup is correct and that they are all active.

The <Link> tag may appear in a paragraph or list item, for example, but must only contain the clickable content of the link.

Internal links allow to reach a page view only. To link to a specific text or word, it is necessary to insert bookmarks (see [Bookmarks](#)).

Notes :

- Foreign language hyperlinks must be correctly marked so that the text-to-speech devices pronounce them correctly (see [Words or groups of words in a foreign language](#)).
- By default, the link text is the text contained in the link. It is sometimes necessary to add a replacement text to make the destination of certain links unique and less ambiguous (see [Link text](#)).

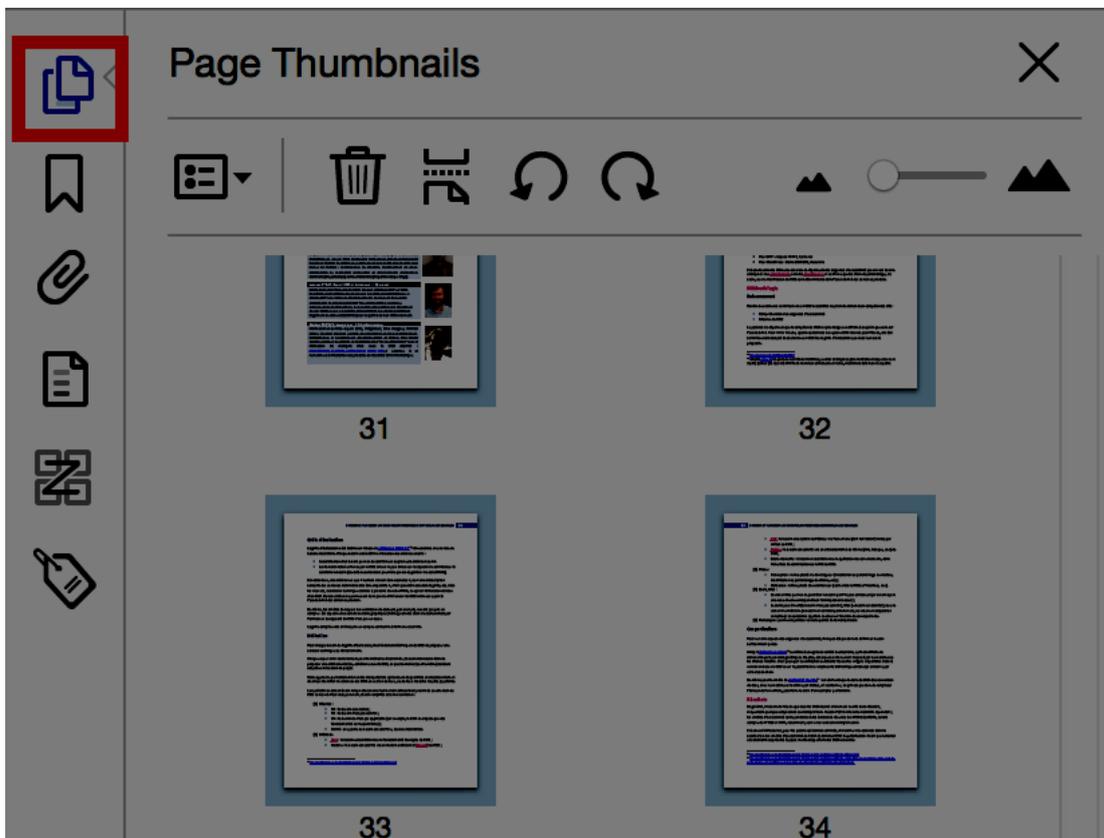
1. Turning a text into a link

Use the Create Link command to turn a text into a link:

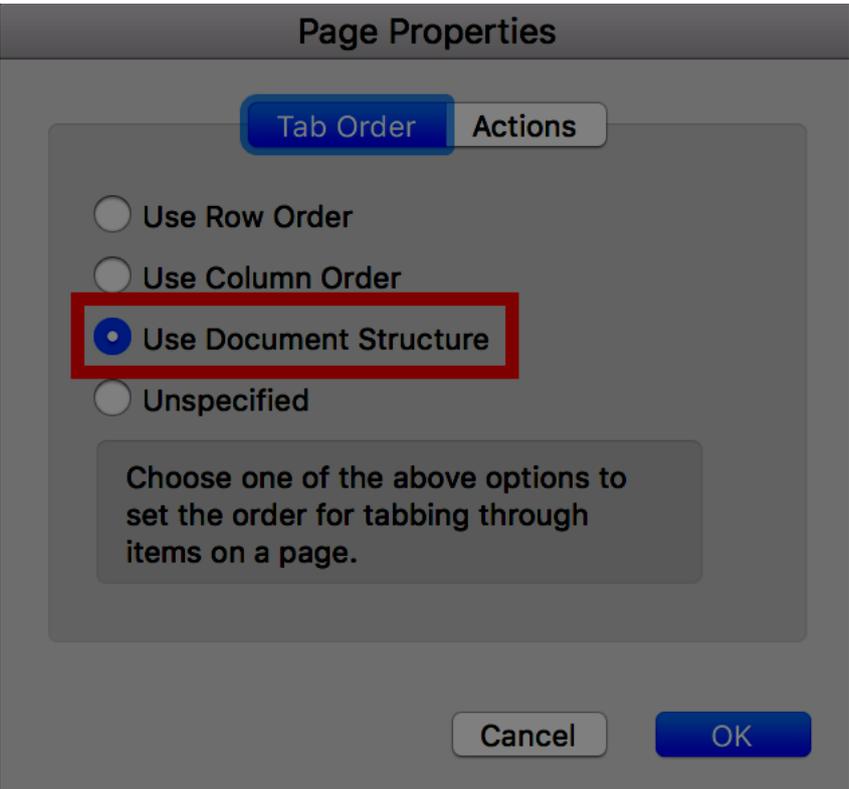
1. Go to **Tools > Edit PDF**.
2. Click the **Link** icon and select **Add/Edit Web or Document Link**.
3. With the pointer, draw a rectangle around the area where you want to create a link.
4. In the **Create Link** dialog box, define the appearance of the link.
5. In the **Link Action** section, select the target type for the link and click **Next**.
6. For external links, in the **Edit URL** dialog box, enter the URL of the target Web page.
7. Click **OK**.
8. Finally, add a replacement text to the new link (see [Link text](#)).

2. Setting links tab order

1. Open the **Pages Thumbnails** navigation pane.



2. Select all page thumbnails.
3. Right-click one of the thumbnails and select **Page Properties**.
4. On the **Tab Order** tab of the **Page Properties** dialog box, check **Use Document Structure**.



11. Setting document properties

1. Introduction

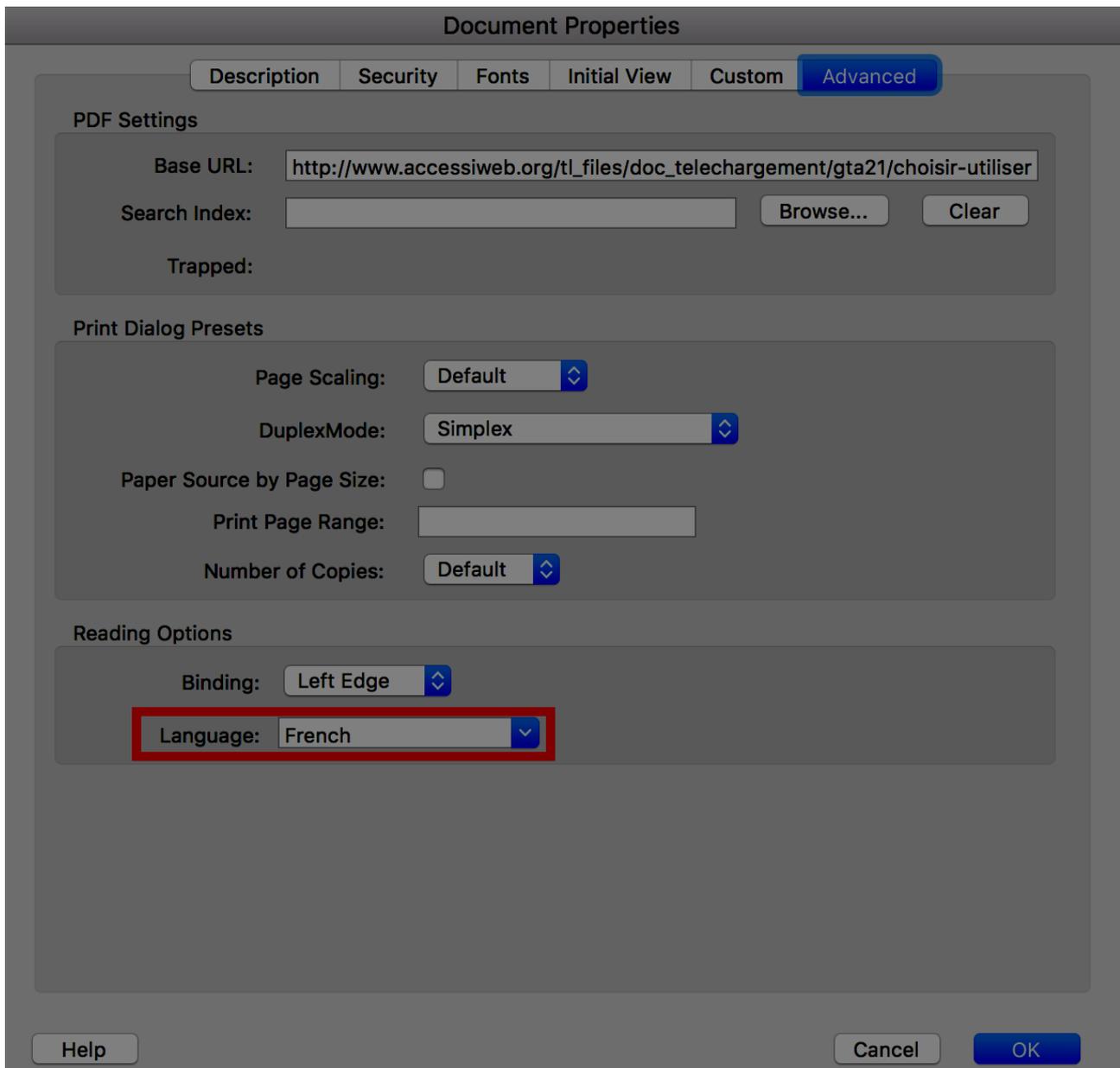
Document properties, also known as metadata, are information about a file that describes or identifies it. They include information such as title, author's name, subject, and keywords identifying the topics or content of the document, the document language, and whether some security parameters have been set or not.

2. Document language

For text-to-speech software, the language selected for the document determines how the content is spoken. It is therefore imperative to define a language for the whole document, and to ensure that any word or passage in another language is correctly identified (see [Words or groups of words in a foreign language](#)).

To set the document language:

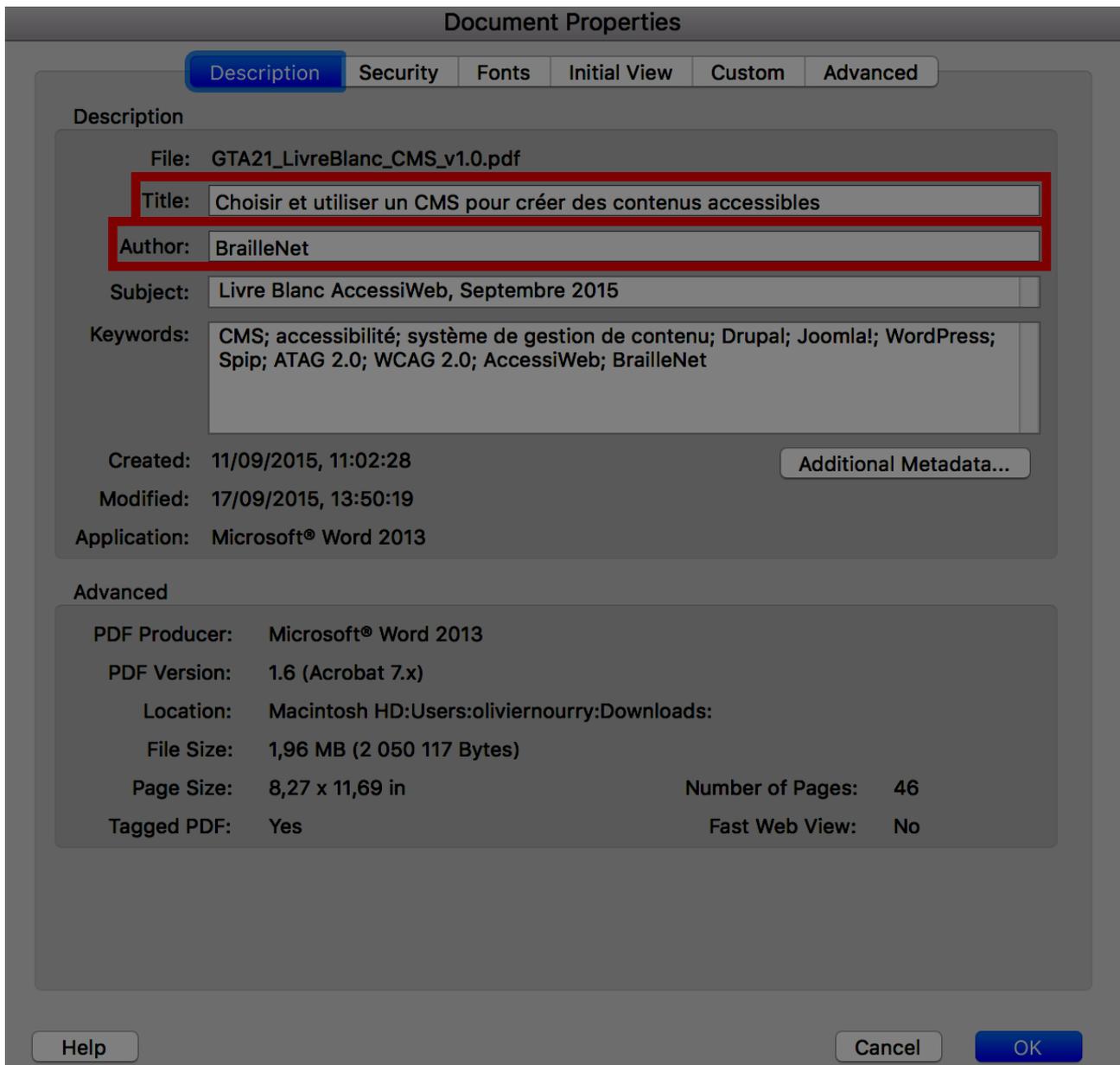
1. Go to File> Properties.
2. Under the **Advanced** tab, in the **Reading Options** area, select the main language of the document.
3. Click **OK**.



3. Filling in the document properties

When opening a document, some assistive technologies refer to the document properties to output the document title and sum up its content.

1. Click **File > Properties**
2. To enable assistive technologies to identify and query the document, complete the following fields **Title**, and **Author**. The **Subject** and **Keywords** fields may also be populated, but are not required for assistive technologies.
3. Click **OK**.



4. Informing the reader that the document is tagged

In order for users of assistive technologies to know the accessibility status of the document, the **Document is Tagged PDF** option should be enabled:

1. Open the **Tags** navigation panel.
2. Go to the **Options** menu and select **Document is Tagged PDF** (a check mark appears beside the option to indicate that it is enabled).

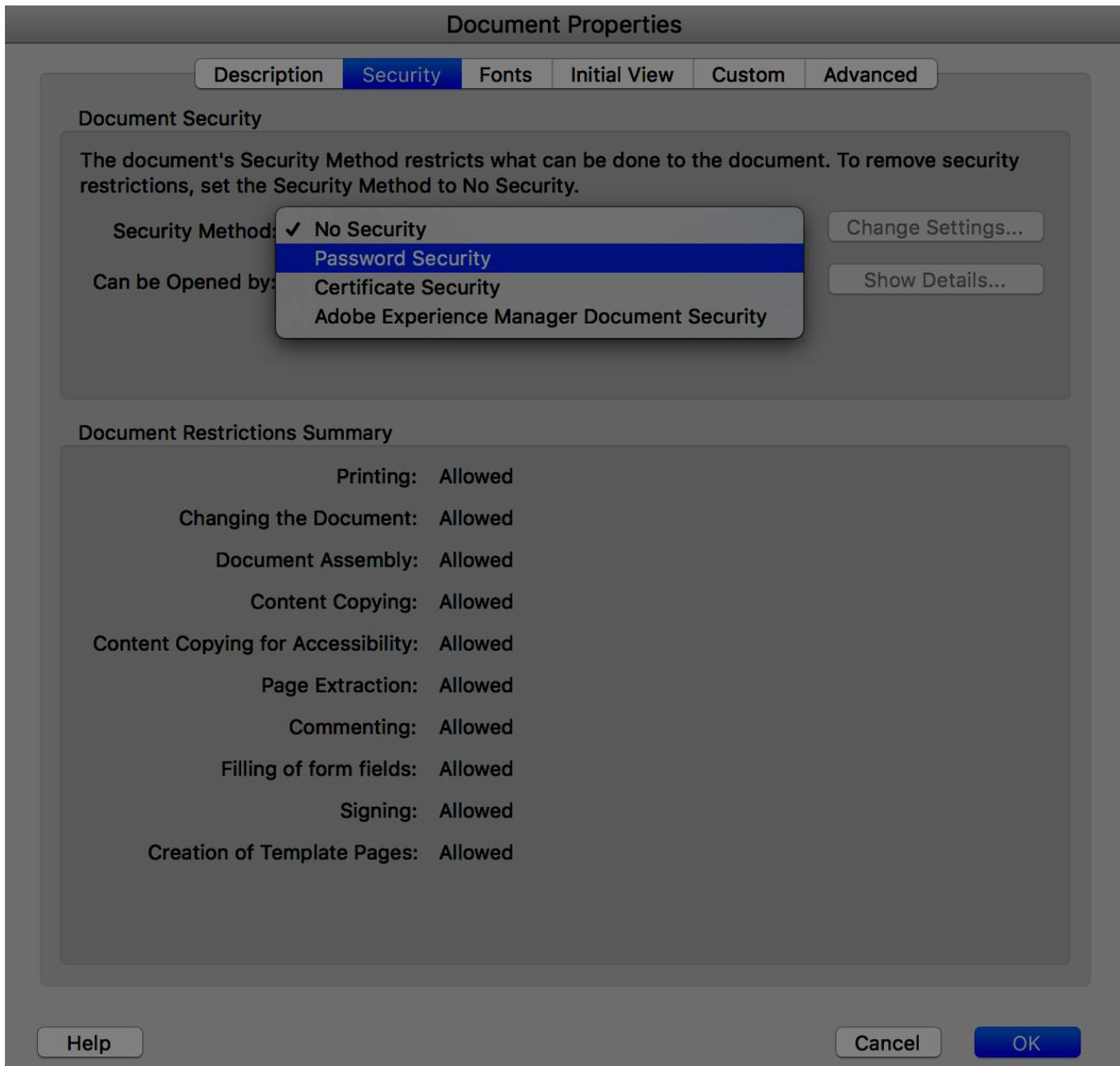
5. Defining the protection parameters

The text of a PDF document must be accessible to screen readers. By default, documents are not protected and are therefore accessible to assistive technologies. If the document must be protected to limit modification or printing, it is necessary to ensure that the protection parameters do not interfere with the screen reader's ability to access the contents of the document.

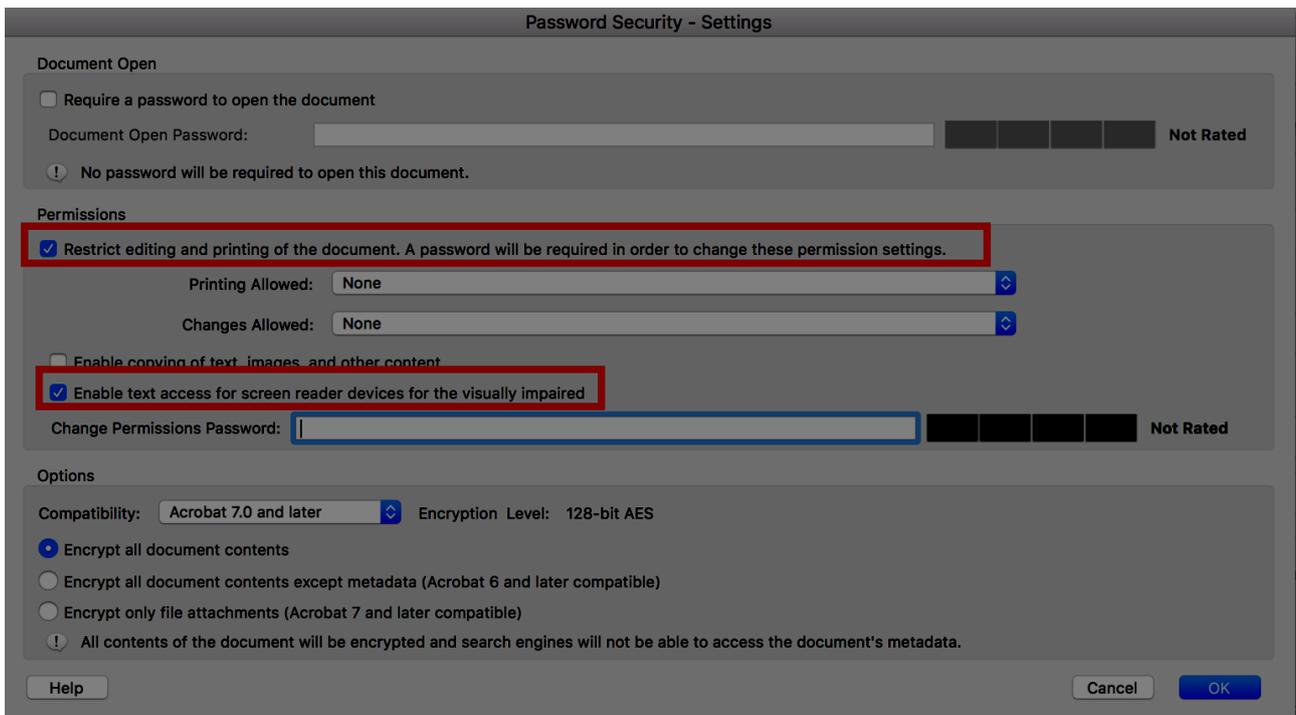
To make the document accessible to assistive technologies while limiting editing or printing:

1. Go to **File > Properties**.

2. Under the **Security** tab, in the **Protection Method** box, select **Password Protection**.



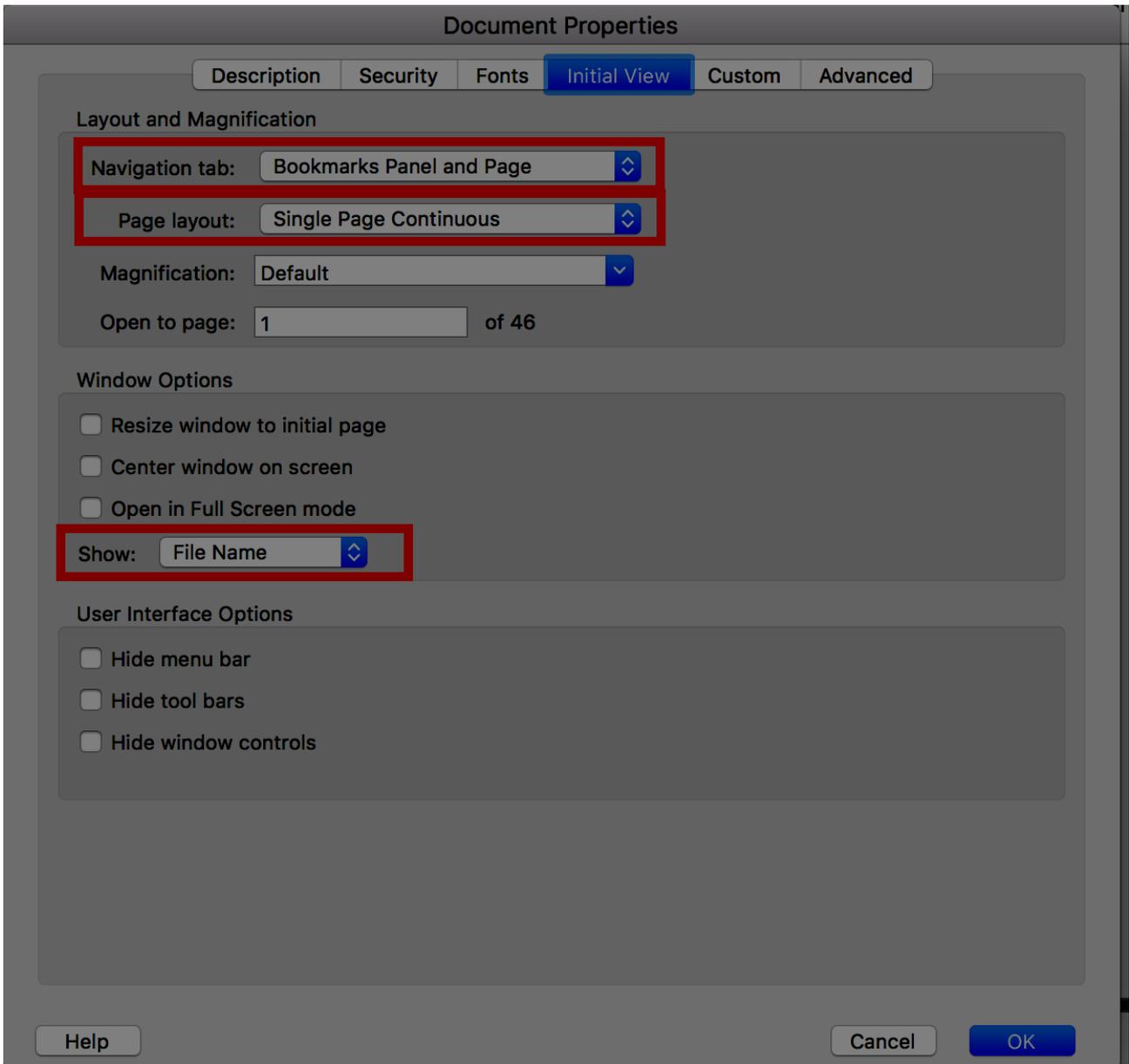
3. In the **Password Protection - Settings** dialog box, in the **Rights** area, select the “**Restrict editing and printing...**” and “**Enable text access options for screen readers devices for the visually impaired**”.



6. Defining the initial view of the document

You can set the initial view of the document before it is distributed, so that the Bookmarks navigation panel is opened when the user opens the document.

1. Go to **File > Properties**.
2. Under the **Initial View** tab in the **Navigation tab** area, select **Bookmarks and Page Panel**.
3. In the **Page Layout** area, select **Single Page** or **Single Page Continuous**.
4. In the **Show** drop-down list, select **Document Title**.
5. Click **OK**.



12. Checking the content reflow

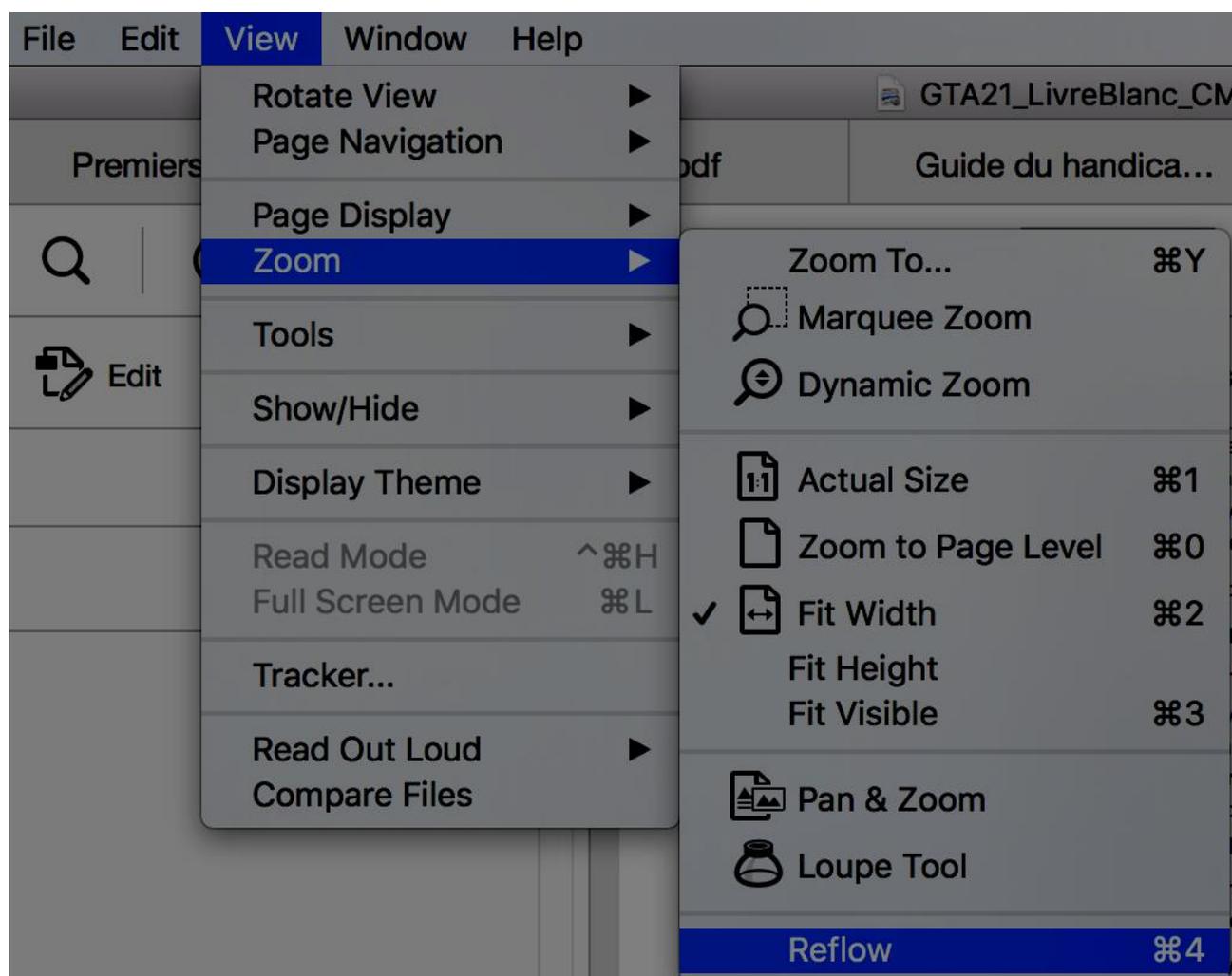
PDF format is often preferred because it allows to preserve the formatting as the author defined it whatever the application or the platform used for its reading. However, in order to improve the readability of the document for some readers or on some devices such as mobile phones, Adobe Acrobat gives the possibility to temporarily reorganize (“reflow”) the contents of the document on a column occupying the full width of the display panel.

A vertical text is reflowed horizontally, giving the possibility to magnify it without having to use the horizontal scroll bar. Some complex content (forms, for example) and page artifacts are not reflowed.

Markup ensures that the contents of the document are correctly reflowed and follow a logical order. When a tag is created and associated with content in the **Tags** navigation pane, a container is created in the **Content** navigation pane.

To quickly check the reading order of a document, display it in Reflow mode.

Click **View > Zoom > Reflow**.



To return to normal view, in Reflow mode, click **View > Zoom > Actual Size**.

7. Fixing reflow errors with the Content panel

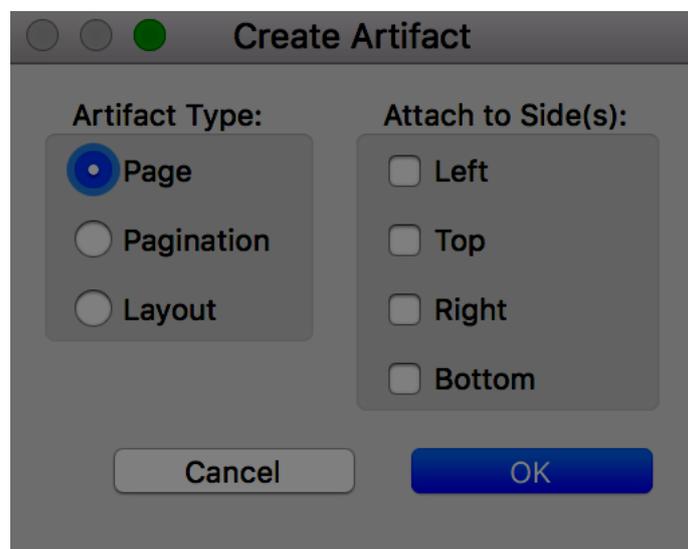
The Content panel displays a view of all of the tagged and non-tagged content objects composing a PDF document, listed in the order they appear on the page (see The Content panel).

This panel can list 3 types of content:

1. Texts.
2. Images.
3. Vector content (usually a vector element is composed of several path-type contents).

If objects that do not convey information in the context of the document are not already tagged as artifacts, this step can be performed via the Content panel:

1. Return to normal view.
2. In the Content panel, select the object to be transformed into an artifact.
3. Right-click and select **Create Artifact**.
4. A dialog box lets you choose an artifact type and an anchor position. Leave the option checked by default.



To avoid visual overlay issues that may result from content tagging with the Touch Up Reading Order tool, it is recommended that the artifacts be positioned - always in the same relative order - at the beginning of the tree. Conversely, the tagged contents must be located at the end of the tree.

To change the position of the contents during reflow:

1. Choose **View > Show / Hide > Navigation Pane > Content**.
2. Expand the document name to display pages and objects.
3. Move a container or object after selecting it by dragging it to the desired location (or choosing the **Cut** and **Paste** commands from the **Options** menu).

13. Checking the accessibility of the PDF document and fixing tagging errors

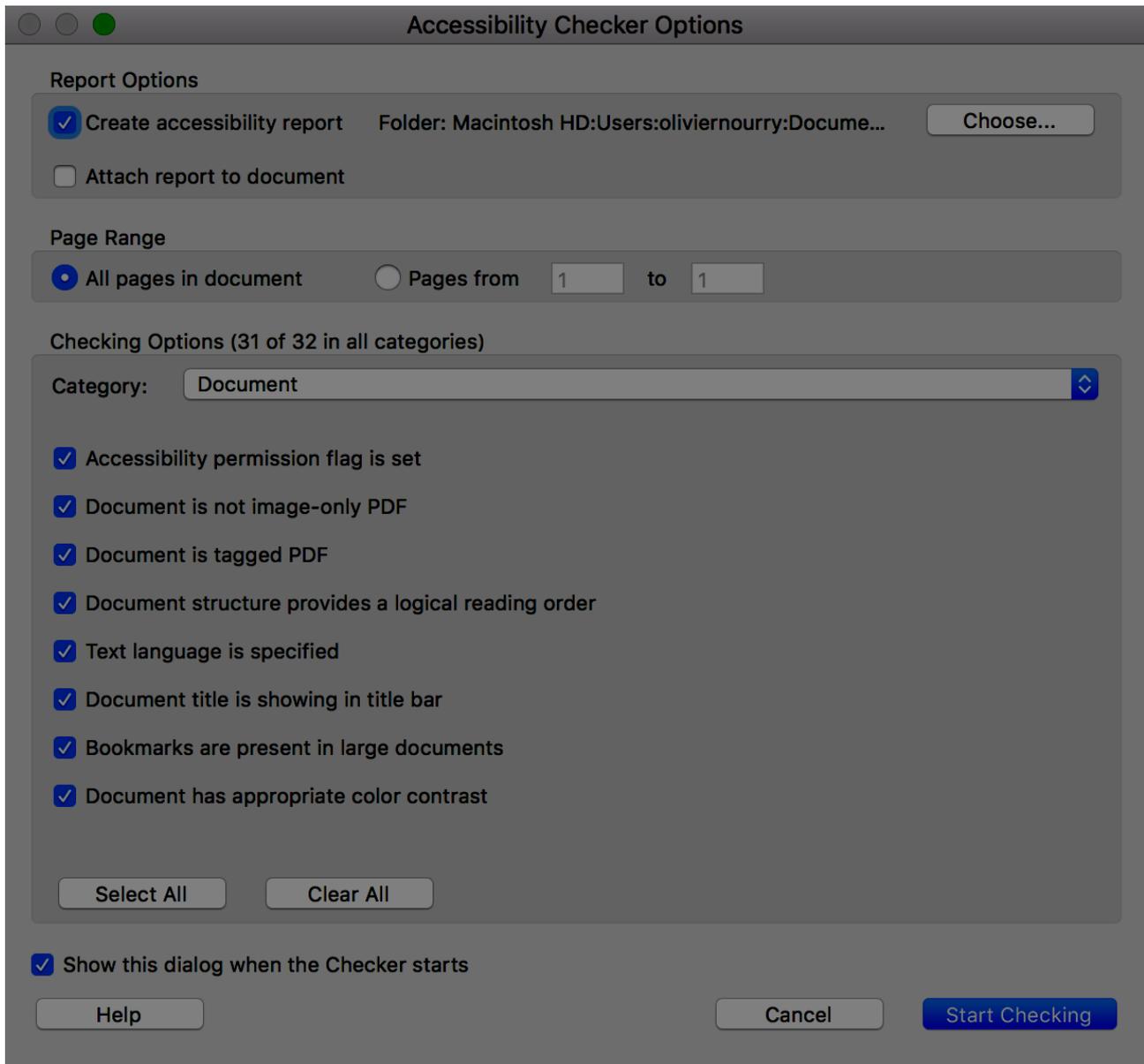
Adobe Acrobat Pro DC includes an accessibility checker. Although it allows the identification of certain content that can cause reading issues for users of assistive technologies, it only performs automatic controls and does not detect a number of barriers to access.

Before starting the checker, it is possible to select the accessibility issues that will be checked, from a pre-established list of criteria divided into 4 categories: Document; Page content; Forms, tables and lists; Alternate texts and Headings.

To start the accessibility checker:

1. Go to **Tools > Accessibility**.
2. On the secondary toolbar, on the right side of the screen, click **Full Check**.
3. In the **Report Options** section, specify whether you want to **Create an accessibility report** (as an HTML file) and/or **Attached the report to the document**.
4. Select the page(s) you want to check (if the document is a large one, page-by-page checking is recommended).

5. Choose the check options (by default all options are ticked - it is advised to leave them as such).



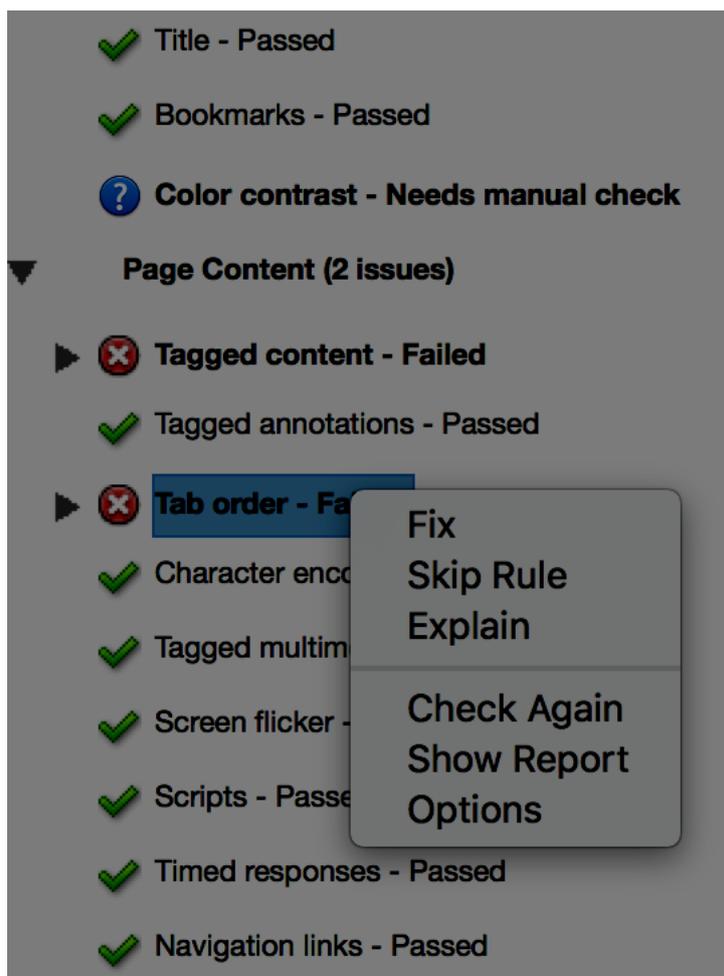
6. Click **Start Checking**. The results are displayed in the **Accessibility Checker** panel. If you have created a report, the results are also available in the selected folder.

The report displays one of the following statuses for each rule check:

- Pass: The item is accessible.
- Skipped: The rule was not checked because it was not selected in the Accessibility Checker Options dialog box.
- Needs Manual Check: The Full Check feature could not automatically check the item. Check the item manually.
- Failed: The accessibility of the item could not be confirmed.

To fix a reported error, right-click the item in the **Accessibility Checker** panel and select one of the following options:

- **Fix:** Acrobat automatically corrects the item or prompts you to fix it manually via a dialog box.
- **Skip rule:** untick this option in the Accessibility Checker Options dialog box for subsequent checks of this document, and sets the item's status to Skipped.
- **Explain:** Opens online help with additional information about the detected issue.
- **Check again:** Allows you to check again after modifying one or more elements.
- **Show Report:** Displays a report with links to the online support documentation.
- **Options:** Opens the Accessibility Checker Options dialog box, so that you can choose which checks to perform.



1. Manual checks

Ideally, you should test the behavior of a tagged PDF file with a screen reader. It is also useful to use the reading modes offered by Adobe Acrobat Pro to test the rendering of the document.

In addition to the Reflow view (see **Checking the content reflow**), Adobe Acrobat Pro includes a Read Out Loud feature. Enabling this feature helps to identify issues with the reading order or to test the relevance of some alternate texts.

To enable the Read Out Loud feature:

1. Go to **View > Read Out Loud > Activate Read Out Loud**.
2. Make sure that each item on the page is read out in a logical order.

It may also be useful to save the document in accessible text format to check the quality of the text that will be rendered to Braille display users. To export a file to text, go to **File > Export to > Text (Accessible)**.

14.Sources

Atalan / Rendre accessibles les documents PDF avec Adobe Acrobat Pro, version 1.1.5 (2011) - PDF, 5,1 Mb, in French³.

Acrobat Documentation / Création d'un fichier PDF accessible (in French)⁴.

Acrobat Documentation / Ajout de balises à un document PDF existant (in French)⁵.

Acrobat Documentation / Edit document structure with the Content and Tags panels (Acrobat Pro)⁶

WebAIM / PDF Accessibility⁷.

³http://www.pdf-accessible.com/wp-content/uploads/2015/01/manuel-balisage-acrobat_AcCeDe.pdf

⁴http://help.adobe.com/fr_FR/acrobat/using/WS58a04a822e3e50102bd615109794195ff-7d10.w.html

⁵http://help.adobe.com/fr_FR/acrobat/using/WS58a04a822e3e50102bd615109794195ff-7d09.w.html#WS58a04a822e3e50102bd615109794195ff-7d07.w

⁶<https://helpx.adobe.com/acrobat/using/editing-document-structure-content-tags.html>

⁷<http://webaim.org/techniques/acrobat/>

15. Main tags used

Tag name	Type of content
<Document>	Document element. The root element of a document's tag tree.
<Part>	Part element. A large division of a document; may group smaller units of content together, such as division elements, article elements, or section elements.
<Div>	Division element. A generic block-level element or group of block-level elements.
<Art>	Article element. A self-contained body of text considered to be a single narrative.
<Sect>	Section element. A general container element type, comparable to Division (DIV Class="Sect") in HTML, which is usually a component of a part element or an article element.
<L>	List element. Any sequence of items of similar meaning or other relevance; immediate child elements should be list item elements.
	List item element. Any one member of a list; may have a label element (optional) and a list body element (required) as a child.
<BlockQuote>	Block quote element. One or more paragraphs of text attributed to someone other than the author of the immediate surrounding text.
<Caption>	Caption element. A brief portion of text that describes a table or a figure.
<Index>	Index element. A sequence of entries that contain identifying text and reference elements that point out the occurrence of the text in the main body of the document.
<TOC>	Table of contents element. An element that contains a structured list of items and labels identifying those items; has its own discrete hierarchy.
<TOCI>	Table of contents item element. An item contained in a list associated with a table of contents element.
<Table>	Table element. A two-dimensional arrangement of data or text cells that contains table row elements as child elements and may have a caption element as its first or last child element.
<TR>	Table row element. One row of headings or data in a table; may contain table header cell elements and table data cell elements.
<TD>	Table data cell element. A table cell that contains non header data.
<TH>	Table header cell element. A table cell that contains header text or data describing one or more rows or columns of a table.

Tag name	Type of content
<Quote>	Quote entry element. An inline portion of text that is attributed to someone other than the author of the text surrounding it; different from a block quote, which is a whole paragraph or multiple paragraphs, as opposed to inline text.
<Code>	Code entry element. Computer program text embedded within a document.
<Figure>	Figure entry element. A graphic or graphic representation associated with text.
<Form>	Form entry element. A PDF form annotation that can be or has been filled out.
<Formula>	Formula entry element. A mathematical formula.
<Link>	Link entry element. A hyperlink that is embedded within a document. The target can be in the same document, in another PDF document, or on a website.
<Note>	Note entry element. Explanatory text or documentation, such as a footnote or endnote, that is referred to in the main body of text.

16. License

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⁸<http://ddata.over-blog.com/xxxyyy/4/37/99/26/licence/Licence-Ouverte-Open-Licence-ENG.pdf>

⁹<https://github.com/DISIC>