PDF Accessibility Terms

WHITE PAPER



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PDF Accessibility Terms You Should Know

Like other niche tech industries, document accessibility has its own set of unique words and acronyms. It can take time to familiarize yourself with this technical jargon. That's why CommonLook created this PDF Terms for PDF Accessibility white paper, which includes the terms you need to know right now.

Whether you are brand new to PDF accessibility or just need a refresher, we hope you find this to be a valuable resource.

Accessibility Checker

These are tools that test digital documents for accessibility compliance. The Adobe Accessibility Checker is an example; it checks PDF documents and provides a list of what needs to be fixed or manually verified. Typically, full compliance requires manual verification. There are more comprehensive checkers available, notably PAC3 and CommonLook PDF Validator.

Accessibility Checklist

Lists checkpoints that need to be tested or manually verified to ensure that all aspects of the accessibility requirements are correct; this includes heading levels, reading order, alternative text (alt-text), metadata and many additional items. Visit the W3C website for more information on the checkpoints.

Accessibility Standards

The W3C or World Wide Web Consortium publishes accessibility standards such as WCAG 1.0, WCAG 2.0 and now WCAG 2.1 at three levels A, AA and AAA. Each standard progressively lists expanded areas of requirements to ensure content is accessible to the broadest audience. The ISO publishes an accessibility standard called PDF/ UA. Most government requirements reference one of the W3C or ISO standards in their regulations or laws.

Accessible PDF

An accessible PDF is, by definition, a tagged PDF that is verified to meet one or more of the standards such as WCAG 2.0/2.1 AA, HHS or PDF/UA. A properly tagged PDF will work well with assistive technology, such as a screen reader. Detailed Article on Accessible PDFs.





Accessible PDF Forms

PDF forms on web pages are common, but print-to-fill forms are inaccessible. A PDF form needs to be electronically fillable before it can be accessible. If fillable forms are not standardscompliant, someone using a screen reader or keyboard cannot fill them out.

ADA or Americans with Disabilities Act

The ADA became the law of the land in 1990. The law prohibits discrimination against individuals with disabilities and seeks to provide the same rights and privileges in all aspects of their public life. The law is broad. It addresses five sections that provide equal opportunity in public accommodations, employment, state and local government services, transportation and telecommunications. In 2009 the law was updated. In most cases, ADA laws apply to physical and virtual places of business, like a website.

Alternative Text or Alt-Text

When an image, chart or graph is used in a document, someone using a screen reader cannot get any information from those graphics if they don't have Alt-text. Alternative text or alt-text is a text description of the image that should provide that information to someone using a screen reader. Some graphics are used for decorative purposes only and do not need alt-text. Most images need a written description so that someone using assistive technology can read all of the document's components, not just the text sections.

Assistive Technology (AT)

Assistive technology (AT) is an evergrowing family of tools. Assistive technologies improve the functionality of computers, software and websites for those with disabilities who cannot read the content in traditional ways. When it comes to accessible documents, we typically think of screen readers and Braille keyboards, but the technology is not limited to these technologies. New AT solutions are released every day.

Auto-Tagging

The tag is what screen reader reads instead of the physical view of a PDF. Tags need to describe the content accurately; they need to be in the correct reading order, and they need to use proper tags so someone using a screen reader can fully navigate, read and comprehend the document. Auto-taggers attempt to assign the correct tags automatically using software algorithms and machine learning. Adobe Acrobat DC Pro has an auto-tagger function. All these tools require manual verification of the tagged document before it can be considered standards-compliant and fully accessible.

Braille

Braille is a series of raised dots that represent all the letters of the alphabet, along with punctuation and numbers. People who are blind or who have low vision use their fingers to read braille. It can be used with computer systems using a refreshable braille display.

Color and Contrast

In addition to document tagging for screen readers, there are other areas of document accessibility. For people that are color blind or have low vision, proper use of color (such as not using color as the only means of conveying information) is required. The same applies to contrast. Contrast that is too low makes it difficult to see or read text for people with low vision.

CommonLook PDF Validator

A free tool for testing PDF files for standards conformance to WCAG 2.0 AA, WCAG 2.1 AA, Section 508, HHS and PDF/UA compliance. Validator delivers a comprehensive report showing checkpoint by checkpoint that the file meets the requirements. <u>More Details</u>.

Complex Table

Like other components of a document, tables must be tagged correctly to work with a screen reader. Do not use tables to format text. Tables should arrange data in a tabular format with column headers and rows labeled correctly so that a user of assistive technology can navigate and find the information they are looking for. A complex table is a table in which one or more of the following conditions exist: cells that span multiple columns, cells that span multiple rows, multiple rows of column header cells or multiple columns of row header cells. It is challenging to make complex tables accessible unless you are using software designed to manage table tags, like CommonLook PDF.

Document Compliance with the Standards

A document is compliant if it has been tested against the accessibility compliance standards such as WCAG 2.0 AA, WCAG 2.1 AA, HHS or PDF/UA without any errors. There are two free tools for testing to meet the standards, PAC3 and CommonLook PDF Validator.

Content View

PDF files have three views: physical view, tags view and content view. The

content view is based on the physical order of the objects in the document's content stream. The content view is often used by software that does not support the tags' view.

Data Table

A data table organizes related content to show relationships using rows and columns. Do not use tables to format text. When authoring a document with accessibility in mind, a simple table with two columns of text should be tagged as two paragraphs in the tag tree.

Document Accessibility

The generic term for documents authored or remediated (fixed) for accessibility and compliance with the standards.

HHS

The HHS is an acronym for the Health and Human Services Department of the United States federal government. HHS has requirements beyond the <u>Section 508 Refresh</u>.

ISO

ISO is the acronym for the International Organization for Standardization who provides rules and guidelines. The ISO is independent of the US government. It has a membership of 164 national standards bodies. Their PDF/UA standard, ISO 14289, provides details about how to make a PDF accessible.

Non-Textual Elements

A non-textual element is an element in a document that is graphical and not made up of text, including tables, graphs, maps, figures, pictures or even graphic text. Non-textual elements must have alternative text to ensure the content is accessible and standards-compliant.





OCR

Optical Character Recognition is a process that converts an image made primarily of characters into searchable text. PDF documents created by using scanners or copiers are just pictures of the file and cannot be read by screen readers or other assistive technology. Scanned images or pages in PDF documents can be converted into searchable text through OCR. After conversion, the PDF can be tagged for accessibility.

PAC3

PAC3 is a free tool for testing PDF documents for conformance to PDF/ UA.

PDF Metadata

PDF metadata consists of information about the PDF document, which includes its title, author, subject, keywords and copyright information. This information falls under searchable fields of a PDF document, which means that search utilities can access the metadata. <u>More on Metadata</u>.

PDF Remediation

PDF remediation is a term for the process to properly tag a PDF and go through the process of checking the tag structure for conformance with the accessibility standards. Remediation means the act of fixing or repairing something. <u>More details on the</u> <u>remediation process.</u>

PDF/UA

PDF/Universal Accessibility or simply PDF/UA is the informal name for ISO 14289, the International Standard for accessible PDF technology. It employs an internationally-recognized set of checkpoints or rules to ensure the accessibility of PDF documents.

Physical View

The physical view is what displays on a computer screen or shows up in the printed version of the document using traditional technology or a mobile device. The physical view is not inherently accessible for people using assistive technology, so Adobe added the Tag View to provide a means for screen readers and assistive technologies to deliver reading and navigation capabilities to people with disabilities.

Presentation Table

A presentation table is used for formatting content but does not convey tabular structure and relationships between the content in the table. While this is not an issue for printing or displaying on a screen, for a user working with assistive technology, a table that displays text in a simple two-column table will be read as a table by a screen reader. However, because the table does not have column headers, it is harder to navigate or understand. Presentation tables should be tagged as paragraphs so they will work correctly with screen readers.

Public-Facing Documents

These are all the documents that are on the internet and freely available to anyone who visits your website. Under the ADA, any organization that has a website needs to treat it as a place of public accommodation. So, if your public-facing documents are not accessible, that is the equivalent of having only stairs to enter your office space. Just like physical buildings need wheelchair ramps and other alternative accommodations, your website needs to have accessible content that does not discriminate against people with disabilities.

Reading Order or Logical Reading Order

When it comes to PDF accessibility, "reading order" is defined as the order of the Tags in the Tags tree. It's the sequence in which assistive technologies (AT), like screen readers, present content to consumers. <u>Learn</u> <u>More.</u>

RFP

Many large projects for PDF remediation are placed in a Request For Proposal or RFP to select a vendor for a document remediation project. RFPs should be carefully constructed to ensure that you are getting a quality deliverable and make the best choices when comparing vendors. Learn How to Write an Effective RFP

Scanned PDF

It is guite common to have PDFs that are images of hard copies of a document. Somebody used a scanner or copier to save these pages to a PDF. Unfortunately, these scanned PDFs are inaccessible to people with disabilities who use screen readers, refreshable braille displays, etc. Often, poor quality scanned documents are posted on websites and are impossible to read using assistive technology because they are images and not text. Scanned PDF files need to go through the OCR process before they can be tagged and remediated for document accessibility standards compliance.

Screen Magnifier

Screen magnifiers are another assistive technology used by people with low vision. Screen magnifiers use the physical view of a PDF to zoom in to view text that is too small to read without magnification.

Screen Reader

A screen reader is an assistive technology designed to use a keyboard to navigate a document and have the content on the screen read to the user. People with vision impairment typically use screen readers to read PDFs. JAWS and NVDA are two of the best-known screen readers. This technology is now built into many mobile devices and PCs, like Apple VoiceOver, Google ChromeVox and Windows Narrator.

Section 508

Section 508 is a law that requires that public-facing content on government websites, as well as a vast majority of internal communications, be accessible. Also, Section 508 is a standard that defines how accessibility is achieved. In 1998, the US Congress revised the Rehabilitation Act of 1973 to require Federal agencies to ensure their information technology was accessible to people with disabilities. Unfortunately, this revision is not comprehensive enough because only federal agencies or organizations that accept federal funds are required to follow Section 508 standards. The regulations did not keep up with the times as technology advanced. The requirements were updated and put into law on January 18, 2018, as the Section 508 Refresh, which requires compliance with WCAG 2.0 AA.

Tag Tree (or Tag View)

The Tags View is what is used by assistive technology like screen readers to allow the user to navigate and read a document. The Tags View is structured to identify the content of a PDF with properly labeled tags.

Tagged versus Untagged PDFs

Tags are critical to accessing PDF content using assistive technology because tags identify the type of content within the document. A tagged PDF is the first step to accessibility. Generally, when PDFs are created, they are untagged by default. Even when they are tagged by a tool, the tag structure still needs to be manually reviewed to ensure it is correctly tagged and will work well with assistive technologies. A tagged PDF is not automatically accessible, but an untagged PDF is not in compliance with the accessibility standards such as WCAG 2.0 AA, WCAG 2.1 AA, HHS or PDF/UA. Learn more.

Tags Panel

The Tags Panel view in Adobe Acrobat displays the tags tree. In the tags tree, you can check if the reading order is correct. The tags panel is often used in conjunction with the physical view so you can visually walk through the tags tree and see that the tags are correctly linked to the physical content in the document.

Voice to Text

Voice to text is now a mainstream feature with the popularity of Siri, Alexa and Google Assistant. Voice to text allows your spoken words to be translated into text on your computer, mobile device and other speechactivated technology.

WCAG

The Web Content Accessibility Guidelines or WCAG standards are guidelines published by the Web Accessibility Initiative (WAI) of the World Wide Web Consortium or W3C. As technology advances, so do the WCAG standards. WCAG is widening its support to include a broader range of disabilities, including dyslexia and cognitive disabilities. WCAG standards include 1.0, 2.0, 2.1 and in three levels, A, AA and AAA.

Z-Order

Z-order relates to overlapping objects, which can be a challenge to tag when using Adobe Acrobat alone. For example, text and images may be behind or in front of other objects, like when text is overlaid on a photograph. Z-order is often confused with the Order Panel in Acrobat because of the "Z" in the icon. For more information on document accessibility and standards compliance, please visit <u>CommonLook's free Accessibility Newsletter</u>, where we cover these and related topics in detail . Our aim is to write about everything that you need to know if you work in the field of PDF accessibility and compliance.



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