

The Basics of Tagged PDF



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Introduction

Many people find their way into the field of PDF remediation to ensure that PDF documents are accessible for those of us with disabilities. This document updates my step-by-step information on how and why we do this and why we make PDF content accessible.

Note: If you use adaptive technology to test documents, start the adaptive technology BEFORE starting the application or opening the document. If Adobe Acrobat is running and then adaptive technology such as a screen reader or Text-to-Speech tool is launched, there might be disruptions in the adaptive technology in reading the document and accessing tools. When adaptive technology starts first, all scripts for the application initialise and activate, providing optimal access to the application and content.

Where to Start

PDF or Portable Document Format comes from any source. It can be an Office document converted to PDF, desktop published documents converted to PDF, scanned documents converted to PDF or even websites converted to PDF.

The challenge is making sure that PDF documents which are images of content, accessible to those of us with disabilities.

In the early 2000s, Adobe added XML-based Tags to a PDF document to optimise accessibility. As time has gone by, the tagging abilities in Acrobat and the conversion tools used by word processing, presentation, spreadsheet, desktop publishing and other applications has improved. An ISO (International Standards Organization) PDF/UA – 1 (Universal Accessibility) standard guides developers on tagged PDF.

As communities of people accessing PDF using adaptive technology and those remediating PDF to optimise accessibility, we are constantly providing feedback on how to improve access and make PDF remediation easier and faster (more cost-effective).

Models of PDF Remediation

For a long time, the only model for remediating PDF documents to optimise accessibility was that of the "lone remediation professional" sitting in their cubicle focused on ensuring that a department's or organisation's PDF documents were accessible.

There was no real place (other than my book, a shameless plug¹) to identify accessibility barriers, fix them and learn techniques to save time.

¹ " Accessible and Usable PDF Documents: Techniques for Document Authors, Fourth Edition": <https://karen-mccall.teachable.com/p/accessible-and-usable-pdf-documents>

There are now several remediation services available

The "new model" is a blended one where an organisation can use its staff to remediate smaller, more uncomplicated documents and let the companies who specialise in remediation with their proprietary tools handle the complex larger volume of documents.

Those of us who are remediation professionals working in our cubicles can't make PDF-based bills, statements and other dynamically produced PDFs accessible on time. Most of us are overwhelmed with the daily number of smaller, less complex PDFs.

One way to decide what documents are remediated in-house and what PDFs are sent to remediation services is to send front-facing PDFs, those that will appear on websites or sent to clients, to remediation services. Remediate the documents with a short shelf life like flyers that come from surrounding businesses with expiry dates for sales or lunchtime offers, memos and other documents whose content is only viable for a few days or weeks, in-house.

Another strategy is to use a remediation service for long, complex documents and remediate short, easy to repair documents in-house.

Note: It is critical that an organisation perform spot checks on PDFs received from remediation services. Some remediation services only provide "access" to PDFs. This means that there might not be a correct logical reading order, the Tags may not be correct for the content and some content may not be accessible. If a remediation service defines their product with a "clean accessibility check" by any automated tool, PDFs need to be checked for accessibility. A PDF can have all <P> Tags and pass an automated accessibility checker but it does not mean the PDF is accessible. Ideally an organisation will include criteria for an accessible PDF in an RFP and hold remediation services accountable.

You need a strategy supported by top tier management and procurement.

If you don't Tag documents in-house, have people who understand what a tagged PDF document is and how to check it when it comes from remediation services to confirm a quality assurance process for your organisation, you have no idea what you are paying for. Knowledge is power!

Defining PDF Accessibility

I don't use ISO 14289 – 2 as a benchmark accessible PDFs. As a member of the ISO PDF/UA committee, it was made quite clear that the standard is moving from UA meaning "Universal Accessibility" to "Universal Access." The accessibility part of the standard plays a minimised portion. The focus of PDF/UA is for the machines, not the people who have to

access the content. The technical specifications are for developers and have little to do with creating, editing, and converting our documents to tagged PDFs.

The new direction of PDF/UA will require more manual testing and validation. For example, they are replacing the <Index> tag with either a metadata flag or an attribute. Automated tools cannot interpret whether an attribute or piece of metadata is correct for the content it is applied to.

There is no guidance on implementing PDF/UA moving forward. One committee member stated publically : "That is up to the developer."

Committee members have told me that all those with disabilities can expect from PDFs is equal access to crappy content/document structure"; and "We can't force people to create well designed/accessible documents."

For me, the following list has always been the personal standard to follow, even if I did create it myself. I also use a screen-reader and depend on accessible document design" to be able to read what I need when I need it or what I want to read when I want to read it.

Simply put, a PDF document has to:

- Have Tags.
- Tags must be correct for the content.
- Tags must be in a logical reading order.
- There must be proper headings, and headings cannot skip levels (for example, having a Heading 1 followed by a Heading 3).
- Tables must be structurally sound and use table header Tags when necessary.
- If a table has merged or split cells, the correct ColSpan or RowSpan must be used.
- Images must have Alt Text unless they are decorative, in which case they are Artifacts.
- Links in the body of the document should have Alt Text.
- Links in a Table of Contents, Footnotes, Endnotes or Bibliography should not have Alt text.
- The document must have a core language. The core language (and any language designation must be plain vanilla. For example, English instead of EN-CA or EN-US or EN-UK. We need to be able to listen to a document with pronunciations we are used to.)

- If the document is multilingual, you must use the appropriate language attribute for that content. Once again, you must use a "plain vanilla language" designation.
- The Tab Order for links and form controls must be correct
- The Page Labels must be set in the document even if there are no preface pages.
- There must be document properties including the title of the document to optimise the searchability of the content.
- The Initial View of the document should be the Document Title instead of the filename. Showing the document title makes it less confusing when we have more than one PDF open at a time.

Accessible PDF and Adaptive Technology

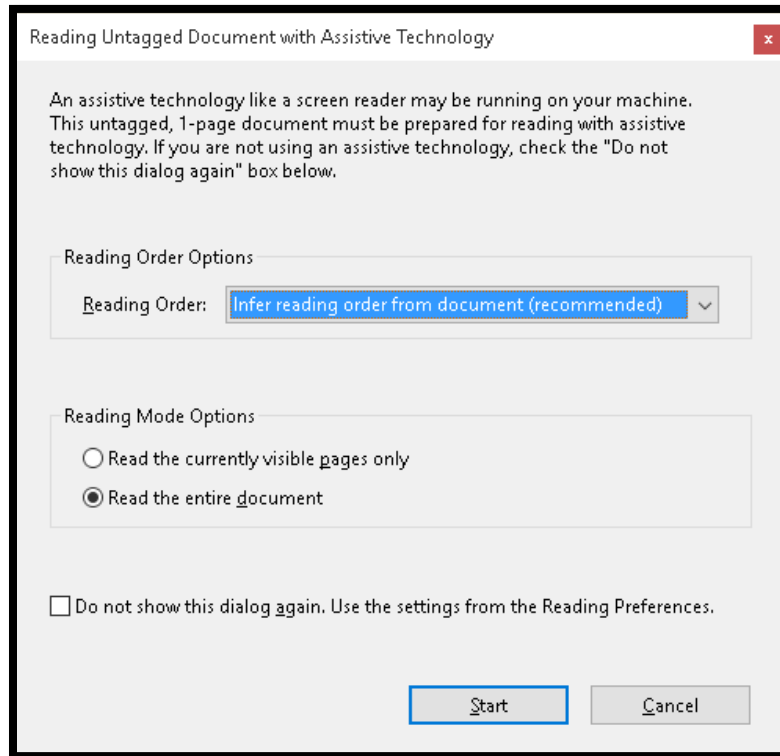
If you use adaptive technology such as a screen reader, Text-to-Speech, voice recognition or screen magnification tool, you may get a dialog when you open some documents asking if you want to infer the reading order from the document.

The "infer reading order dialog" is a tool that creates "virtual tags" to access content in a document that is scanned or is not tagged or both. The problem is that there is often no logical reading order, Tags are not correct for the type of content they correspond to, and each time you open the document, you can get different results. "Virtual Tags" are not saved with the document.

A PDF document is NOT accessible if it doesn't have Tags in the Tags Tree, the Tags are correct for the type of content, and the Tags are in a logical reading order.

DO NOT say yes to the "Infer reading Order from Document" dialog. Press Escape to dismiss it. Adding the virtual Tags can interfere with adding actual Tags to a PDF document.

Figure 1 Reading Untagged PDF and Assistive Technology dialog.



General Compliance Issues

The first thing to consider for compliance is Acrobat Pro DC's Accessibility Full Check tool. The Accessibility Full Check is an automated tool and is no substitute for a manual review and "sign-off" from a document author or remediation professional. An accessibility full check can point out potential problem areas, but these items might not be. For example, images as links. Would a clean full check provide alt text for the image or ensure a link is created and given alt text in effect demoting the image itself to a "background" role in the document?

The second "compliance" issue is getting caught in being "specific adaptive technology compliant." This baseline is a version of the JAWS screen reader in most cases. The problem with promoting something as "JAWS compliant" is that each iteration of the adaptive technology adds new capabilities for accessing PDF. Will the disclaimer be upgraded with each version release of the adaptive technology? Another problem is that not all adaptive technologies have the same capabilities for accessing digital content, including PDF. This approach implies that everyone reading the tagged PDF content will have to have precisely that version of Adobe Reader and version of adaptive technology. In extreme cases, even settings for both might be specified. Specifying specific tools to access PDFs takes the "right" of the "end-user" to control how they view and interact with the content. It also puts those who can't afford to upgrade their adaptive technology at an extreme disadvantage.

A third item to consider is what parts of a document will be required to be tagged. As a person using a screen reader, there is nothing worse than having my thought process or comprehension interrupted by identifying decorative elements or sidebar quotes plunked into a Tags Tree at the point they appear on the page.

Other issues include ensuring that multiple languages or a specific language that all parts of that document reflect that language—for example, not having a French document with graphics with English text.

Another item to consider is the amount of information contained in a figure's alt text. If adaptive technology has to buffer a lot of information "at once," it could result in a crash of the application or the adaptive technology, or some of the alt text is not read. This means a complex image that takes up an entire page should be given concise Alt Text or broken down into smaller figures.

Most of the accessibility issues in a document can be identified, repaired, or designed more effectively in the native application before the tagging process. However, many elements of an accessible PDF document require manual checks and verifications. By "sign off", I do not mean a certificate or even a PDF/UA identifier; I mean that you, as the PDF remediation professional, has gone through the document manually to check the things an automated tool can't.

Hierarchy of Tasks

We need to look at two things before digging ourselves into what might appear to be a bottomless pit, tagging PDF documents. One is a hierarchy of tasks when working with PDF documents, and the other is the basics of an accessible PDF document.

The hierarchy of tasks is the series of questions we mentally go through each time we look at a PDF document that needs to be more accessible.

- Is it a scanned document?
 - If yes, perform text Recognition or OCR (Optical Character Recognition).
- Does it have form fields? (I now work with tagged PDF and add the form controls as it saves me about an hour a page when creating a PDF form that is accessible. If I can get the source template accessible, adding the form controls is faster than adding them to an untagged PDF.)
 - If yes, add the Form fields/controls using Acrobat.
- Does it have hyperlinks?
 - If yes, add the links using the Create Links from URL's tool or the Links Tool.

ONLY AFTER you've gone through the hierarchy of tasks do you TAG the document using the Add Tags to Document tool!

Create a logical document structure and reading order in the native application! Once you convert the document to a tagged PDF, these structures create the tags.

Adobe Acrobat Pro DC

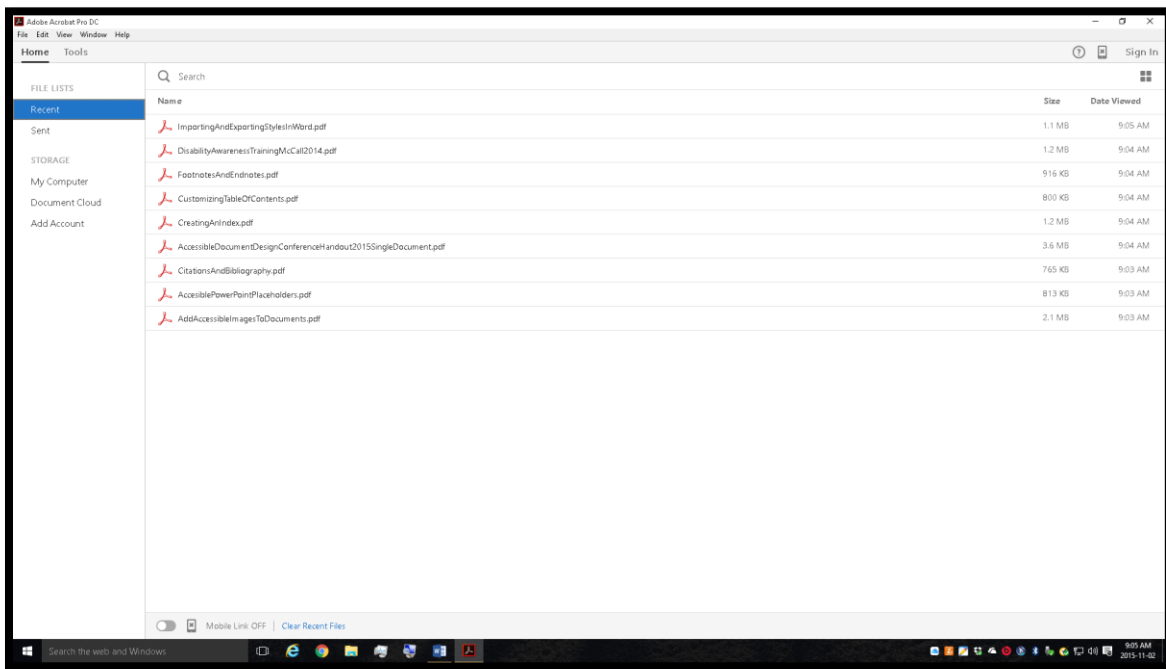
Adobe Acrobat Pro DC is the current version of Adobe Acrobat Professional. You cannot use Acrobat Reader or Adobe Acrobat Standard to remediate PDFs.

Adobe Acrobat Pro is a subscription-based application. Subscriptions are for one year.

You must create an Adobe Account and sign in to Adobe Acrobat Pro DC. You have access to the Adobe Cloud for storage but keep in mind that it is not "your" storage and may be vulnerable to privacy issues.

Once you sign in, the first thing you see is a list of recently opened PDF documents.

Figure 2 Acrobat Pro DC list of recent documents.

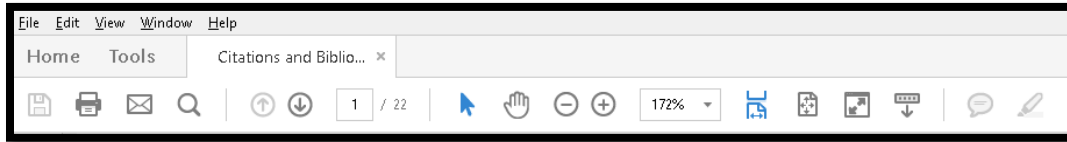


A Menu Bar has some options but not all you may know. The Menu Bar items are File, Edit, View, Window and Help. Do everything else through the user interface.

Just under the Menu Bar is a sort of Toolbar with two or three items, depending on whether you have a document open or not.

If no document is open, you will only see the Home and Tools tabs. If you do have a document open, the document's title (if you've added it) displays in a tab of its own, and there will be a sort of sub-toolbar for working with that document.

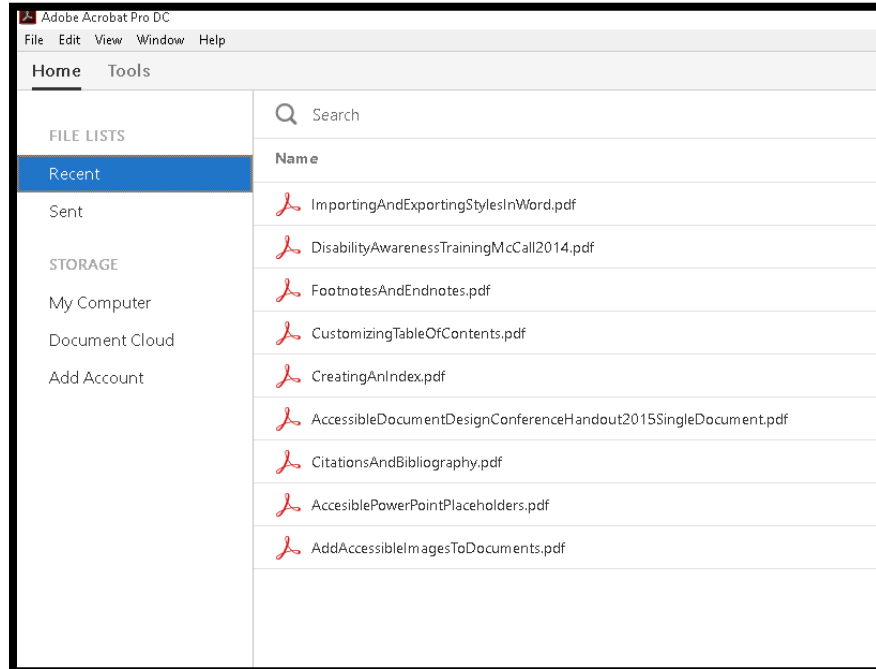
Figure 3 Menu Bar area of Acrobat Pro DC.



If you want to use the keyboard to get to the area of tools for the document, press Alt to put focus on the File item, then press Ctrl + Tab to move to the first item in the Toolbar for the document. Use the Left and Right Arrows to move along the Toolbar; press Tab to continue along the Toolbar when you get to the edit box to move to a page.

If you have no document open, you are on the Home tab by default. The Home tab shows you the locations you can look in for documents and a list of recent documents.

Figure 4 Closer look at the list of locations and recent documents.



The first thing to do is to make sure that the Tags, Order and content Panels are visible in the Navigation Pane, located on the document's left.

The keyboard command to show or hide the Navigation Pane is F4.

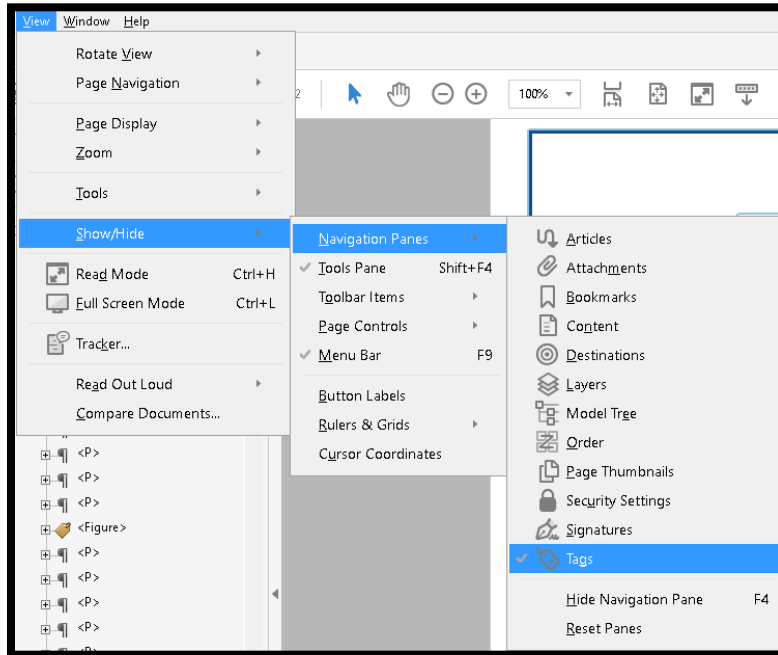
To add the Tags, Order and Content Panels to the Navigation Pane, Click View, Show/Hide, Navigation Pane or press Alt + V for View, N for Navigation Pane, then:

- G for Tags.
- Letter O for Order.

- N for Content.

Each one is placed in a set order in the Navigation Pane as it is added.

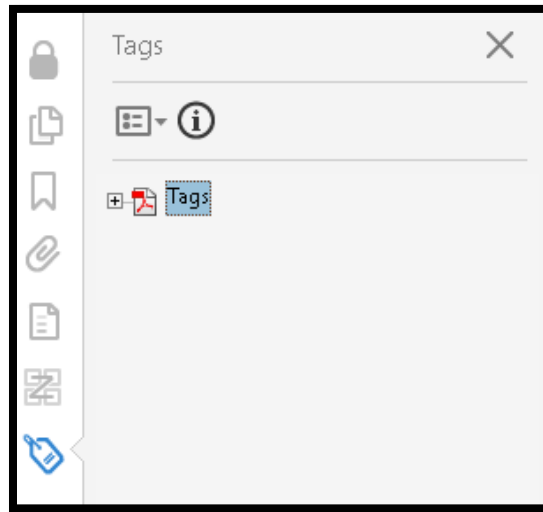
Figure 5 View menu with Navigation Pane options.



The Navigation Pane includes the Bookmarks, Pages and Attachments. When you add Tags to a document, this is where the Add Tags Report and the Accessibility Full Check Report will appear.

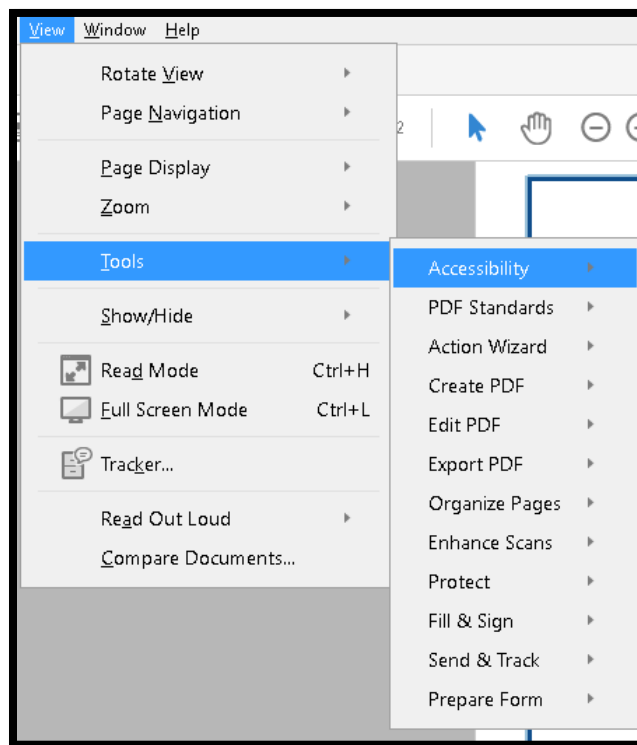
If the Tags, Order and Content Panels are not available to add, activate the Reset Panes option in this context menu.

Figure 6 Navigation Pane.



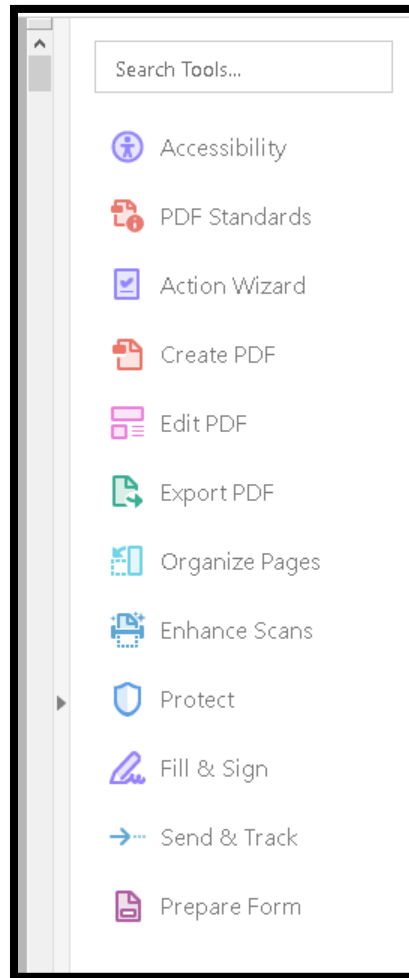
On the other side of the document is the Tools Task Pane. The tools in the Tools Task Pane can be Accessibility, Action Wizard, Edit PDF, Send and Sign or Organise Pages. These items are added or removed using the Manage Tools option from the Edit Menu.

Figure 7 View Menu showing tools in the Tools Task Pane.



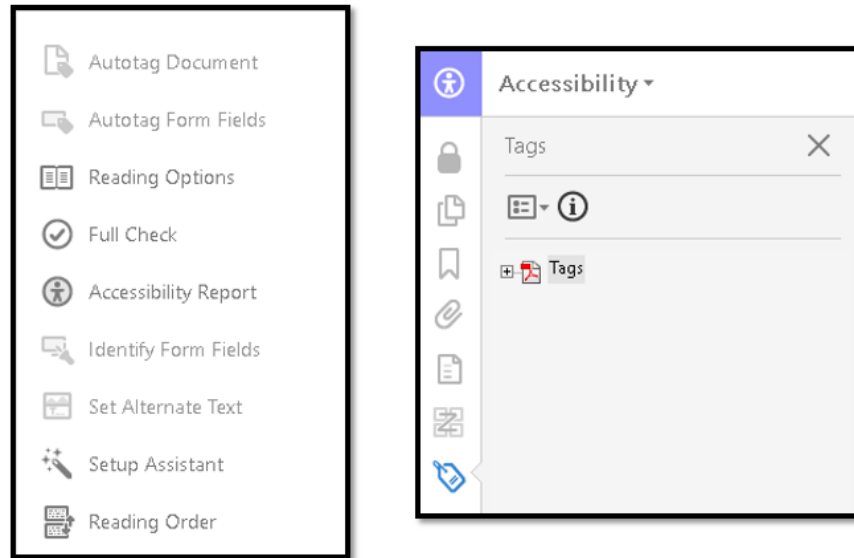
The following image shows the Tools Task Pane after reorganising the tools to work more effectively as a remediation professional.

Figure 8 Tools in my Tools Task Pane.



As you click on or open each set of tools, the list expands under them, and the tools are identified as being open just above the Navigation Pane.

Figure 9 Accessibility tools expanded in Tools Task Pane and shown above the Navigation Panel.



It is worth noticing that Adobe Acrobat has joined the number of applications with poor contrast light text and is yet another contributor to computer-based visual fatigue.

Tools for Remediating PDF in Acrobat

There are several foundational tools available in Acrobat Pro DC that we can use to make repairs on what can best be described as “ICKY” documents. This section of the handout gives you an idea of what is available and how to use it.

Action Wizard

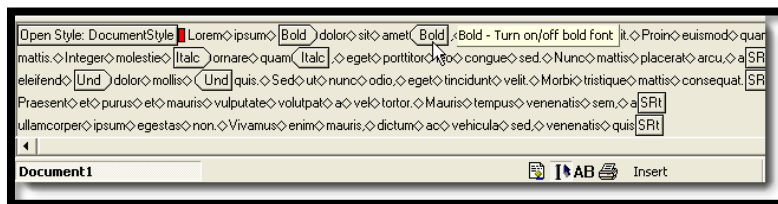
I don't recommend using the Action Wizard as it is problematic to stop mid-process, which means you can't take your time remediating a file. Also, based on my approach to form templates created without symbols, lines or tables, there is nothing for the auto-detect form controls tool to find.

Tags Panel/Tags Tree

What are tags, and how do they work?

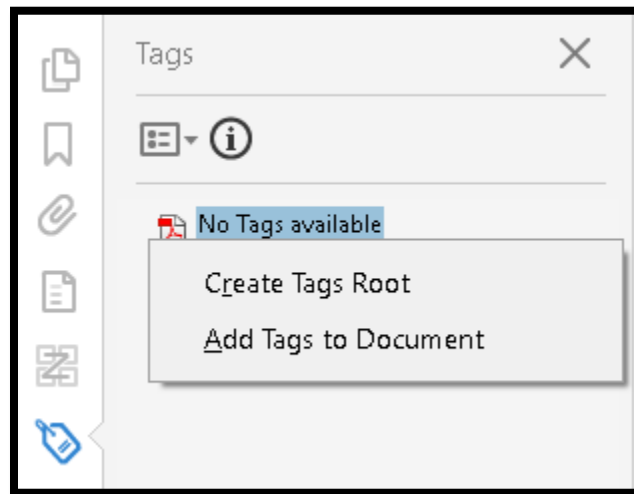
We know what tags are if we think of Corel WordPerfect or HTML for web pages.

Figure 10 WordPerfect RevealCodes.



PDF tags are XML based. Tags define the role of content in a document. For example, there are heading tags, paragraph tags, list tags, figure tags, and table tags. Each contributes to the readability and structure, whether tagged PDF or other file formats.

Figure 11 Add Tags to untagged document from Tags Panel.



The first step in looking at the Tags of a PDF document is to add them if there are none.

The fastest way is to go to the Navigation pane, Tags Panel, Tags Tree and when you see "No Tags Available", press the AppKey or right mouse button and choose Add Tags to Document.

You can choose Add Tags Root, but that will just put the "Tags" root in the Tags Tree, not any other Tags for content. Tags Root is what you choose if you are manually adding EVERY tag to the document.

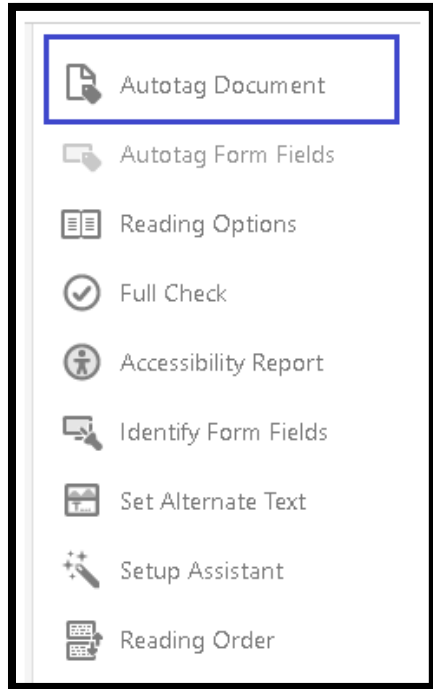
When you choose Add Tags to Document, the Tags are added, and an Add Tags Report opens in the Navigation pane. We'll cover the Add Tags Report later in this tutorial.

For now, we just want to look at a Tags Tree to begin to familiarise ourselves with what Tags are and how the Tags Tree is structured.

You can use the "Autotag Document tool in the Accessibility Tools in the Tools Task Pane to the right of the document area.

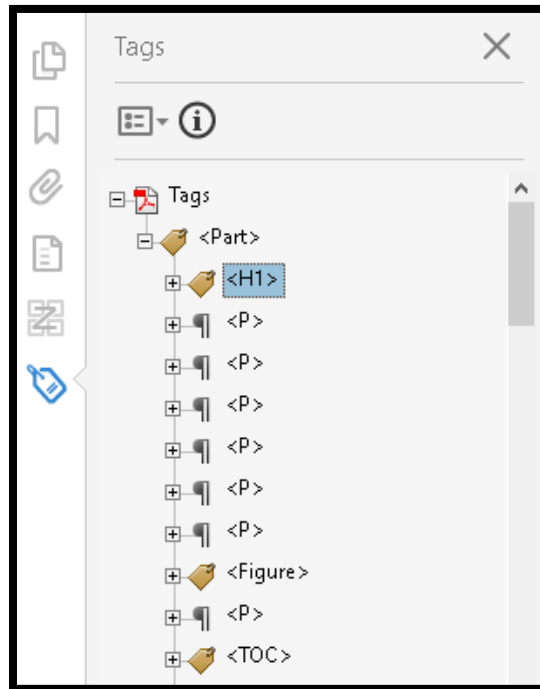
Either way will Tag the document.

Figure 12 Autotag document from Accessibility Tools Task Pane.



Tags have a hierarchy of parents and children. The “Tags” root is the base of the family tree. From there, tags can branch out much the same way our folders do on a hard drive.

Figure 13 Sample Tags Tree in Tags Panel.



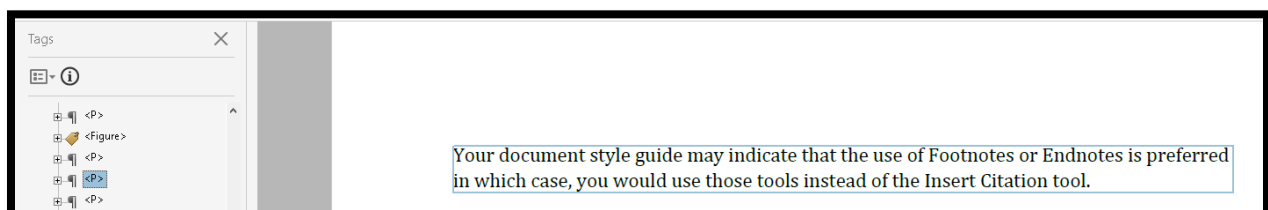
If the content is essential to understanding the concepts and ideas in a document, then it must have a Tag. If the content is decorative or, as in the case of page headers and footers, is a non-printing element, it is identified as an Artifact. Adaptive technology doesn't see Artifacts, and therefore Artifacts are not read.

Tags provide the document's structure and identify what role specific pieces of content play in the document.

Tags are displayed in the Tags Tree in the Tags Panel.

The corresponding content is highlighted in the Tags Tree as you use the Arrow keys to move through the Tags Tree. This is turned on by default, and it is one of your "best friends" in working with PDF documents.

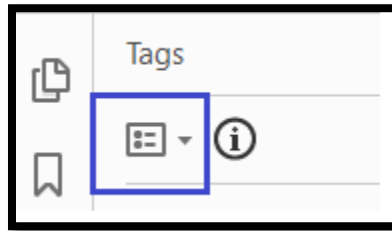
Figure 14 Tags Tree and document showing Highlight Content.



You can right-click or press the AppKey on any Tag to display the options for working with that tag.

There is an Options button just above the Tags Tree with other tools for working with a Tag, and we'll look at them later in this tutorial.

Figure 15 Options button in the Tags Panel, tags Tree.

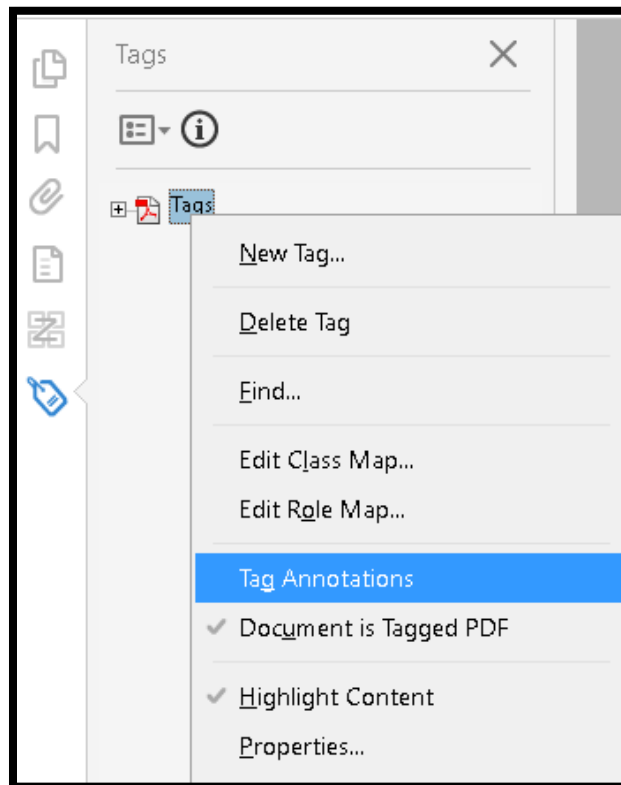


Tag Annotations

If you are working with links or form controls (fields), you'll need to turn on Tag Annotations in the Tags Tree.

If you need to remediate links, you need this turned on.

Figure 16 Context menu for Tags showing Tag Annotations option.



To turn on Tag Annotations, open the Tags panel, look just above the Tags root, and you'll see what looks like a page with lines on it. This represents the context menu with the options available in the Tags Panel, Tags Tree. You will need to turn on the Tag Annotations

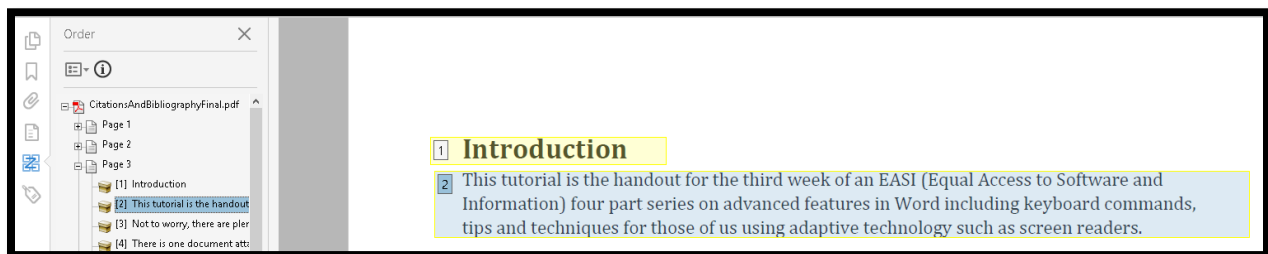
for every document you open and every time you open a document...or when you need to use it.

Order Panel and Reading Order Panel

The Order Panel icon is usually placed just above the Tags icon in the Navigation Panel. As with the Tags Panel, you need to add it by going to the View menu, Show/Hide, Navigation Panel and choosing order. The keyboard command is Alt + V, S, Right Arrow on Navigation.

The Order Panel provides a global or satellite view of the document. You can easily see what is tagged and what is not. You can use the Reading Order Panel to make repairs here. For example, you can select parts of the page and use the Reading Order Panel to identify the selected content as text, headings, a figure, a table or background (Artifact).

Figure 17 Order Panel showing content in document highlighted.



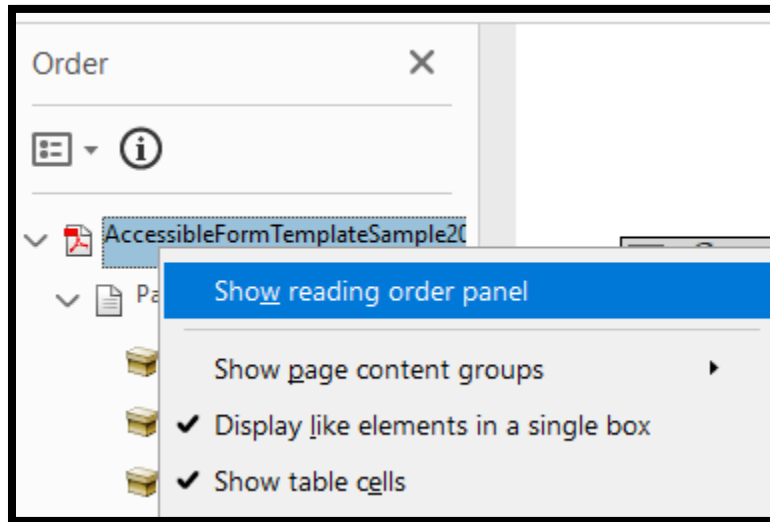
The information in the Order Panel corresponds to the information in the document. For example, in the preceding image, the first paragraph is number 2 or the second piece of content on the page in the logical reading order. This is correct. You can see this in both the Order Panel and the document.

I have the colours adjusted to see the different types of content easily. By default, everything is grey.

I chose yellow for the text in the document. I also decided not to group or lump all content with the same role or tag into one block to see the individual paragraphs, which makes editing out blank lines a lot easier if I need to.

To make these changes, you need to open the Reading Order Panel. To do this, right-click anywhere in the Order panel and choose Show Reading Order Panel. The Reading Order Panel can also be launched through the Accessibility tools in the Tools/Task Pane.

Figure 18 Show Reading Order Panel in the Order tab.



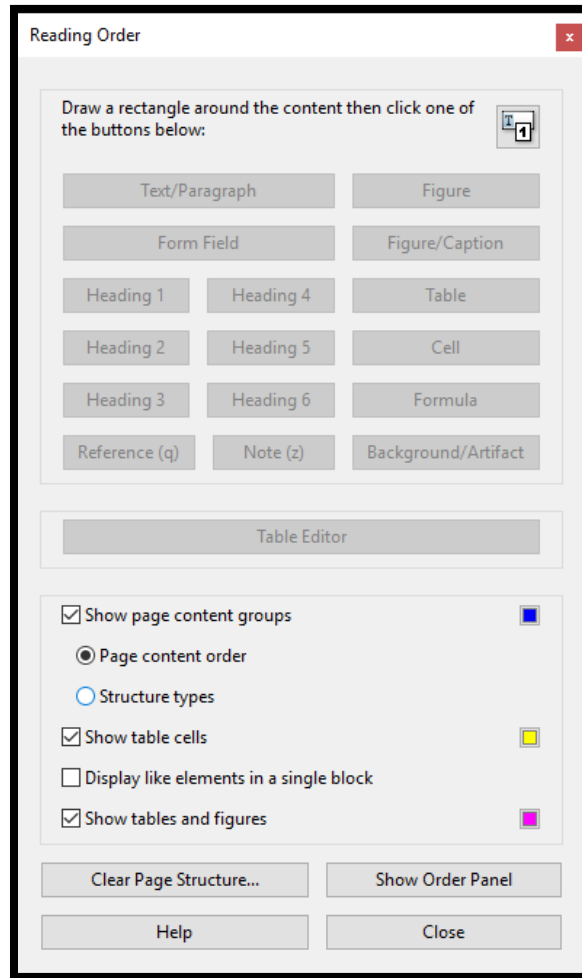
When the Reading Order Panel opens, it floats over the document. You may want to use Ctrl + Minus on the NumPad to make the document a bit smaller so you can drag the Reading Order Panel to one side. You may also want to close the Navigation Pane by pressing F4. To make the document in the document area larger, press Ctrl + Plus Sign on the NumPad.

You can open the Reading Order Panel from the accessibility tools in the Tools Task Pane to the right of the document.

The first part of the Reading Order Panel contains the buttons for selecting content and assigning it a role or tag in the PDF document.

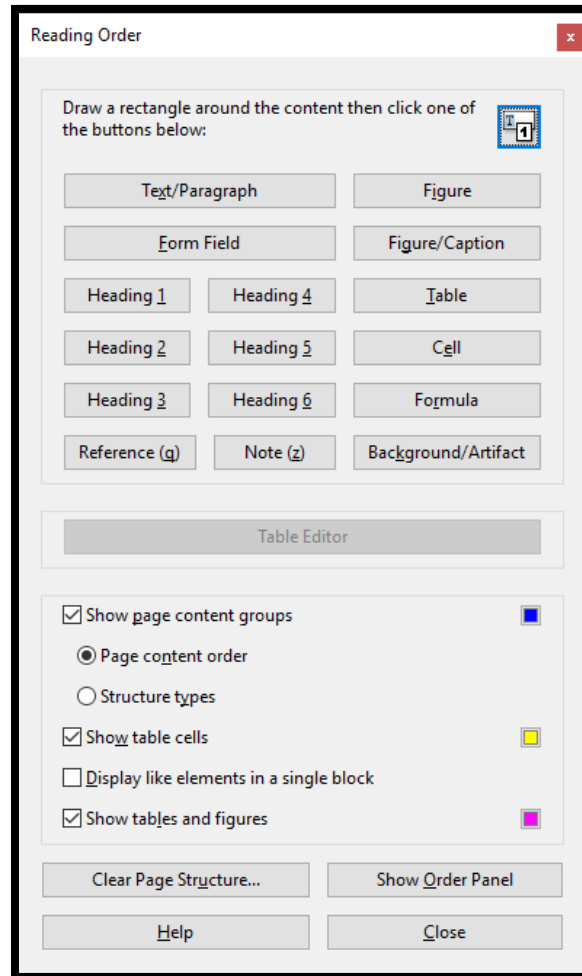
The bottom part of the Reading Order Panel has the options for how content is viewed when you are either in the Order Panel or have opened the Reading Order Panel.

Figure 19 Reading Order Panel with no content selected in the document.



If there is no content selected in the document, none of the buttons in the Reading Order Panel are available.

Figure 20 Reading Order Panel with content in the document selected.



Let's take a closer look at the options for viewing documents in the Order Panel or with the Reading Order Panel open.

Click on "Show page content groups" to check it. This setting has two radio buttons associated with it, and it is checked by default.

The two radio buttons are for "Page content order," which is the default or "Structure type," showing the Tag identifier instead of the number. For example, instead of seeing 1, you would see H1 if the content were a Heading 1. Worth noting is that there is no synchronisation between the Order Panel and the reading Order Panel, so if you choose to show the elements like <H1>, you will have to mentally match them up with the numbers in the Order Panel.

Click on the colour picker for this option. The default is black, which may appear grey in the document. Choose a colour you can quickly see and distinguish from other content on the page. I chose bright yellow.

Click “Show table text” to check or uncheck it. (it is checked by default). Click the colour picker for this setting. Again, the default is black. I chose bright blue.

Click “Display elements in a single block” to check or uncheck it (it is checked by default). I’ve unchecked it so I can see the specific paragraphs and other page elements isolated from each other. There is no colour picker for this setting.

Click “Show tables and figures” to check or uncheck it (it is checked by default). Click the colour picker for this setting. The default is black. I chose bright magenta to help me isolate this type of content while in the Order Panel or TouchUp Reading Order Panel.

There is a button to “Clear page Structure,” one for Help, another for “Show Order Panel”, and an OK button.

Making Repairs using the Reading Order Panel

Let’s make basic repairs using the Order Panel and the Reading Order Panel.

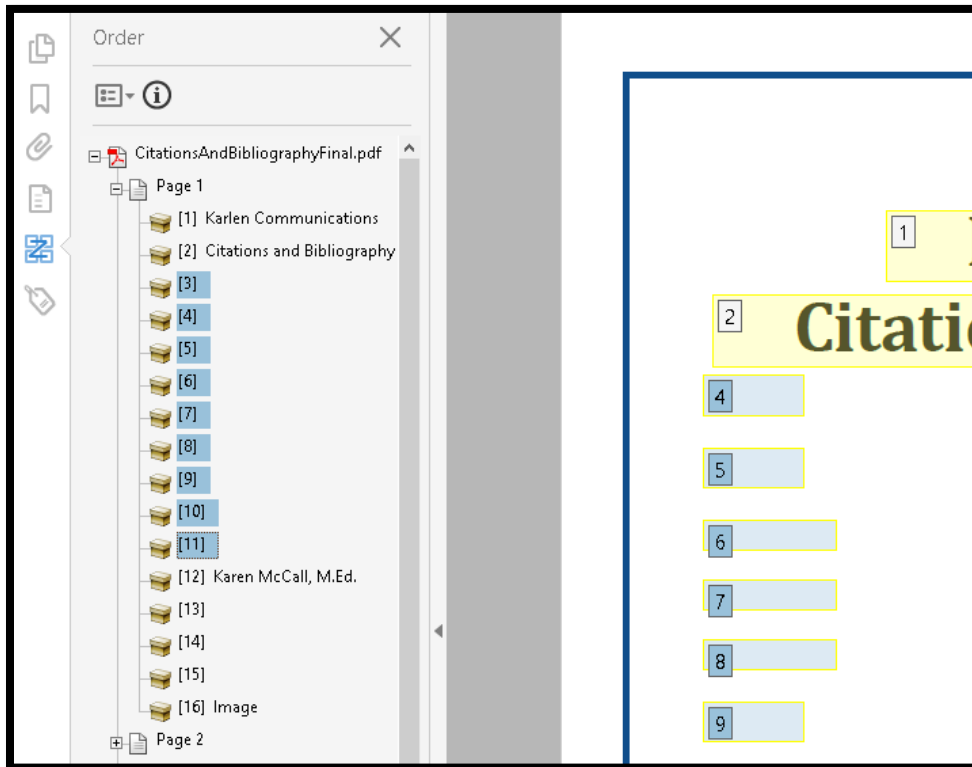
The document I’m using as the example was created using Word, and before I added the space beneath the title of the document, there were several pressings of the Enter key to make space. Although adaptive technology won’t get stuck on these blank lines, removing them tidies up the PDF document and can reduce the file size.

In the Order Panel, I select the first blank line. This is represented by a number with nothing next to it. I have several of these in a row.

The following image demonstrates that I can hold down the Shift key and use the Down Arrow to select all grouped blank lines.

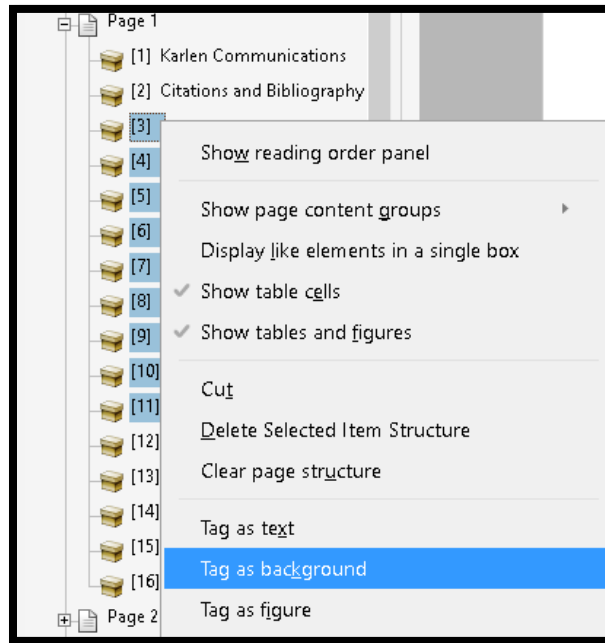
If you have one blank line, select it and continue with the next set of instructions.

Figure 21 Several blank lines selected in the Order Panel.



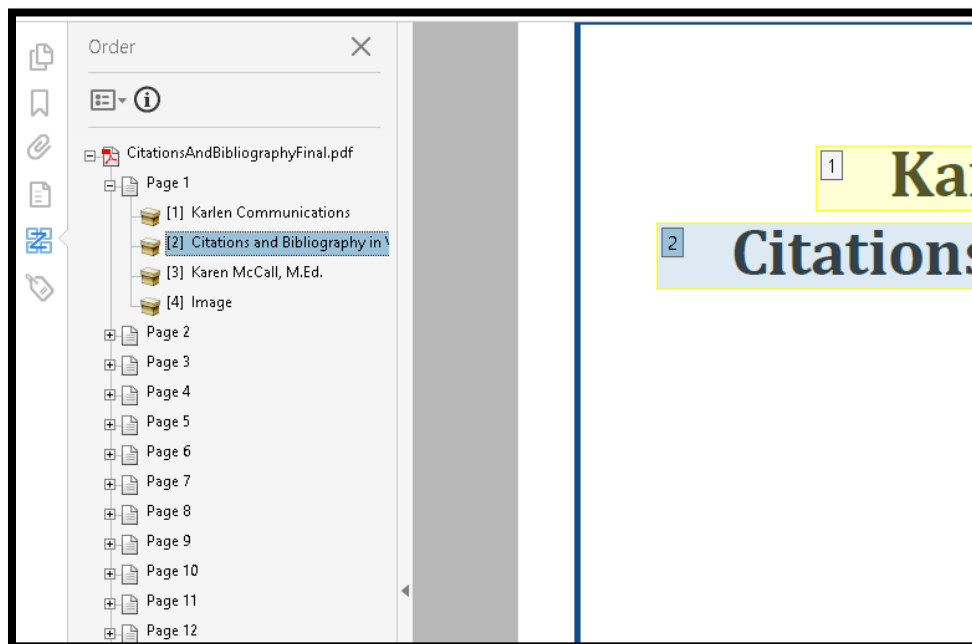
With the blank lines selected, press the AppKey or the right mouse button and Choose “Tag as Background, “ making the blank lines Artifacts.

Figure 22 Context menu in Order Pane to Tag blank lines as Artifacts/Background.



The Tags for the blank lines are removed from the Tags Tree simultaneously, and in the content Panel, the blank lines are no longer paragraphs but are now Artifacts.

Figure 23 Order Panel and a document showing blank lines removed/made Artifacts.



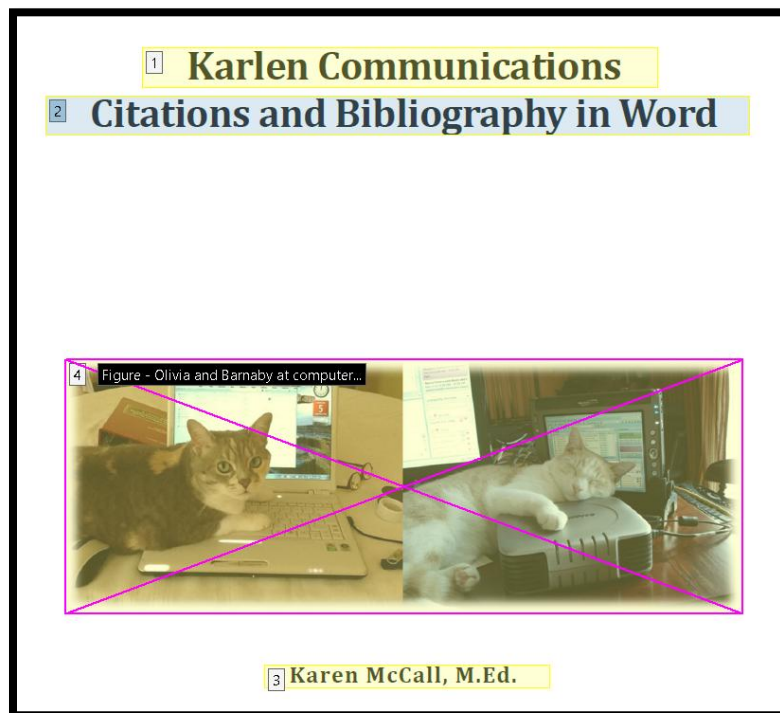
There is a tool in the Options button to Delete Empty Tags in the Tags Tree. You need to have the Tags Root selected for this tool to work. It won't work if you have any other Tag selected.

The Reading Order Panel can be used to rearrange content. In the example I used for reassigning blank lines as Artifacts or background, the image is identified as number 4, and the text of the author's name is number 3.

The image comes before the author's name, logically looking at the page.

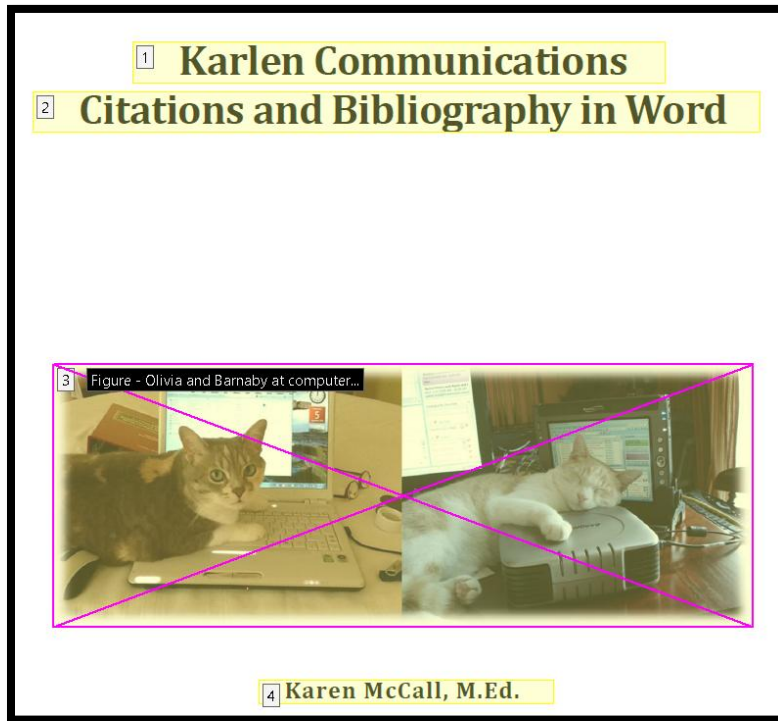
Using the mouse, you can select the image in the Order Panel and drag it up one position, so it is now number 3, and the author's name is number 4, which is how it appears on the page.

Figure 24 page in the document without logical reading order.



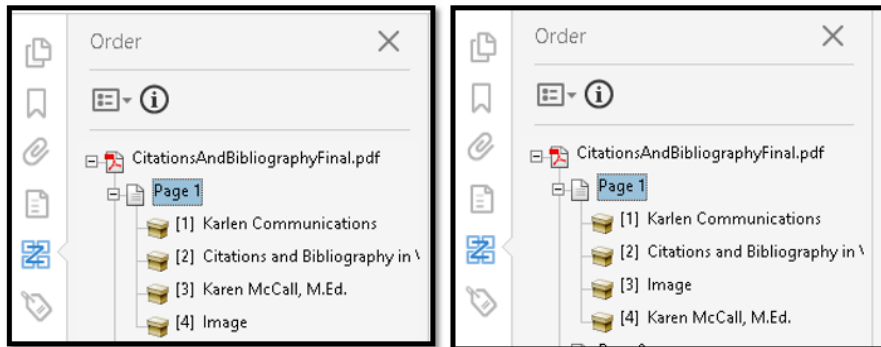
Once the content has been rearranged, the numbering or logical reading order is corrected.

Figure 25 Corrected reading order on-page.



If you look at the Order Panel, you will see the change in logical reading order.

Figure 26 Before and after Order Panel of the first page of a document.



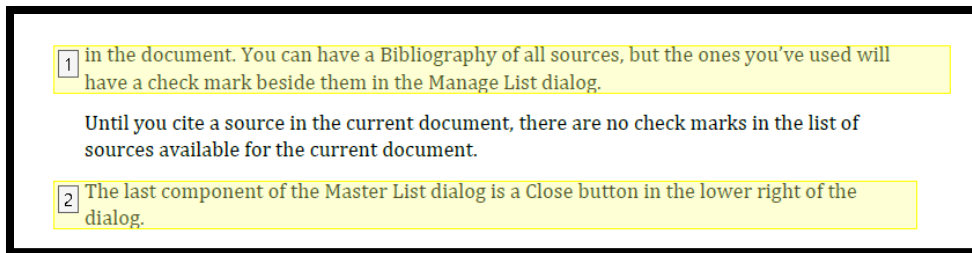
If you cannot get the Tags Panel and the Order Panel to agree, **always go with the tags Panel and Tags Tree**. It is the tags that the adaptive technology uses to render the content to the end-user.

If you open the Order Panel and discover that content is not tagged when it should have been, you can use the Reading Order Panel to add the content.

Identify the content that is missing. You will be able to easily recognise it because it is not shaded using one of the colours you've chosen in the Reading Order Panel. Having access to the Order Panel alone provides a fast way of identifying content not tagged.

In the following example, a paragraph of text has not been tagged or has been mistakenly tagged as an Artifact.

Figure 27 Document with paragraph not tagged.

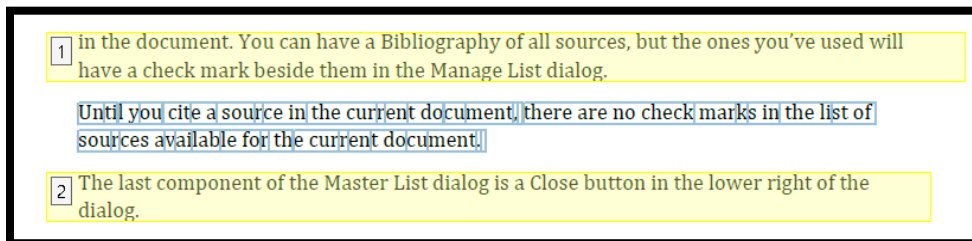


The first thing to do is to open the Reading Order Panel.

Move it to one side of the document to see all of the text in the paragraph that needs to be tagged.

If you notice, your cursor is now a crosshair. Position the cursor by the upper left corner of the text and drag it to the lower right corner.

Figure 28 Untagged paragraph selected using the TouchUp Reading Order Panel.



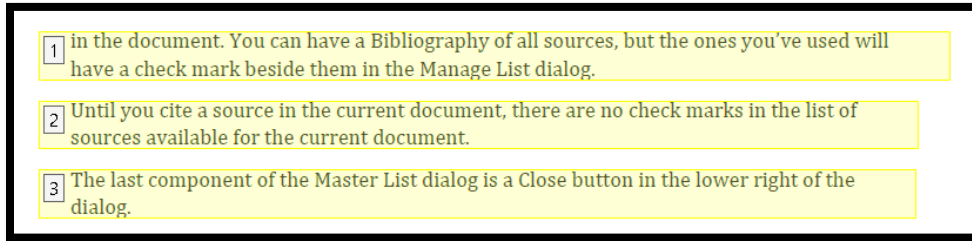
Don't worry that the words or letters have a colourful highlight around them. This is normal. Visually check to ensure that all the words or characters, including punctuation in the selected paragraph, are highlighted.

The buttons on the Reading Order Panel are now visible/available.

The paragraph is text so click the "Text" button.

The paragraph is tagged as text and assigned a number in the logical reading order of the page. Correctly, it is the second piece of content that someone will read on this page.

Figure 29 Untagged paragraph on a page repaired and tagged using the TouchUp Reading Order Panel.

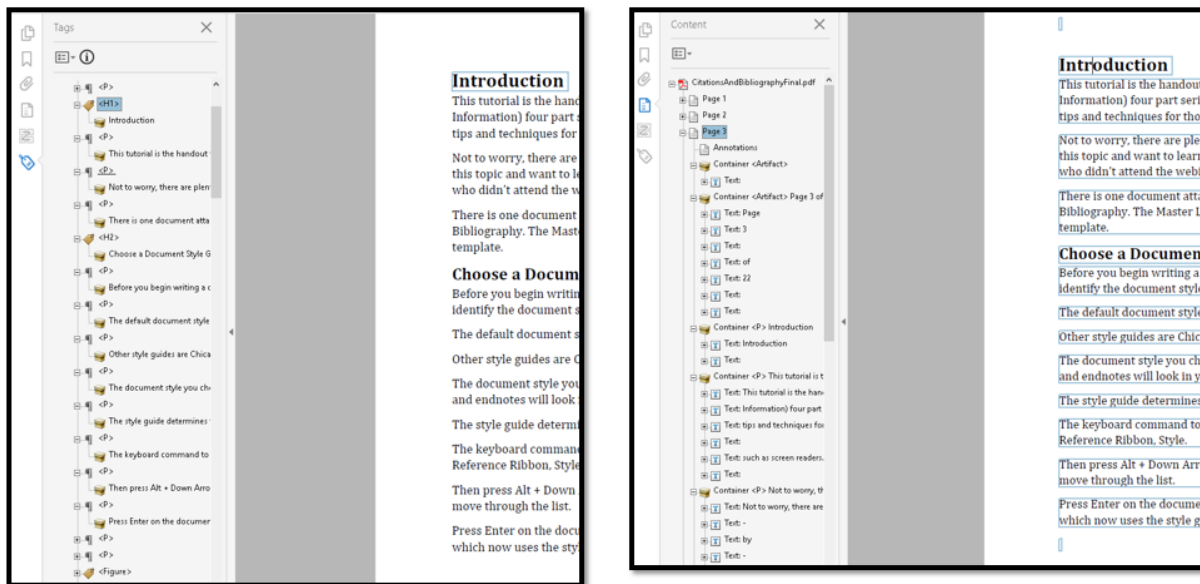


Content Panel

The Content Panel is where you can see every piece of the page and document sent to the printer. In other words, every bit of “stuff” on the page is represented in the Content Panel.

The items in the Content Panel may or may not be in the same logical reading order as they are in the Tags Tree.

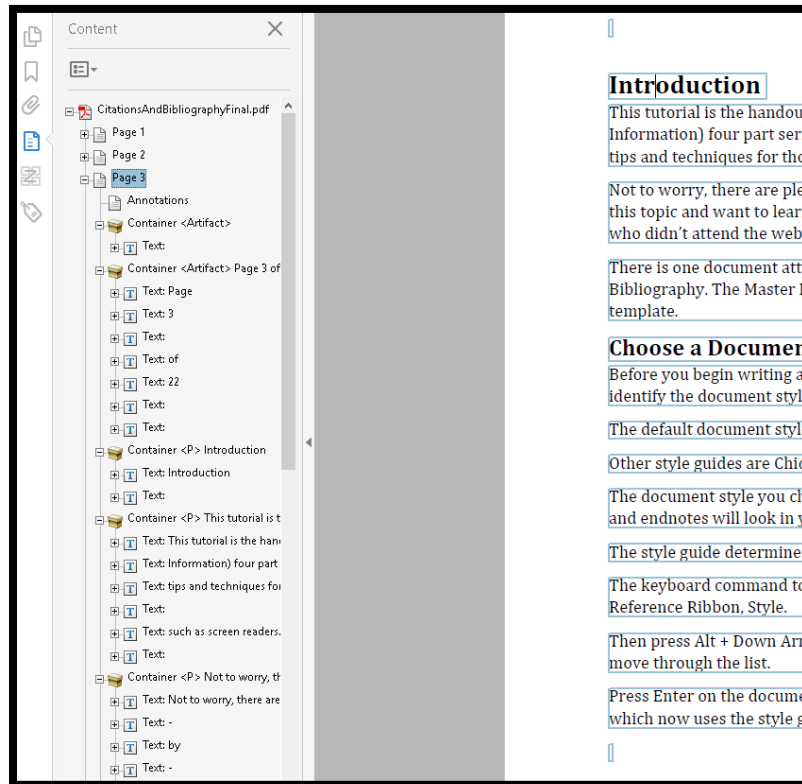
Figure 30 View of a page in the Tags Tree (L) and the Content Panel (R).



As illustrated in the preceding image, there appears to be more detail and breakdown of exactly how the “Tag” content is identified in the Content Panel.

Taking a closer look at the image of the Content Panel, if you think back to the Order Panel and selecting the paragraph to be tagged and how both characters and words were highlighted, we see the consolidated results in the Tags Tree and the representation of those characters and words in the Content Panel.

Figure 31 Close-up of page content in the Content Panel.



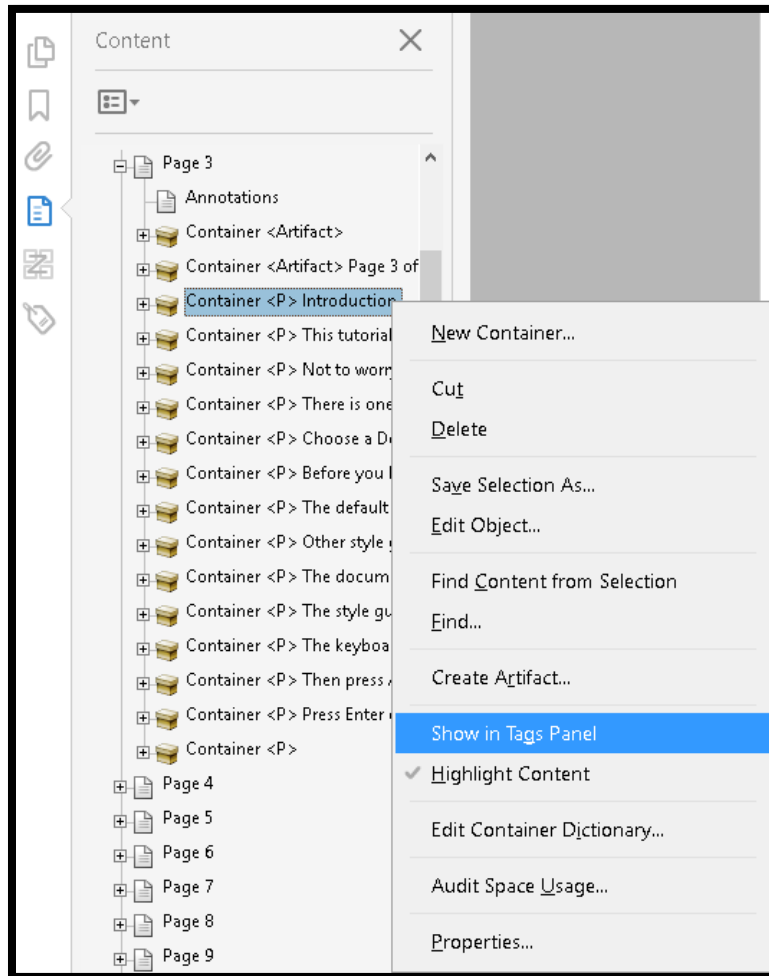
Most of the remediation of a PDF document occurs in the Tags Panel, Tags Tree. The second place you'll work in is the Order Panel and Reading Order Panel. At one time it was rare to work in the Content Panel but that is no longer true. There are some things that you can't see unless you are working in the Content Panel. A good example of this are the table gridlines that can interfere with adaptive technology. They can only be seen and made Artifacts in the Content Panel.

However, there are some tools in the Content Panel that you'll use a lot when working in the Content Panel.

If you activate the Content Panels Options button or press the AppKey (right mouse click) on anything in the Content Panel, one of the options is to Find Container from Selection.

This lets you select content on the page and then find the Container in the Content Panel so you can take a closer look at its contents.

Figure 32 Content Panel context menu with "Show in Tags Tree" selected.

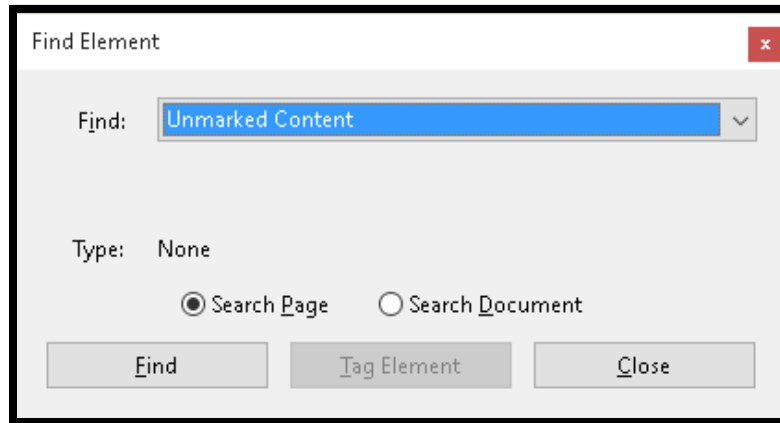


The next helpful tool is the Find tool which lets you find untagged content. However, if you've designated something as an Artifact, it will show as untagged content in a general Find.

This tool also lets you find Artifacts, unmarked links and annotations in documents with links and form controls.

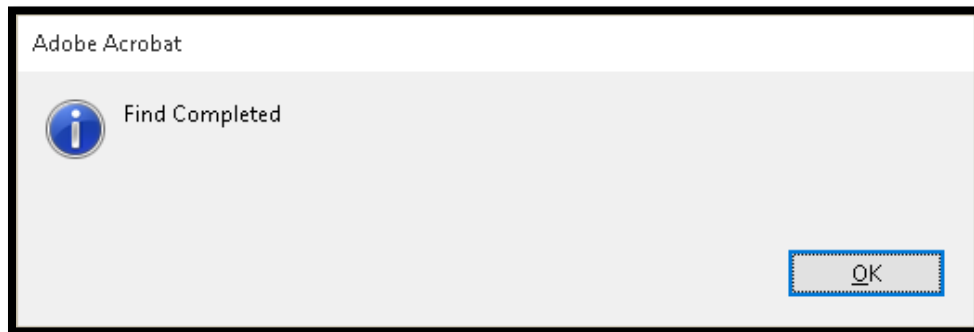
The Find tool is one that you will use extensively when working with accessible PDF forms that you create using a tagged PDF as the form template.

Figure 33 Find dialog from the Content Panel.



You can search the current page or the entire document. Once you've found all instances of what you were searching for, another dialog opens, saying the Find is complete.

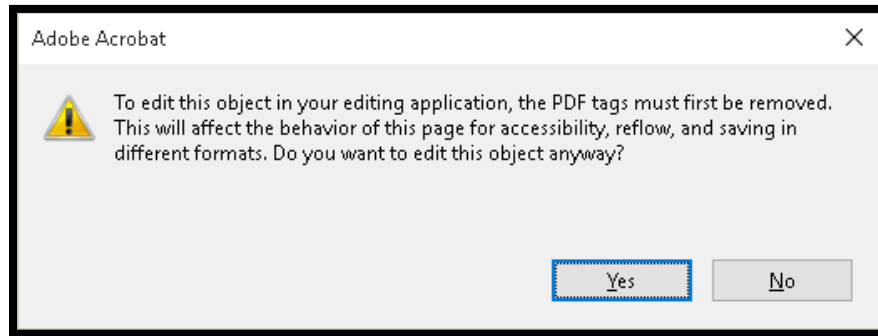
Figure 34 Notification from Find dialog that the search for an item is complete.



While it might seem that the Edit Object option in the context menu might let you work in the Content Panel as you would in the Tags Tree, if you try to change a <P> Tag to a <H1> Tag, you will get a warning dialog that says you can only do this in an untagged document.

The <P> Tag I did this on was tagged correctly in the Tags Tree, but it is identified as a paragraph container in the Content Panel. This is true. It is a container of text.

Figure 35 Warning dialog in Content Panel.



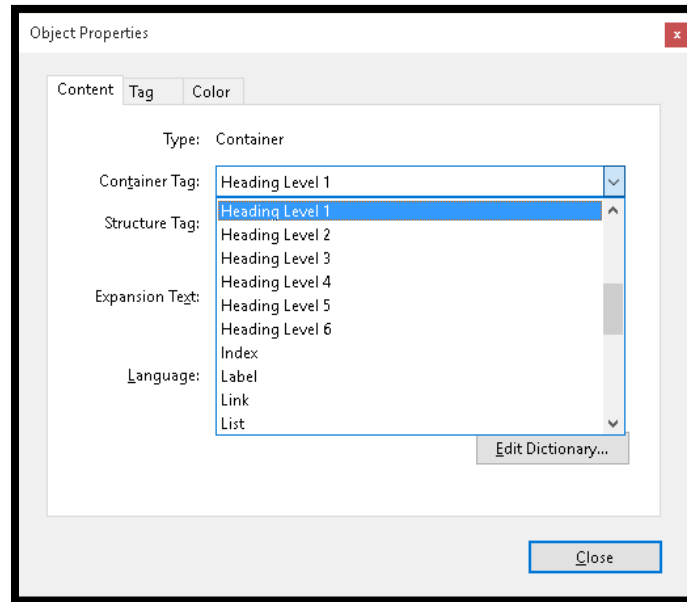
The Options button or context menu in the Content Panel can help you create Artifacts when the Order Panel or TouchUp Reading Order Panel doesn't let you.

The Properties option lets you reassign a Tag identifier. For example, in the sample document used for this tutorial, the word "Introduction" was correctly tagged as <H1> in the Tags Tree but is a <P> Tag in the Content Panel. The Tags Tree needs to be correct in the greater scheme of things because adaptive technology goes down the Tags Tree to provide information to someone reading the PDF document.

However, suppose you are working in the Content Panel because you can't edit a Tag in the Tags Panel or Order Panel. In that case, you can select a Container, press the AppKey or right mouse button (or click the Options button) and choose Properties.

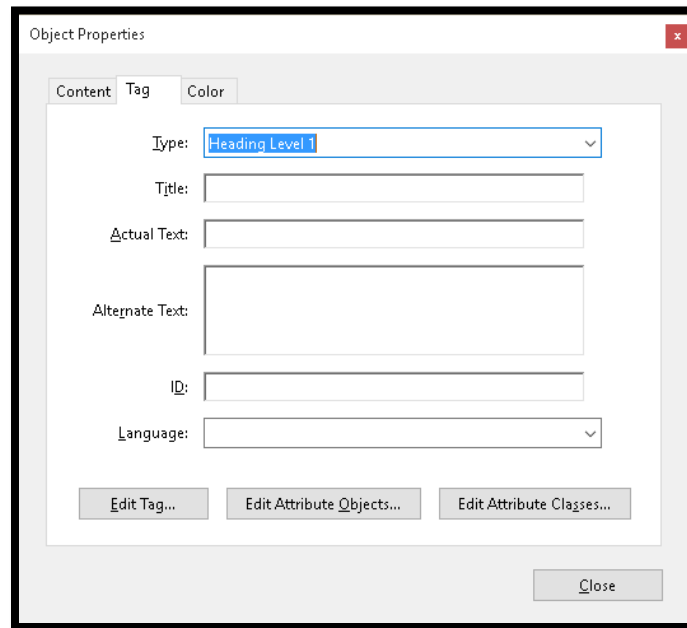
When the Properties dialog opens, the focus is on the General tab and the Content Tag list. Click on the drop-down list and, in the case of our example, change a paragraph to a Heading 1 by choosing that Tag from the list.

Figure 36 Properties dialog for a Container in the Content Panel.



If you Click on the “Tag” tab, you will find the Properties dialog you might be used to seeing in the Tags Tree.

Figure 37 Tag tab in the Properties dialog.



Try to do most of the document remediation’s in the Tags Panel, Tags Tree, then the Order Panel, and the Content Panel as a sort of last resort. I suggest this only because it takes a bit of getting used to working in the Content Panel. You may need to work your way through

understanding Tags and their relationship to content and adaptive technology before diving into the Content Panel.

Role Map

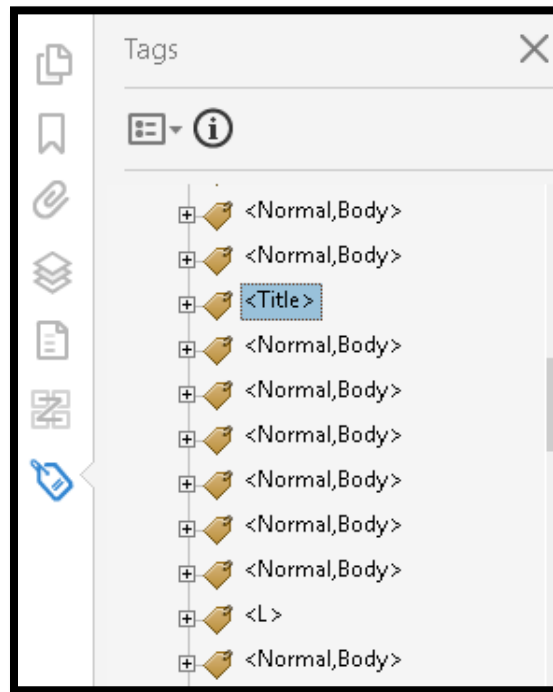
Sometimes you'll see a document that has what might be called unusual Tags. For example, PDF coming from older versions of Word using an older version of Acrobat might produce a <Normal> Tag. This is the Word Style used for the Normal paragraph, and its role in the PDF is as a paragraph.

In Adobe Acrobat Pro DC, these unique Tags have automatically been displayed as correct Tags using the PDF – 1 or ISO 32000 syntax/specifications. You would choose to Edit Role Map to see the original names of Tags.

The following image is a Word document converted to a tagged PDF in Acrobat 8 or 9. If you convert the same document using Acrobat Pro DC, you will get a <P> Tag instead of a <Normal> Tag.

You'll also see these types of Tags when working from documents created in desktop published applications such as Adobe InDesign.

Figure 38 Tags Tree showing a <Normal, Body> Tag.



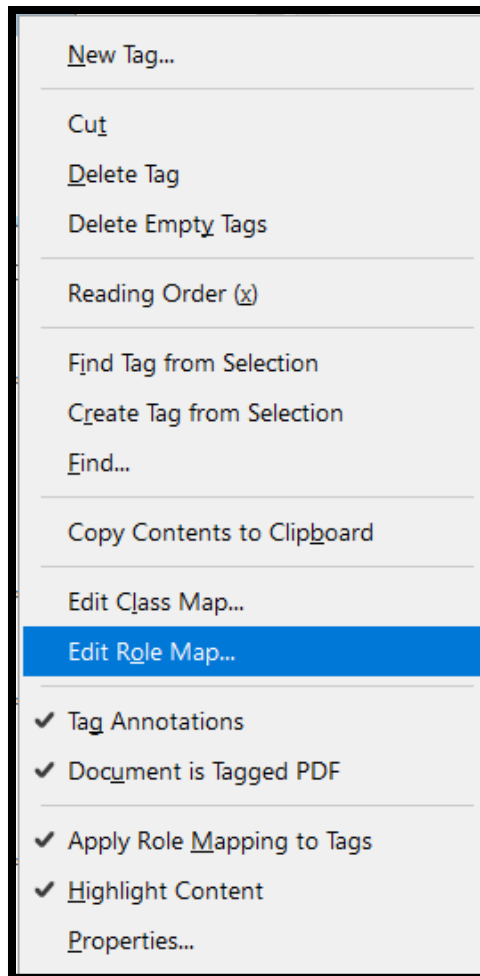
In the example above, the <Title> is a Word Style. The <Normal, Body> Tag represents the normal paragraph style in Word.

We can verify that the Tags have their correct role in the document by looking at the Role Map.

With the current (2019) version of Adobe Acrobat Pro DC, the unusual names for Tags are automatically displayed using the Role map equivalent. This takes the guesswork out of knowing whether a Tag is correctly representing its content or not. There is still the option to look at the Role Map if you need to.

In the case of the <Normal, Body> Tag, it has been correctly mapped to the <P> or paragraph Tag. This means that the content within those Tags will be identified by adaptive technology as paragraphs.

Figure 39 Context menu in Tags Tree showing the "Edit Role Map" option.



The preceding image shows the context menu in the Tags Tree with the “Edit Role Map” selected and the “Apply Role Mapping” turned on.

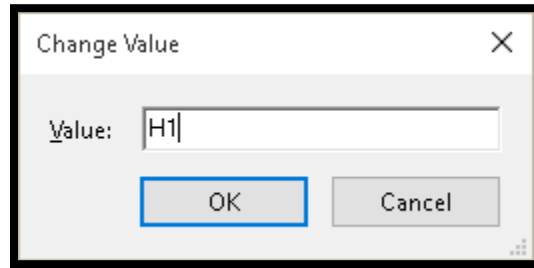
This part of the instructions will walk you through how to change the relationship in the Role Map dialog.

1. Right-click anywhere in the Tags Tree and click on “Edit Role Map.”
2. In the Role Map dialog, select the Title Tag.

3. Press Alt + C to activate the Change Item button.
4. In the Change Value dialog, delete the P and type in H1.
5. Click OK

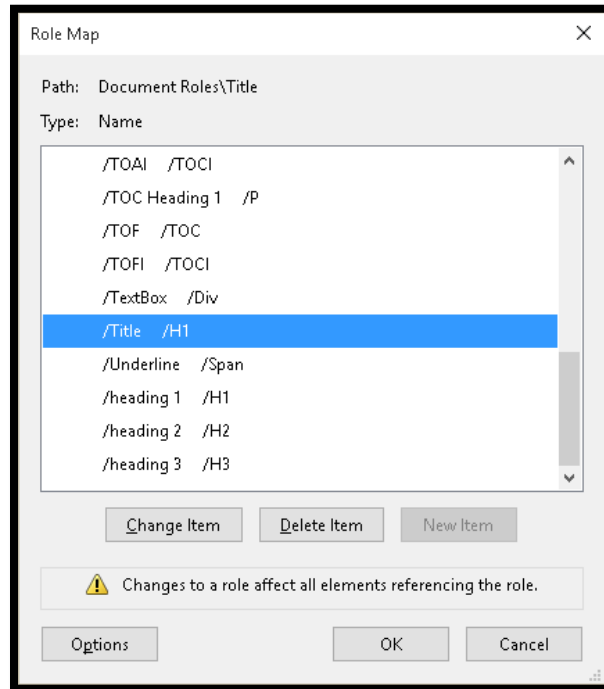
The Title Tag now has the role of a Heading 1 in the current PDF document.

Figure 40 Change Value dialog with the new role of H1 entered.



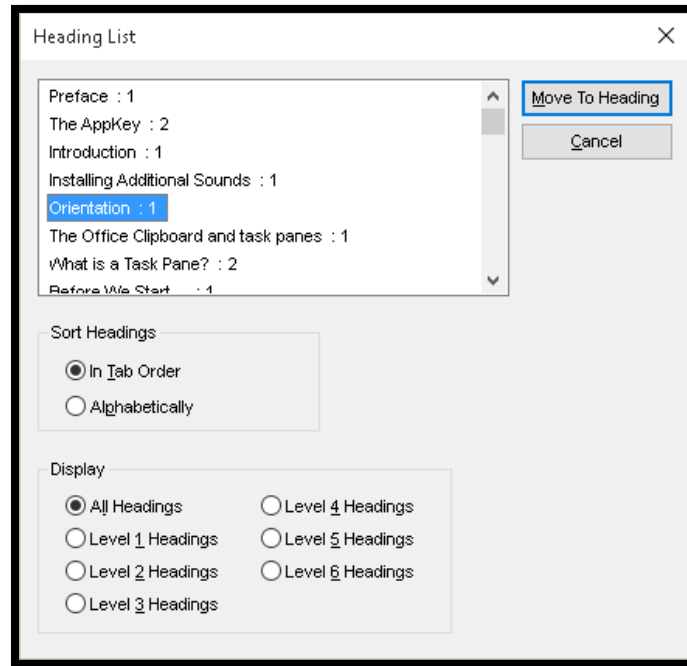
Once you are returned to the Role Map dialog, the Title Tag is now designated an H1 whenever it appears in the Tags Tree for this document.

Figure 41 Role Map dialog showing the Title Tag is now designated as an H1.



You can confirm this using the JAWS screen reader by saving the document, reopening it and pressing JawsKey + F6 to get a list of Headings.

Figure 42 List of Headings in JAWS showing the newly mapped Heading 1.



If you have “Apply Role Mapping” turned on, the <Title> Tag will show as <H1> in the tags Tree.

The preceding image shows the word “Orientation” as a Heading 1. This is the <Title> Tag I selected in the Tags Tree to remap from a paragraph to a Heading.

When you reassign Tags as Headings, make sure you add them to the Bookmarks in the PDF document and place them in their logical Bookmark order.

F2

If you are in the Tags Tree and find content tagged, but the tag is not the right one, you can press F2 or double mouse click to get into Edit mode, delete the part of the wrong tag and type in the correct tag.

The example used here will move the document toward PDF/UA compliance. Tags is the root and the next tag, as illustrated in the following image, is <Part>. It should be <document>.

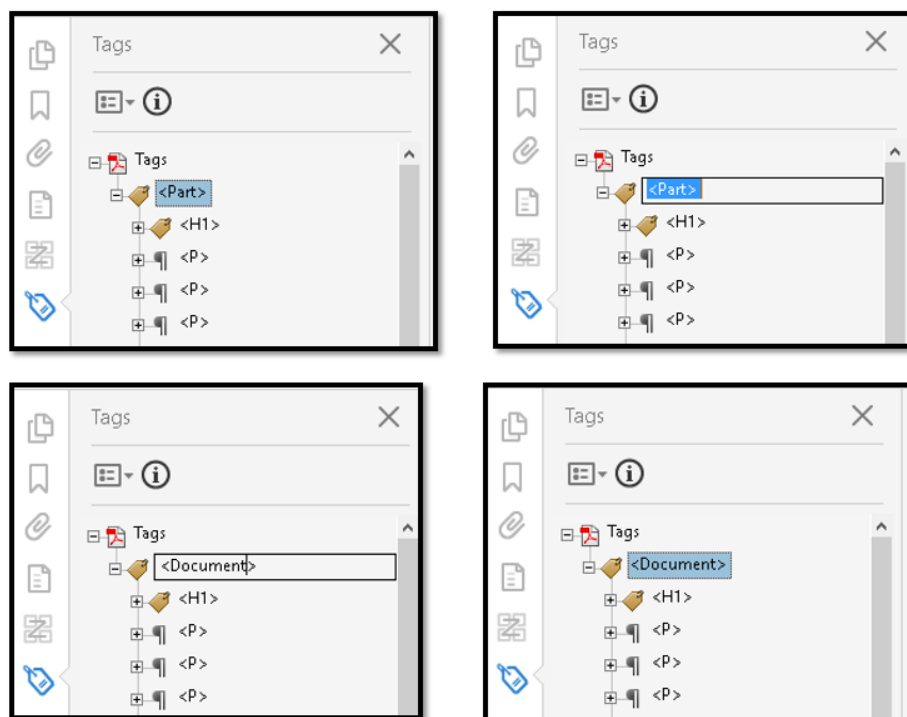
1. Select the Tag <Part>.
2. Press F2. F2 is the Function key to the immediate left of the Escape key in the upper left of the keyboard.
 - a. Double click the mouse instead of pressing F2.
3. The Tag is now in Edit mode.

4. Press the Left Arrow until you are to the left of the >.
5. Press Delete to remove the letters for the word Part.
6. Type the word Document with a capital “D”.
7. Press Enter or click off of the Tag to confirm the change.

The Tags now begin with a <Document> Tag.

You can use this technique for any Tag. For example, you can change a <P> Tag to a <H1> Tag.

Figure 43 Steps to use F2 to edit a Tag.



Once you press Enter after typing in the correct tag, that is the role that adaptive technology will see, and that is the role that the Tag content has in the document.

You may need to save the document, close it, and then open it again to hear the change if you use adaptive technology. This is normal.

Alt Text on Images

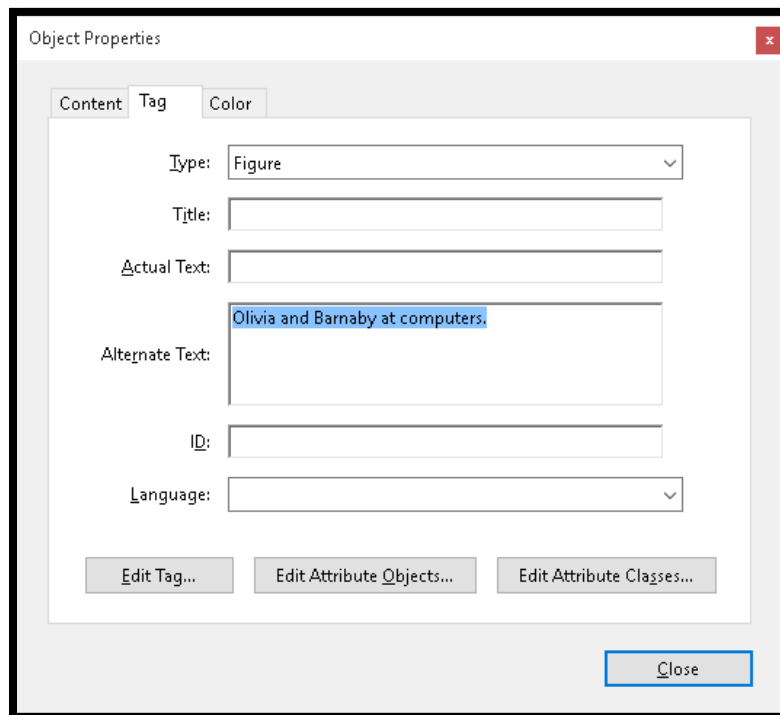
Every image in a document that assists understanding of the content should be provided with Alt Text. Alt text should be concise and meaningful. Any images used in documents should be supported in surrounding content or support surrounding content. Decorative images do not need Alt Text and should be “tagged” as Artifacts.

To add Alt text to an image in Adobe Acrobat Pro DC:

Select the <Figure> Tag. Do not select the content nested under the tag, for example, PathpathPath.

Press the AppKey or right mouse click and choose Properties from the context menu.

Figure 44 Properties dialog for a <Figure> Tag.



For an image, you only need Alternate Text. You do not need Actual Text. By default, the adaptive technology looks for the Alternate Text and will look for Actual Text if it isn't there.

Actual text is used when a small part of the PDF is a picture of text. Sometimes you'll see this in PDFs coming from desktop publishing applications where Illustrator text has been created and plunked into a document.

You'll see this in documents where the author hasn't had the correct font set or the font set used is not complete. For example, if the word is Introduction and the font used in the source document doesn't have a "d," "t," or "n", a drawing of those letters is used. Visually the word looks like "Introduction", but when you try to Tag it or read it using adaptive technology, those letters are missing from the word.

In that case, select the tag that has the letters that do exist and press the AppKey or right mouse click. Choose Properties and in the Actual Text edit box, type the entire word Introduction. Tab to the OK button and press Enter.

Now when adaptive technology such as screen readers or Text-to-Speech tools come across that tag, the word Introduction will be read as a complete word instead of a mangle of a word with characters missing.

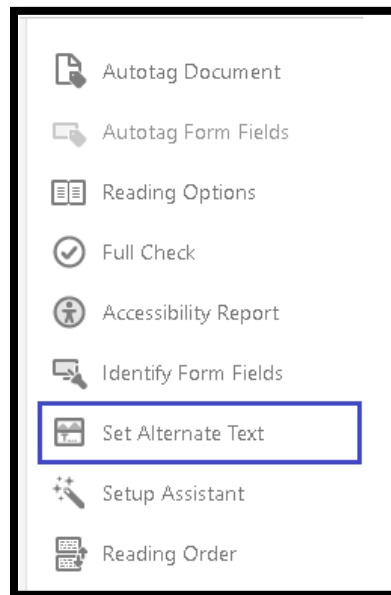
Sometimes you'll see the letters in the tag, but when you attempt to read the content using a screen reader, the word is mangled because characters are missing.

The difference between Alternate Text and Actual Text is how adaptive technology handles it. Actual text is read more fluently...as text would be in a document. The alternate text has a slightly different feel when reading it using a screen reader or Text-to-Speech.

DO NOT use the Actual Text attribute for large pieces of text in the document. Text-to-Speech tools such as Read&Write do not make the transition from text to the images of text. Someone using Read&Write has to switch reading tools to access the Actual Text. Additionally, those using screen readers or screen magnification that highlights as you read, do not highlight Alt Text or Actual text, creating an accessibility barrier.

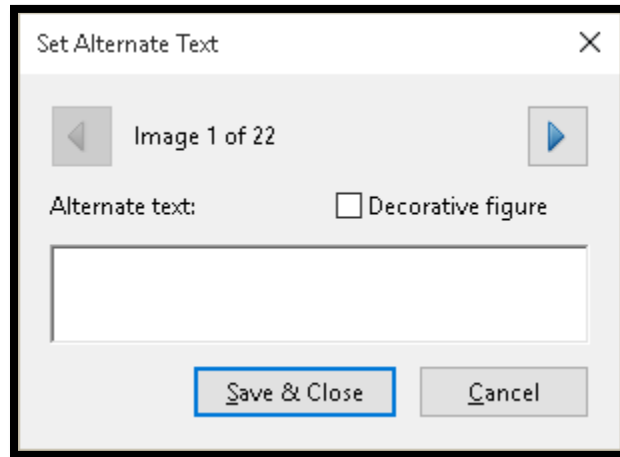
Before performing an Accessibility Full Check, you might want to run the "Set Alternate Text" tool from the Accessibility tools in the Tools Task Pane. Once started, this tool will go through your document and find any figures. It allows you to add the Alt Text if it finds a figure without it.

Figure 45 Set Alternate Text tool from Accessibility Tools, Task Pane.



The Set Alternate Text dialog has buttons to move to the previous or next image, an indicator that you are on X of Y number of images in the document, the ability to make the image an Artifact which is the "Decorative image" check box, the edit area where you can type in the Alt Text for the figure and a Save and Close button as well as a Cancel button.

Figure 46 Set Alternate Text dialog.



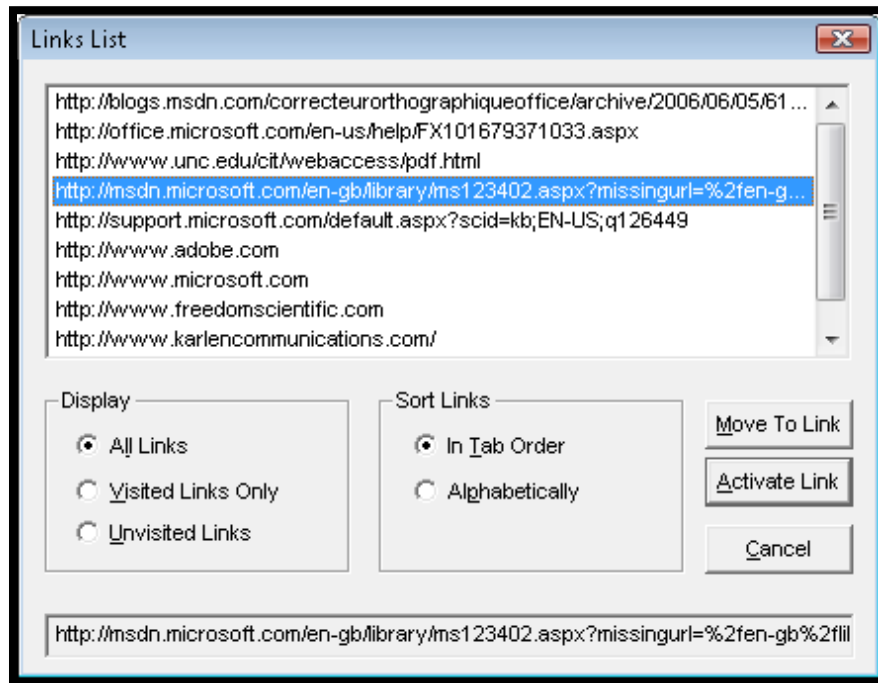
One of my mistakes in using this is thinking that the button lets me move to the next image rather than Save and close. Once you add the Alt Text, you use the Arrow buttons to move to the next image without Alt Text.

Note: A filename is not appropriate Alt Text!

Alt Text for Links

It is essential to create contextual links in the body of documents rather than plunking the long URL's in the middle of the text. By creating more accessible links, the overall accessibility of the document is improved. Consider which you would like to try navigating through:

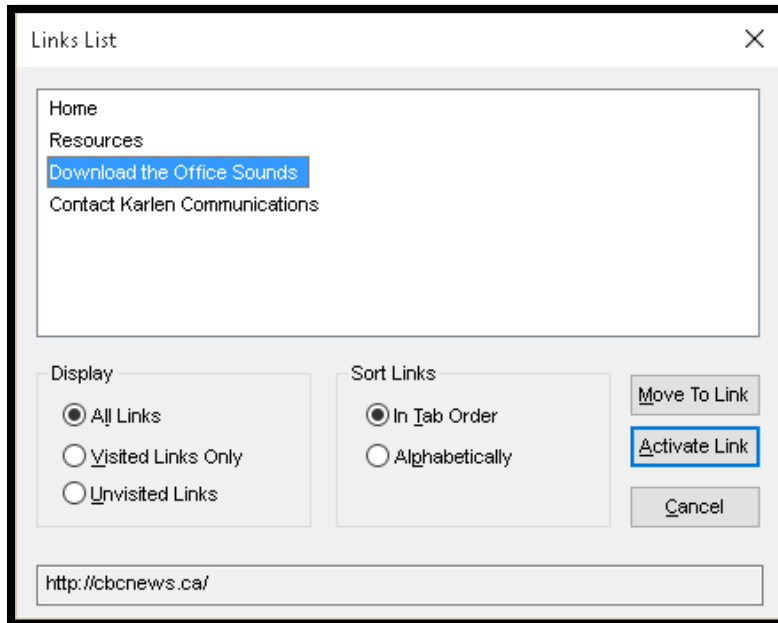
Figure 47 A List of inaccessible links from a Word document using the JAWS screen reader.



Where would this fourth link take you, and what would you expect to find there? Would you listen to the entire URL before knowing what the filename is? What if the filename is file-01.html – where would that take you?

Now, look at links created to be more accessible. The person reading this document has a clear idea of where they are going and what they can expect if they follow a link.

Figure 48 JAWS screen reader list of contextual links.

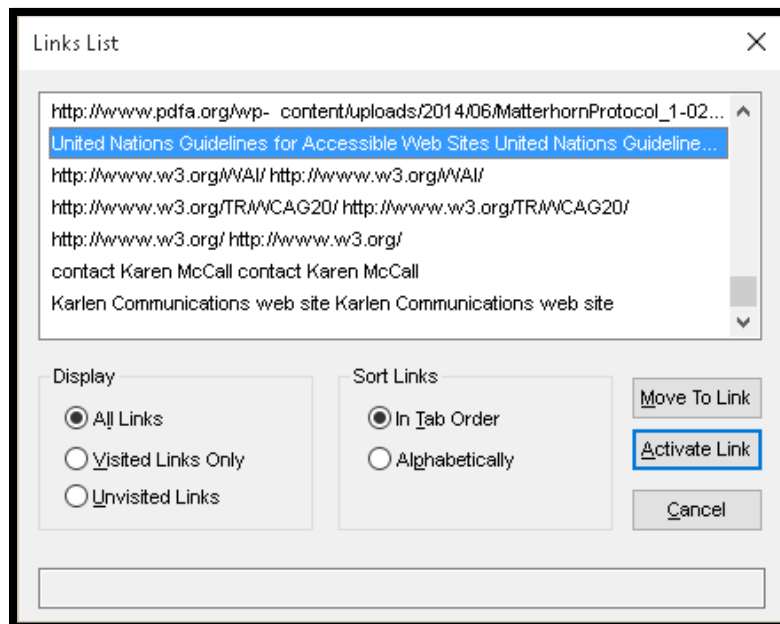


If you look closely at this document, a solution is demonstrated if the document will be printed out or if the document author wants to include the URL itself for clarification. I use Footnotes and Endnotes to provide the long URL's and use contextual links within the text of the document.

Links that do not require Alt Text are: a linked table of contents, a linked table of figures, a linked table of tables or linked table of authorities, links in Footnotes or Endnotes, and links in a Bibliography or references section.

The following image shows a mixture of contextual and long URL's in a document. People can still use first character navigation to find the link they want quickly, but the long URL is also there if they print off the document and need to refer to it.

Figure 49 List of links from the JAWS screen reader showing a mix of contextual and long web addresses.



Remember not to start links with “Go to...” or “Select this link to...” as it prevents the use of first character navigation through the links. “click here” or “here” or “click” aren’t helpful when attempting to determine where a link will take you.

If links in a document are the long web addresses and you add Alt Text, we can still get to the lengthy web address by moving character by character through the web address in the document text if we want to read what the lengthy web address is.

Copy and Paste as a Remediation Technique

While working in the Tags Tree, you can copy and paste to make the remediation work faster. For example, if you notice that in a <Table> structure, the <TH> or Table Header Tags are missing for columns and rows, you can copy the tag while in edit mode (F2) and paste it into other areas of the table structure.

1. Select a Tag, for example <TD>. You want it to be a <TH> Tag.
2. Press F2 or double mouse click, which will put you in edit mode and highlight the entire tag, <TD>.
3. Press the End key and then go back and delete the D and replace it with an H.
4. Press Enter or click off of the Tag to confirm the change.
5. You now have a <TH>Tag.
6. Press F2 or double mouse click the <TH> Tag and press Ctrl + C to copy it. Press Escape or click anywhere off of the Tag.

7. Move to the next <TD> Tag you want to make a <TH> Tag and press F2.
8. Press Ctrl + V to Paste the <TH> Tag over the <TD> Tag.
9. Press Enter or double click the mouse to confirm your action, and the <TD> Tag is now a <TH> Tag.

I find that using Copy and paste for Tags that need a lot of replacing (tables and lists) does save time and keyboarding stress.

You can use Cut, Copy and paste to move content around the Tags Tree, Order Panel and Content Panel.

Language

Even if your native application, for example, Word, identifies a language for the document, most of the time, the language settings are regional or localised. This means the language attribute will be EN-CA or EN-US for Canadian English or US English, respectively.

The ideal is to have just plain English (or French, Spanish, or any other language).

Why?

By saying that the document is Canadian English, if there are changes in pronunciation from US English, British English, Australian English or any other dialect of English, we force the person reading the PDF document to hear the content in a version of English they are not familiar with. The synthesisers we use when we use screen readers or text-to-Speech are ones we use for specific reasons. We either like how the words are pronounced or hear the subtle pronunciations of words and phrases.

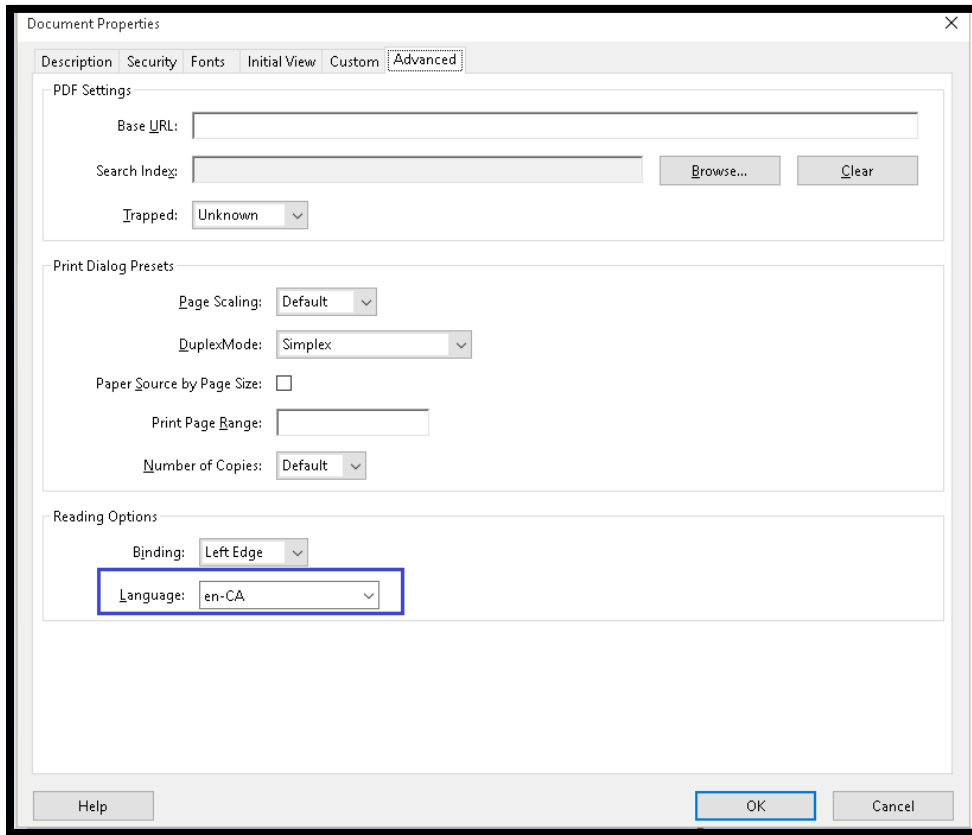
Our ears and minds get used to understanding content based on the voice we use to hear content.

By forcing us to use a different pronunciation, for example, listening to US pronunciation when we use an Australian synthesised voice, it takes us longer to understand the content and hear the various pronunciations in a meaningful way.

Using just “English” as the language allows us to use whatever English-based synthesised voice we are used to when reading PDF documents.

Press Ctrl + D or go to File, Document Properties to open the Document Properties dialog, press Ctrl + Tab to move to the Advanced tab and then press Alt + L or click on Language edit box. Type in the language you need, click on the OK button or Tab to it and press Spacebar.

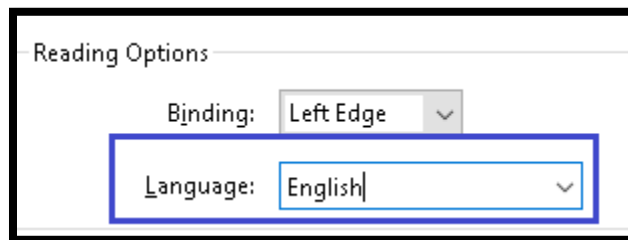
Figure 50 PDF Document Properties dialog Advanced tab showing Language edit box.



The preceding image shows the Language attribute as “EN-CA” or Canadian English.

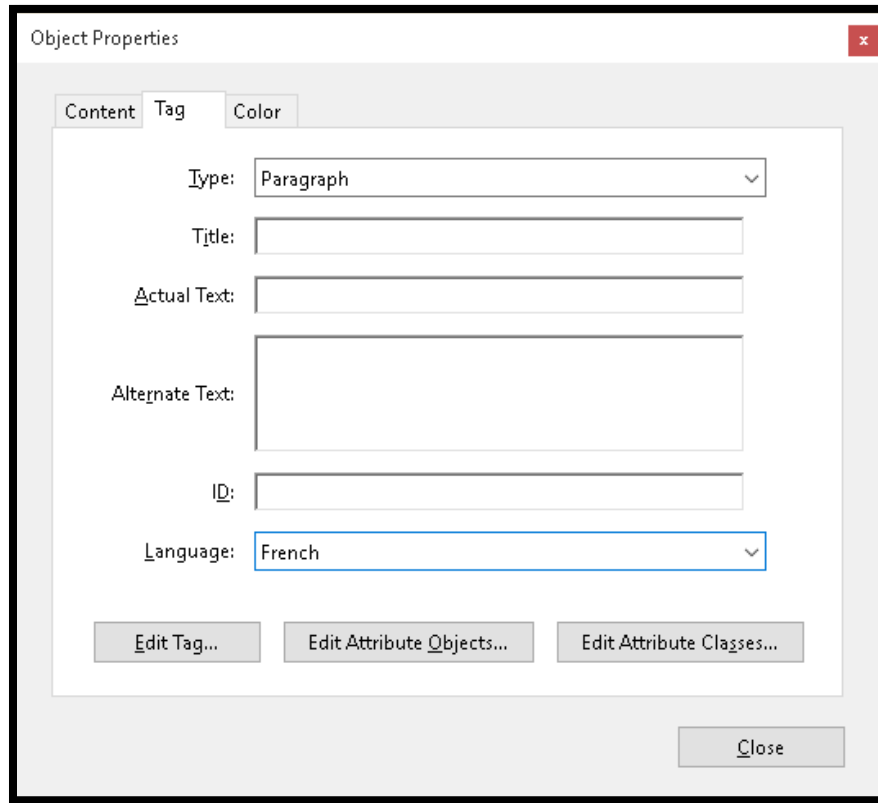
The following image shows the language repaired to be just "English" to allow people reading the PDF document to use their familiar voices and pronunciation when reading a PDF document.

Figure 51 Plain English language attribute.



If you have a multilingual document where some text is in one language and some text is in another, you can ensure that the correct pronunciations are used when someone comes across the language change.

Figure 52 Language attribute for a Tag.



For example, if a <P> or paragraph is in French and the rest of the document is in English, select the <P> Tag for the French text and press the AppKey or right mouse click.

Click on Properties or press the Up Arrow (Properties is the last item in the context menu, so pressing the Up Arrow moves you right to it.). Press Enter to open the Tag Properties dialog.

Press Alt + L to move to the Language attribute and type in the correct language for the tag, in our example, French.

Click Close or press Alt + C, and the language for that one Tag is French.

To hear the changes in synthesiser voices, save the document, close it, and reopen it again. If you don't have a screen reader or Text-to-Speech tool running, exit Acrobat and relaunch it. Adaptive technology always works better when it knows what it is working with. By starting the adaptive technology first, you ensure that ALL scripts and tools for that application are available.

Find Tag from Selection

This tool is one of your "best friend" tools. It lets you select content in the document and then move directly to the corresponding tag in the Tags Tree.

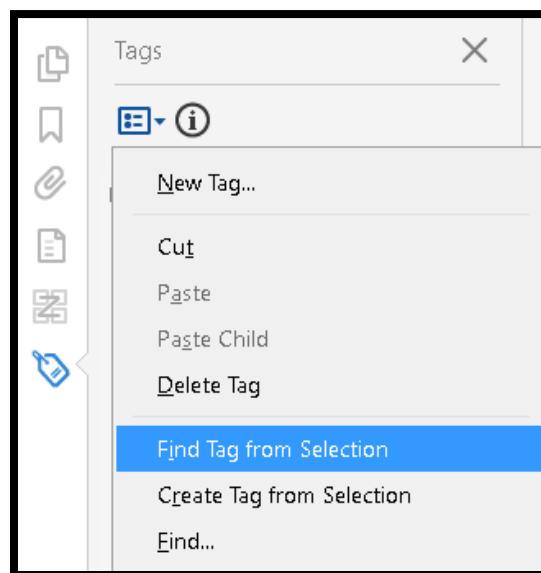
Use the Select Text tool to select text to find a specific tag.

Figure 53 Select and Zoom Toolbar with the Select Text tool active [far left].



Activate the Options button in the Tags Panel and choose Find Tag from Selection.

Figure 54 Options context menu from the Tags Panel showing Find Tag from Selection.



The corresponding tag will be expanded to reveal its contents in the Tags Tree. This is how you will locate it in the Tags Tree. Depending on where you are in the Tags Tree, you may scroll down to see the expanded Tag.

This tool is useful when you want to check the syntax of a <Link> Tag. For links, you want to select text just before or just after the link because trying to select the link itself will inevitably activate it.

Create Tag from Selection

While in the Tags Tree, if you notice content that hasn't been tagged correctly, you can add the content to the Tags Tree by first creating the new tag.

I recommend this because it builds/adds the tag close to where you want it in the Tags Tree. Although you can select content and create the Tag itself during the process, the Tag might be placed at the end of the Tags Tree instead of where you need it.

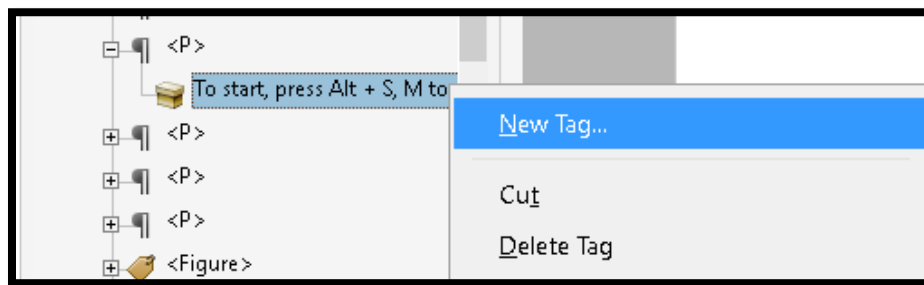
Here is the process I work with.

I locate the content I want in a new Tag.

I might select text just above it in the Tags Tree and use the Find Tag from Selection tool. I then expand the tag to reveal its contents.

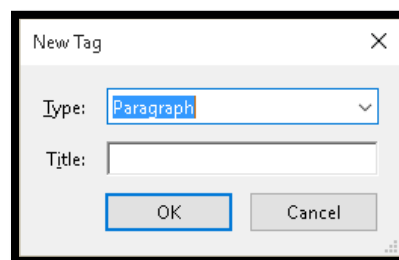
I select the tag's contents and press the AppKey to open the context menu and choose New Tag.

Figure 55 Creating a New Tag nested under existing content.



Once the new <P> Tag has been inserted, I can either drag it out of the existing tag now or when I've finished creating the tag from the selection.

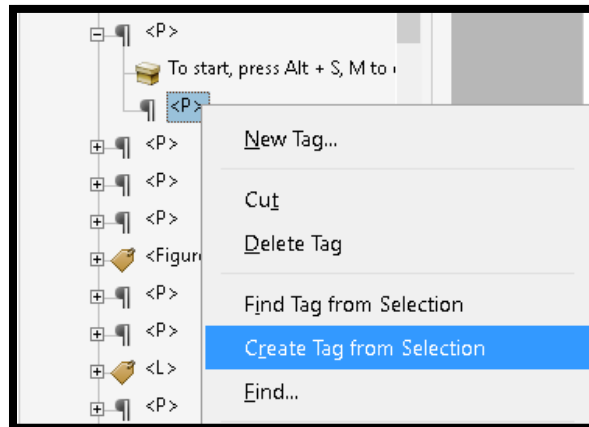
Figure 56 New Tag dialog showing Paragraph Tag to be created.



The next step is to focus on that empty <P> Tag, go to the document and select the content you want in the <P> Tag.

Press the AppKey or right mouse button on the empty <P> Tag and choose to Create Tag from Selection in the Tags Tree.

Figure 57 Create Tag from Selection and empty tag in the Tags Panel.



Once the content has been added to the <P> Tag, move it outside of the tag it is in if you haven't done so already. Make sure you place it in its logical reading order in the Tags Tree.

Using this technique gives me more control over where the new tag is placed. I don't have to go through the Tags Tree looking for it.

Read Out Loud – Just Say NO!

We've been asking for years...well, ever since Read Out Loud was included in Adobe Acrobat and Reader 5 (circa 2002)...to have it removed or put some development into it to make it a complete Text-to-Speech tool. The intent of Adobe in adding it was similar to the origins of Narrator in the Windows operating system. It was included to give people an idea of what it was like to experience a PDF document if you were using adaptive technology that produced audio output, for example, a screen reader or Text-to-Speech tool.

It was NEVER designed to be a primary tool for accessing PDF, nor was it EVER intended to be used as a testing tool for PDF document accessibility!

While Microsoft Narrator has evolved into a full feature screen reader, Read Out Loud has remained a "sample technology." It has not advanced in any way in accessing PDF content. Narrator won't work in Adobe Reader or Adobe Acrobat as of the date of this tutorial in 2019.

My advice is to forget it is there!

If you want to test PDF documents, use [NVDA \(free screen reader\)](#)², which has made advancements in accessing PDF documents.

If you have JAWS or another paid for screen reader, use that.

Do not use Read Out Loud for anything!

² NVDA by NV Access: <https://www.nvaccess.org/download/>

It can only read a page or the entire document. It cannot tell you where Headings, tables, lists, or any other structure are. You cannot read a character, word, sentence, line or paragraph using it...it is all or nothing.

Just say NO to Read Out Loud!

Save As Accessible Text or Export PDF

The ability to save a document as accessible text is sometimes used to verify the reading order. It is more beneficial for people with disabilities who want to read the document outside of Acrobat or Reader. It takes time to save the document, then go through it and validate it against the version in Acrobat.

While using the Save as process will save your PDF in another format, I've found that using the File, Export and then choosing Word gives you a better result than using File, Save As, Word. The Export PDF tools can be added to the Tools Task pane.

Add Tags Report.

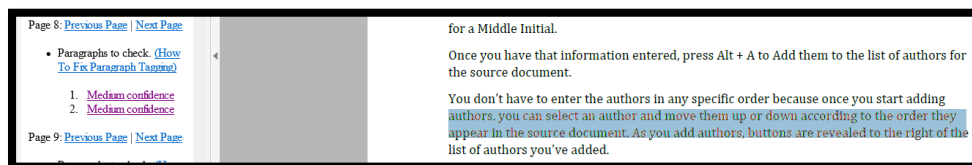
When tags are added to a document, a report on problem areas found during the tagging process is generated in Acrobat.

You will not get an Add Tags Report if you create a tagged PDF document from any application with conversion tools, such as Microsoft Office or Adobe InDesign. The tagged PDF document will open in Acrobat, and you can begin the Quality Assurance process to see if any remediation is necessary.

The tools to add Tags to an untagged PDF document were outlined earlier in this tutorial. If you start with an untagged PDF, go through the Hierarchy of Tasks until the Add Tags to Document. The Action Wizard, Make Accessible, will guide you through the same Hierarchy of Tasks.

The following image picks up the process after Tags have been added to an untagged PDF document and the Add Tags Report has been generated.

Figure 58 Sample content flagged in Add Tags Report.



When the Add Tags Report is generated, an icon is added in the Navigation pane, usually just under the Bookmarks tab and before the Attachments tab. The Add Tags Report is open and ready to work with.

The Add Tags Report contains whether Acrobat has low, medium or high confidence in tagging. By clicking on or navigating to a link in the Add Tags Report and pressing Enter, you are moved to the problem area in the document, and it is highlighted.

Here is where the Find Tag from Selection comes in handy.

Once the text is highlighted in the document from the Add Tags Report, switch to the Tags Panel/Tags Tree, use the Select Text tool to select a part of the content in question and in the Tags Panel, Options, choose Find Tag from Selection.

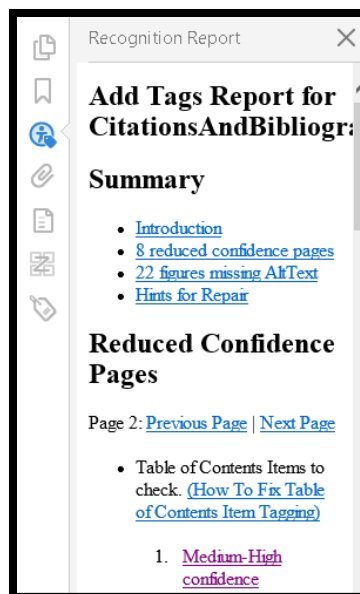
The tag for that piece of content is expanded, and you can see if it is correct, if all of the necessary content is tagged or if you need to repair it.

Switch to the Add Tags Report to move to and examine the next issue the Add Tags Report found.

Once you have worked with enough PDF documents, you may not want to review all items in the Add Tags Report. You may just start on repairs based on your knowledge of what can be problematic, or you may want to skim the results and then begin working on remediations.

Having worked on tagged PDF for over 20 years, I immediately go to the Tags Tree and start working my way down it, which lets me perform most of my Quality Assurance while doing any remediation. This save a huge amount of time!

Figure 59 Add Tags Report in Navigation pane.



I'd move directly to the Tags Panel and Tags Tree or Order Panel and begin making necessary repairs.

For example, one strategy might be to move to the Order Panel and quickly review the document to see if large pieces of content are not tagged before moving to the Tags Tree. The other technique is the one I used and previously mentioned of starting work directly in the Tags Tree.

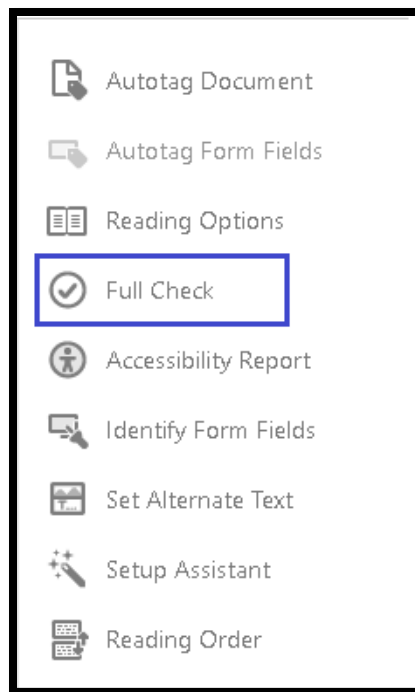
Accessibility Check

Once repairs have been made to a document, it is wise to perform an Accessibility Check. This will identify any outstanding issues in the document.

Of course, you don't need to wait until you finish remediating a PDF document to perform an Accessibility Check. I often run the Accessibility Check if I am working on a fragile PDF where I think I fixed something on page 5 that might have affected something elsewhere in the document.

The Accessibility Check is found in the Accessibility Tools in the Tools Task Pane.

Figure 60 Accessibility Full Check in the Accessibility Tools in the Tools Task Pane.



When you activate the Accessibility Check automated tool, a dialog opens with settings you can change to customise how the Full Check Report will be conducted.

I accept the default settings and press Enter. However, they are described here if you want to explore the settings.

The first settings identify that you want the Accessibility Check Report and where it will be placed. As well as seeing it in the Navigation Panel just after the Bookmarks and before the

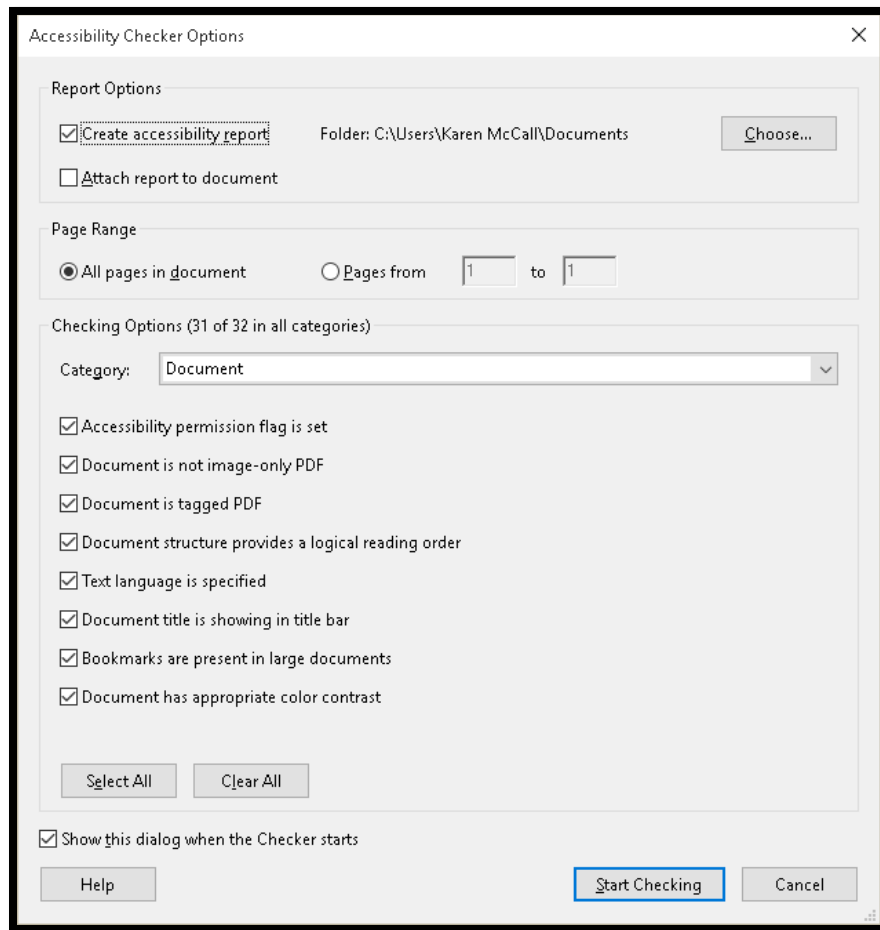
Attachments tabs, you can access it as a web page from the location it is saved to. I generally don't include the report with the PDF.

There is a check box to attach the Full Check Report to the PDF document. This should not be checked by default.

The middle section of the Accessibility Check dialog lets you choose whether to check the entire document or a specific page range.

The last section of the Accessibility check dialog lets you choose what elements of the PDF document will be checked. The default is to check the document or everything.

Figure 61 Accessibility Full Check dialog showing document checking options.

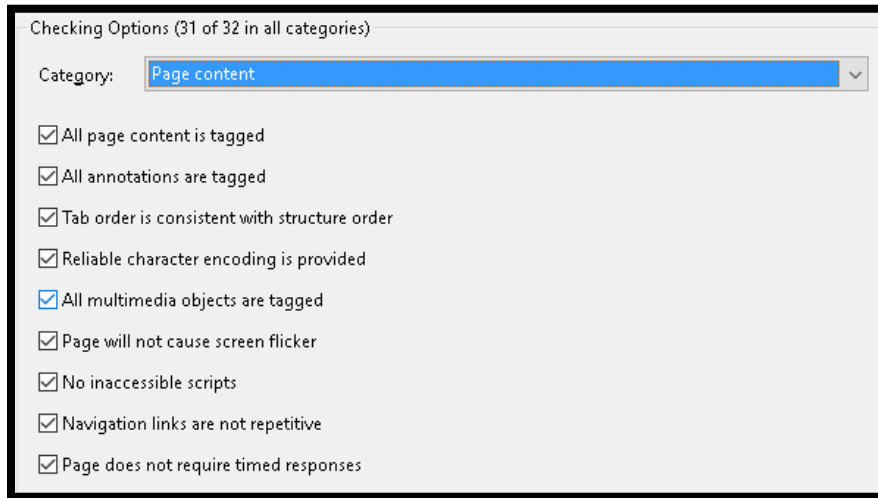


There are three other choices: Page Content, Forms, Tables and List and Alternate Text and Headings.

The following image shows the options for Page Content.

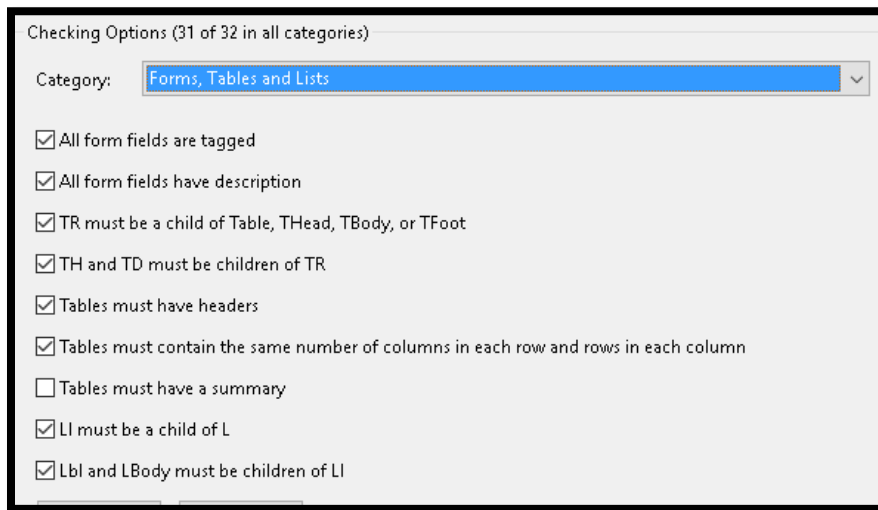
If you check Page Content, some of the options are to check that all content is tagged, that all Annotations are tagged, that the Tab Order is consistent with the structure order and that there are no inaccessible scripts.

Figure 62 Accessibility Check options for Page Content.



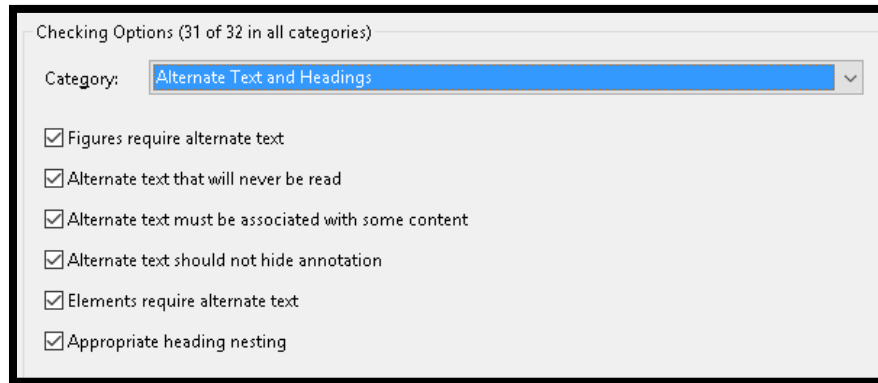
The next option is to check Forms, Tables and Links. When you choose this option, the settings change.

Figure 63 Accessibility Check options for Forms, Tables and Lists.



If you choose to check Forms, Tables and Lists, some of the options are that all form fields are tagged, all form fields have descriptions, TR must be a child of Table, TBody, THead or TFoot and that LI must be a child of L.

Figure 64 Accessibility Check options for Alternate Text and Headings.



If you choose Alternative Text and Headings, the options change to include figures requiring alternative text; alternate text must be associated with some content and appropriate Heading nesting.

The accessibility Check Report opens in the Navigation Pane, and you can begin to go through the items it found.

Note: I probably should have mentioned this before, but before starting the Accessibility Check, go to the Document Properties dialog (Ctrl + D) and check the language and document title. These are two things that regularly get flagged. Make sure the Initial View is set to Document Title instead of the filename. Then go to the Pages tab in the Navigation Panel and check the Tab Order for all pages. You can do this by pressing Ctrl + A to select all Pages and then use the AppKey or right mouse button to open the context menu and choose Properties. Make sure the Tab Order is from the document structure. Doing this will save time when the Accessibility Full Check is done.

No matter which type of Accessibility Full Check you perform, there is still a need to check some items manually. For example, you must manually review the logical reading order and colour contrast. Although it is not much, you can do if the document author has used poor contrast except suggest that they receive training on accessible document design.

For logical reading order and colour contrast, select those items in the Accessibility Full Check Report, press the AppKey or right mouse button and choose Pass. They are now "fixed."

In the sample document I used for the Accessibility Full Check, there were several images with no Alt Text.

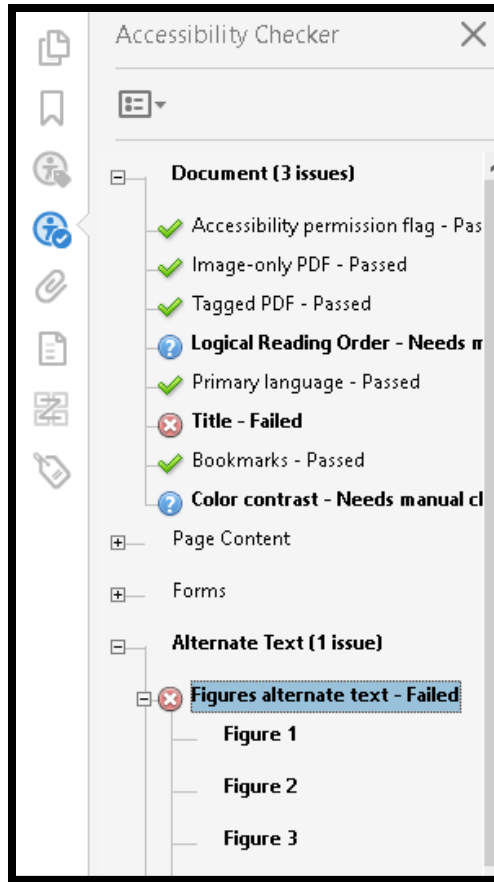


Figure 65 Accessibility Full Check Report in Navigation panel.

I expanded the Alternative Text item in the Accessibility Full Check report. Notice that it tells you how many images have no Alt Text.

I can select a figure in the list and click on it to go directly to that figure to look at the problem.

I can then press the AppKey on the figure in the Accessibility Full Check Report and choose Fix.

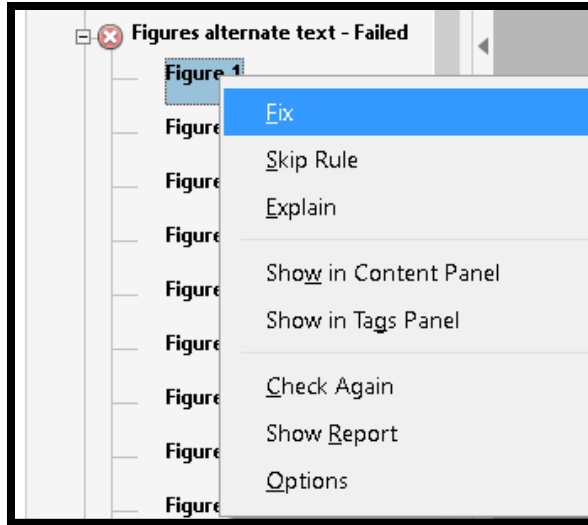


Figure 66 Figure with no Alt Text and context menu to fix it in the Accessibility Full Check Report.

This opens the Set Alternative Text dialog, adding the Alt Text for the image.

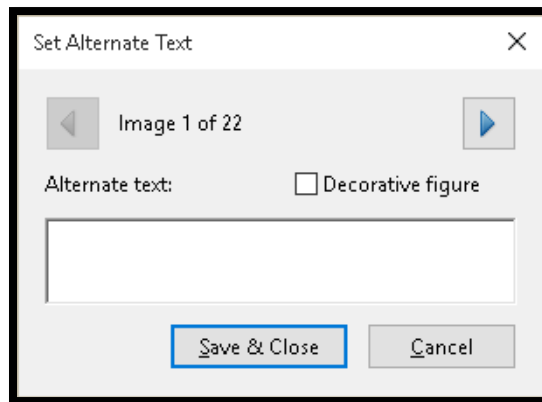


Figure 67 Set Alternate Text dialog.

When you have made the necessary repairs, perform the Accessibility Full Check again. Repeat the process as required to comply with your organisational policy on accessible PDF.

You can perform an Accessibility Full Check at any time during the remediation process. You don't have to wait until the end. I often perform the Accessibility Full Check after remediating a complicated piece of content to ensure that I haven't broken anything in the process.

Bookmarks

One of the critical elements of an accessible PDF document is the existence of Bookmarks. The Bookmarks can be generated from many native applications such as Microsoft Word. They are based on the Headings used in the source document in Word. Another good reason to use correct Heading structure in your Word documents!

If you are working with a PDF document that doesn't have Bookmarks, you can add them.

Select the text you want to be the Bookmark.

Press the AppKey or right mouse button and choose Add Bookmark. The keyboard command is Ctrl + B.

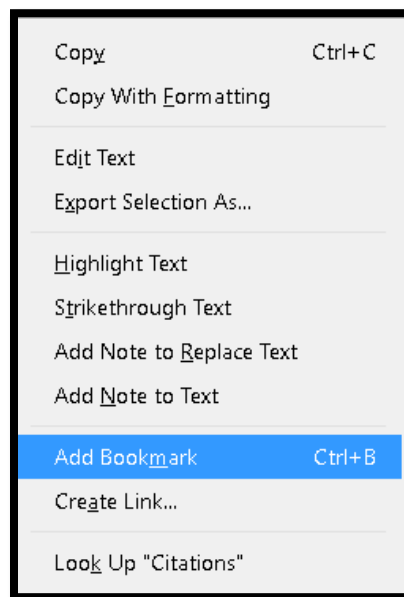


Figure 68 Add Bookmark in the context menu.

Depending on your focus in the Bookmarks Panel, you may have to drag Bookmarks around to a logical order.

Bookmarks should be nested just as they would be in a Word document. For example, heading 2 is nested under Heading 1, and Heading 3 is nested under Heading 2.

The following image demonstrates how Bookmarks reveal and support the logical structure of the PDF content.

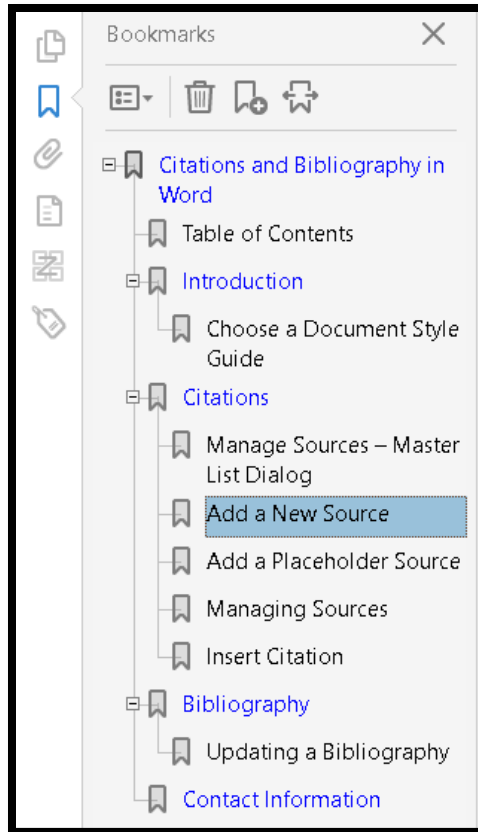


Figure 69 Bookmarks in a PDF document.

One of the tools available for Bookmarks is making levels of bookmarks a different colour, so they are even easier to navigate.

I recommend only making the first level or Heading 1 Bookmark a different colour. This lets people locate things like chapter titles and quickly see what content is under them or quickly move to the chapter title.

To make a Bookmark a different colour:

1. Select the Bookmark in the Bookmarks Panel in the Navigation Panel.
2. Press the AppKey or right mouse button and choose Properties.
3. Change the colour of the Bookmark.
4. Tab to and activate the Close button.

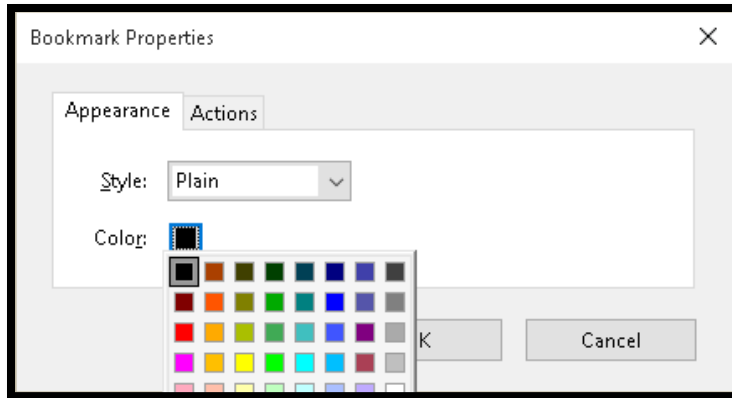


Figure 70 Bookmark Properties dialog showing colour palette.

Contact Information

You can [contact Karen McCall³](#) with any questions about this how-to booklet or any suggestions for others. Visit the [Karen McCall School on Teachable⁴](#) for updated free tutorials and online courses or books for purchase.

Working toward:

1. An international accessible document standard for print-to-digital publications.
2. A Global Inclusive Education Standard to meet the UN Sustainable Development Goals (Goal 4.5 is to achieve inclusive education by 2030.)

³ Contact Karen McCall: info@karlencommunications.com

⁴ Karen McCall School on Teachable: <https://karen-mccall.teachable.com/>

Appendix A: Tag Samples

The following are samples of the most commonly used Tags at a basic tagging level.

The <P> Tag is used for a paragraph. All parts of a single paragraph must be under this tag. Each paragraph must have its own <P> Tag.

Paragraph Tags

<P>

Sample paragraph text. Video provides a powerful way to help you prove your point. When you click Online Video, you can paste the embed code for the video you want to add. You can also type a keyword to search online for the video best fits your document.

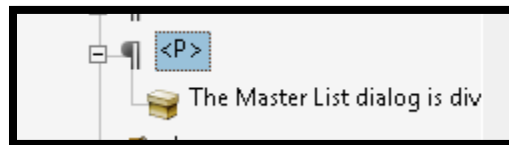


Figure 71 Sample paragraph Tag.

Heading Tags

A Heading Tag identifies a navigational point in the document. Headings must be sequential, going from H1 to H2 to H3 or Heading 1 to Heading 2 to Heading 3. From a Heading 3, you can go back out to a Heading 2 or a Heading 1, but you must not skip headings. You can have a Heading 1 with more than one Heading 2 under it; you can't skip Heading levels. For example, you are tagging from an H1 to an H3 without an H2.

Headings are reflected in Bookmarks, and there should be the same Bookmarks as there are Headings.

Headings must not be used for complete paragraphs!

<H1>

Sample Heading text. Chapter One



Figure 72 Sample heading tag.

List Tags

Lists have a parent <L> and have child Tags. A or List Item Tag can have a <Lbl> Tag for a bullet or number and a <LBody> Tag for the content. It is best practice to have both the <Lbl> Tag for a bullet or number and the <LBody> Tag for the content related to that bullet or numbered list item.

<L>

<Lbl>

Bullet or number

<LBody>

Text for the bullet or numbered list item

<Lbl>

bullet or number

<LBody>

Text for the second bulleted or numbered list item.



Figure 73 Sample list Tags.

Table Tags

Tables have a specific structure as well. There is a parent <Table> Tag with a child <TR> or Table Row Tag for each row in the table. The <TR> Tag has either <TH> or Table Header Tags for column and row titles or a <TD> or Table Data cell for data in a table.

The following table has 3 columns and 3 rows.

```
<Table>
  <THead>
    <TR>
      <TH>
        Column title
      <TH>
        Column title
    <TR>
      <TH>
        Column title
  <TBody>
    <TR>
      <TH>
        Row title
      <TD>
        Data information
      <TD>
        Data information.
    <TR>
      <TH>
        Row title
      <TD>
        Data information
      <TD>
        Data information.
```

<TFoot>

<TR>

<TD>

Any source information

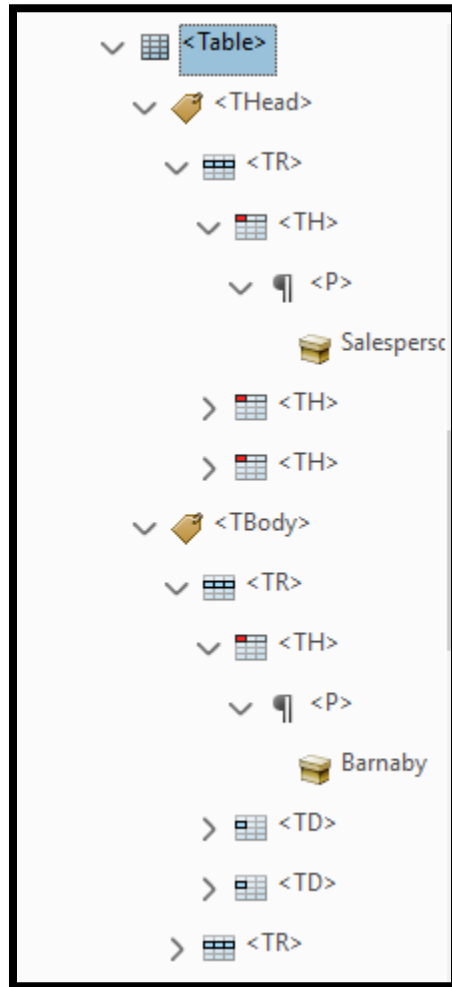


Figure 74 Sample Table Tags.

Figure Tags

The <figure> Tag is used for images. Sometimes you might see <Shape> or <Formula>. All of these are figures requiring Alt Text.

<Figure>>

PathPathPathPath

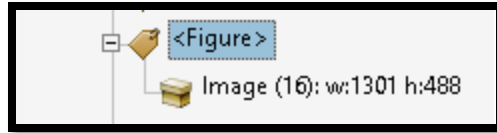


Figure 75 Sample figure Tag.

The preceding image shows how the figure can be identified within the <Figure>Tag: "image followed by the dimensions."