Department of Homeland Security

Section 508 PDF Document Accessibility Test Process

July 2012 | Version 1.0

Table of Contents

PDF Document Accessibility Test Process

Introduction

The use of Portable Document Formats (PDFs) is popular for sharing information. Unfortunately, persons with disabilities, who utilize screen readers or other assistive technologies to read the content of PDFs, often cannot access the content because the documents are not Section 508 compliant. To help ensure that 508 compliant PDFs are disseminated, this test process has been created to evaluate documents against all applicable 1194.22 Web, 1194.24 Multimedia and 1194.31 Functional Performance Criteria standards.

Through the testing process, if an element is found to be Not Compliant, then the element remains Not Compliant even if other elements are found to be Compliant. Marking an element Not Compliant will make the document Not Compliant.

Accessibility Help Desk Information

For questions, and access to further resources including training, please review the Office of Accessible Systems & Technology (OAST) intranet website or contact the DHS Accessibility Help Desk with any questions:

- OAST: http://dhsconnect.dhs.gov/org/comp/mgmt/cio/oast

- Accessibility Help Desk internal web site: Accessibility.DHS.gov

- Accessibility Help Desk: Accessibility@DHS.gov

Testing Tools

To validate PDFs for Section 508 compliance, testers must utilize the tools available in Adobe Acrobat Professional to conduct manual and automatic Section 508 compliance testing. Adobe Acrobat Reader does not include any accessibility validation tools and therefore it is not used to test PDFs in this test process.

Adobe Acrobat PDF Testing Tools:

Testing Tool	Description	Tool location in Acrobat X	Tool Location in Acrobat 7.0-9.0
Content Pane	Displays the document's content and its associated tags structure.	View>Show/Hide>Navigation Panes>Content	View>Navigation Panes>Content
Tags Pane	Reveals the document's tags tree and the properties associated with the tags.	View>Show/Hide>Navigation Panes>Tags	View>Navigation Panes>Tags
Order Pane	Displays the document's reading/reflow order.	View>Show/Hide>Navigation Panes>Order	View>Navigation Panes>Order

Testing Tool	Description	Tool location in Acrobat X	Tool Location in Acrobat 7.0-9.0
Show Page Content Order	Displays the document's Reading Order/Reflow, identifies images as having or not having alternative text and reveals if a table is tagged as a table.	View>Show/Hide>Navigation Panes>Order>Options>Show Page Content Order	Order>Options>Show Page Content Order
Edit Object\TouchUp Object	Reveals alternative text associated with images.	View>Tools>Content>Edit Object	Tools>Advanced Editing>TouchUp Object
Table Editor	Displays table tags and tags properties.	View>Show/Hide>Navigation Panes>Order> Options> TouchUp Reading Order Panel>Table Editor	Order Pane>Options> TouchUp Reading Order>Table Editor
Form Editor	Reveals form field's tooltips via Properties and displays the form's Tab Order.	View>Tools>Forms>Edit	Forms>Add/Edit Form
LiveCycle Designer Accessibility Pane	Used only with forms created with LiveCycle Designer, it reveals form field's tooltips and displays the form's Tab Order.	View>Tools>Forms>Edit or from the Window's Start menu select All Programs>Adobe LiveCycle Designer	Forms>Add/Edit Form or from the Window's Start menu select All Programs>Adobe LIveCycle Designer
Accessibility Full Check	Adobe's automated accessibility checker. ***Note***: *This is not a true Section 508 testing tool and must be used in conjunction with a manual test.*	Tools>Accessibility>Full Check	Advanced> Accessibility>Full Check

Read Out Loud

Read Out Loud is Adobe Acrobat's simplified version of a document reader which can be used as an alternative testing tool for reviewing a document's reading order. This tool reads both the textual content of a PDF and tag properties, such as alternative text for images and tooltips for form elements. However, the tool will not announce tag attributes such as Header1, List or Paragraph. Additionally, some content may appear to read twice because the content is presented in both the Content and Tags layer of the document. To access the Read Out Loud tool, go to View>Read Out Loud>Activate Read Out Loud.

PDF Accessibility Test Process

1. Editable Content and Interactive Elements

Editable content and interactive elements include selectable text, graphics, navigation elements, forms, button controls, etc.

1.1. Content

Overview

PDFs are made up of three layers. The physical layer displays the visual appearance of the document. The content layer reveals the document's actual text and graphics; this layer is what is presented to assistive technology and alternative devices such as smart phones. Lastly, the tags layer, similar to HTML tags, is used to indicate page elements that define the document's content structure and how elements relate to one another. These elements include heading levels, paragraphs, tables, lists, graphics, and form elements to name a few. Although a physical layer will always be presented in a PDF, some PDFs may not contain a content or tags layer. Documents that do not contain these layers are not accessible and fail all applicable Section 508 standards and Functional Performance Criteria.

Content

Graphical representations of textural content cannot be accessed by assistive technology; therefore, documents must contain renderable text. By using the Content Pane, not only can you validate that the document contains actual content, and can be used to tell how document elements are grouped via containers and tags. If content is not contained within a container, or if the content is associated with an <Artifact> container, the content will not be read by screen readers.

Tags

To help assistive technology users understand the visual layout of a document and how each section of the document relates to one another, all documents must contain tags which map to document elements such as Heading Levels, Paragraphs, List, Table, Table of Contents, Graphics, Links and Form elements, etc. Because PDF tags can be generated by multiple applications, the tags naming convention may differ; however, all tags must map to standard Acrobat PDF tags on page 23. To verify tags map to standard Acrobat PDF tags, view the tag's properties or view the Role Map. For a full list of PDF tags, see the appended list of Adobe Acrobat Standard Tags List. It is not necessary to evaluate every single tag; however, when reviewing a sampling of tags pay close attention to tags that should be associated with Heading Levels, Paragraphs, List, Tables, Graphics and Form elements.

Note*: In most cases, tags generated by applications outside of Acrobat use a tag naming convention similar to the application's styles and formatting options.*

Reading Order

Documents must have a logical reading order. The Reading Order can be defined as reading from left to right, top to bottom or in the order intended by the document's author. A document that contains multi-column text, tables, or call-out boxes adds a layer of complexity to the reading order and needs to be checked carefully. If the reading order is defined in a non-logical order, screen readers may have difficulties understanding the document's content.

Content How to Test

1	Use the Content Pane to verify the document contains actual content and is not just a graphical representation of content. Additionally, verify that repeated headers and footers, page numbers and graphics that are for decoration only are marked as Artifacts. These elements do not need to be in the document's reading order.
2	Use the Tags Pane to verify that the document contains tags that map to standard PDF tags and that each tag accurately conveys the document's visual representation of styles and formatting, such as Heading Levels, Paragraphs, Tables, Table of Content, List, Graphics, Links and Form elements.
3	Use the Show Page Content Order tool to verify that the document contains a logical reading order. The reading order must be verified on each page of the document.

Content Test Results

- If the document's textual content is not visible in the Content Pane, mark 22 (d) Not Compliant (NC) and end test.

- If the document is supposed to only contain graphical content such as charts and graphs, verify the document is tagged as an image and then proceed to Section 4.1 to test the image.

- If the document is not tagged, mark22 (d) NC and end test,

- If the document is tagged, but the tags do not convey the document's visual structure, mark 22 (d) and 31 (a) and (b) as NC.

- If the document does not contain a logical reading order mark Web 22 (d), FPC 31 (a) and (b) as NC.

- If non artifact content is not contained in the document's reading order, mark Web 22 (d), FPC 31 (a) and (b) as NC.

- If artifact content is not marked as an artifact, mark Web 22 (d), FPC 31 (a) and (b) as NC.

- If the document contains renderable content, is properly tagged and has a logical reading order, mark Web 22 (d), FPC 31 (a) and (b) as C.

Applicable 508 Standards:

1194.22 Web (d)
1194.31 FPC (a)
1194.31 FPC (b)

1.2. Fillable Form Elements

Overview

Fillable forms contain form elements such as Text boxes, List boxes, Dropdown boxes, Check boxes, Radio buttons, Signature boxes, Barcodes and Buttons. These form elements can be created either by way of Acrobat Form Editing tools or with LiveCycle Designer, a tool that comes with Acrobat Professional.

It is important to identify how a form was created, so that the correct test process can be conducted. To determine how the form was created go to File>Properties>Description>Application.

Forms Created Using Acrobat Editing tools

All form elements must be tagged as <Form>, contain tooltips and have a logical Tab Order, so that they can be accessed by screen readers.   Forms may have extended features for Acrobat Reader turned on which does not *impact accessibility* but it does restrict functionality in Acrobat Professional and prevents the ability to accurately test the form for Section 508 compliance. Go to File>Properties>Security and see if Creation of Template Page is "Not allowed." If so, extended features for Acrobat Reader is turned on.   To create a version of the form that can be tested, go to File>Save a Copy to create a copy of the form for testing.

Forms Created Using LiveCycle Designer

Although dynamic LiveCycle PDF forms do not contain tags, they can still be accessible as long as they contain descriptive tooltips and have a logical Tab Order. Because LiveCycle Designer is not fully integrated into Acrobat Professional, LiveCycle forms must be tested using the Accessibility Pane located in LiveCycle Designer. To access the Accessibility Pane, select the form element and then from the Windows menu select Accessibility.

Tooltips

Much like alternative text for images, tooltips provide a descriptive narrative for form elements that provide information that is conveyed both via visual layout and form field label. Because screen readers only announce the tooltip when tabbing to a form element, check boxes and radio buttons' tooltips must contain both the question and form field's label as part of the tooltip.

Tab Order

Electronic forms must contain a logical Tab Order. If the Tab Order randomly jumps around the screen or navigates the user through the form in an illogical manner, the user may not be able to fill out the form correctly.

	Forms How to Test
1	**Forms created using Acrobat Form Editing tools** Use the Tags Pane to verify all form elements are tagged as <Form>. **Forms created using LiveCycle Forms** Do not require tags for accessibility.
2	**Forms created using Acrobat Form Editing tools** Mouse over form elements to view the tooltip or view the form element's properties by activating the Form Edit tool and then select the form element, right click the form element and select Properties>General>Tooltip to validate tooltips. **Forms created using LiveCycle Forms** Mouse over form elements to view the tooltip or access the Accessibility Pane in LiveCycle Designer to view Form element tooltips to validate tooltips.
3	**Forms created using Acrobat Form Editing tools** Press the Tab key or view the Tab Order tree located in the Form Editing tool to validate that the form has a logical Tab Order. **Forms created using LiveCycle Forms** Press the Tab key to validate that the form contains a logical Tab Order.

Forms Test Results

- If form elements are not tagged as <Form>, mark Web 22 (n), FPC 31 (a), (b) and (f) as NC. **Note:** *This check is not applicable for LiveCycle forms.*

- If form elements do not contain descriptive tooltips, mark Web 22 (n), FPC 31 (a), (b) and (f) as NC.

- If form elements do not appear in a logical tab order, mark PFC 31 (a), (b) and (f) as NC.

- If form elements are tagged as <Form>, have a descriptive tooltip and appears in a logical tab order, mark Web 22 (n), FPC 31 (a) , (b) and (f) as C.

Applicable 508 Standards:

1194.22 Web (n)
1194.31 FPC (a)
1194.31 FPC (b)
1194.31 FPC (f)

1.3. Language

Overview

The language selected in the document's properties defines if content should be read from left to right or right to left, and it is also used by screen readers to select the correct language synthesizer to read the document. If the wrong language is set, screen readers may pronounce the content incorrectly. If the document contains multiple languages, the language must not only be set in the document's properties, but also in the tag's properties related to the block of content where the language has changed. The document's language properties settings supersede all language settings unless defined in the tags properties.

Language How to Test	
1	Select File>Properties>Advanced>Language to view the document's language setting and confirm that the document's native language has been set to the correct language.
2	Visually scan the document to determine if the document contains multiple languages and if so, locate the tag associated with the content and view the language properties by right clicking on the tag and selecting Properties>Tag>Language to verify the appropriate language has been set.

Language Test Results

- If the document's language property is not set to the document's native language, mark FPC 31 (a) and (b) as NC.

- If the language changes within the document and the language is not set in the tag's properties mark FPC 31 (a) and (b) as NC.

- If the document's language property is set correctly, mark FPC 31 (a) and (b) as C.

Applicable 508 Standards:

1194.31 FPC (a)
1194.31 FPC (b)

2. Color Dependence

Overview

Information provided by way of color must also be available in an alternate method. Color cannot be the only method to indicate an action, prompt a response or emphasize text. Examples of inappropriate use of color are: the red fields are required, yellow items should be selected first, or green fields can be ignored. Additionally, when color is used in a document, there must be a strong contrast between the foreground and background.

Color Dependence How to Test

1	Conduct a visual inspection to see if color is used within the document and first discern if it is used to convey information, and then determine if a textual equivalent is required.
2	Select Edit>Preferences>Accessibility>Replace Document Colors>Use High Contrast Colors to view the document in high contrast. Once in High Contrast, view the entire document to confirm content does not disappear or become difficult to view.

Color Dependence Test Results

- If information is provided only through color, mark Web 22 (c), FPC 31 (a) and (b) as NC.
- If information is provided by color and indicated in an alternative method, mark Web 22 (c), F PC 31 (a) and (b) as C.
- If content is not viewable or difficult to see due to poor contrast mark FPC 31(a) and (b) as NC.
- If all content is easy to read when viewed in High Contrast mark FPC 31 (a) and (b) as C.
- If color is not used to convey information, prompt a response, or indicate an action, mark Web 22 (c), FPC 31 (a) and (b) as NA.

Applicable 508 Standards:

1194.22 Web (c)
1194.31 FPC (a)
1194.31 FPC (b)

3. Data Tables

Overview

Documents may contain both data tables and tables for layout purposes. Do not check layout tables; this standard applies to data tables ONLY. Data tables can be identified by a data cell that requires a row or column header to describe the cell information. For example, if only reading the cell contents does not provide sufficient information to understand the full context, it requires mark up and is not a layout table.

Simple Data Tables

Simple data tables contain one row of Column Headers.

Complex Data Tables

Complex Data Tables contains two or more rows of Column Headers and may also contain merged or split data cells.

Using the Table Editor Tool to validate Data Tables

To setup the Table Editor tool so that the properties of data tables can be viewed, do the following:

1. Select Order Pane>Options>Show Reading Order Pane.

2. Select the Order number associated with the tagged data table.

3. Select Table Editor on the Show Reading Order Pane tool. If the Table Editor button is not activated, the data table is not selected. Once the button is selected, the data table will be highlighted with a table grid.

4. Right click a data cell and select Show Table Editor Options to set up options to view Table Header and Table Data cells. Once these options are set, they will not need to be set again.

5. Right click a data cell and select Table Cell Properties to view properties related to the data cell.

	Data Tables How to Test
1	Use the Table Editor tool or the Tags Pane to visually verify the data table has a logical reading order. All data table elements must be contained in individual data cells and be organized in the same way as the table layout.
2	Use the Table Editor tool to confirm all Column and/or Row headers are associated with <TH> tags
3	Use the Table Editor tool to verify all table cells, with the exception of those associated with the <TH> tags, are designated as <TD> Table Data Cells.
4	Visually determine if the data table is simple or complex. If the table is a complex table, check to see if it has scope applied to the appropriate Row/Column Headers.
5	Use the Table Editor tool to verify that data cells in the tables are associated with the Row/Column Header elements.

Data Table Test Results

- If the data table does not have the correct reading order mark Web 22 (d) as NC.

- If a data table does not have all Row or Column headers identified, mark Web 22 (g) as NC.

- If a complex data table does not have scope associated with Column and or Row headers mark Web 22 (h) as NC.

- If the simple table has a logical reading order and all data table headers and cells are identified properly, mark Web 22 (g) as C.

- If all complex data table cells are associated properly, mark Web 22 (h) as C.

- If there are no complex data tables, mark Web 22 (h) as NA.

- If there are no data tables, mark 22 (g) and Web 22 (h) as NA.

Applicable 508 Standards:

1194.22 Web (d)
1194.22 Web (g)
1194.22 Web (h)

4. Non-Textual Elements

Figures, images, animations, graphs, and audio files must have equivalent descriptions for screen reader users. Multimedia files require synchronized captioning and audio descriptions when information is conveyed visually only.

4.1. Images, Pictures, Objects etc

Overview

Images, Pictures, Objects etc:

ALL images that convey information must contain an alternate text attribute which can be read by screen readers.

- Images that convey information must provide an equivalent description in the form of alternative text. If images contain text that conveys key information, the text must also be represented in the alternative text. For example the alternative text description for the DHS seal should be "Department of Homeland Security seal."

- Images that do not convey information such as decorative images should be marked as Artifacts so that they are not announced by a screen reader.

- Signatures and handwritten images should be tagged as an image with descriptive Alternative Text.

Charts, Graphical representations of data:

- If the chart is intended only to show a trend, the alternative text should contain a description of the trend.

- Charts that contain greater detail should include a compliant data table with the chart's source data.

- Alternative text for complex charts, graphs and decision charts should contain office contact information so that individuals that need additional assistance understanding the graphics can receive the help he/she needs.

Images How to Test

1	Use the Edit Object/TouchUp Object tool or view the properties of the tag associated with the image to verify that the image contains descriptive alternative text.
2	Visually identify complex images and determine if a reference to a more detailed text description is needed and has been provided.
3	Use the Content Pane to verify all decorative images are marked as <Artifact>.

Image Test Results

- If an image does not have an equivalent text description, mark Web 22 (a), FPC 31 (a) and (b) as NC.

- If a decorative image is not marked as an <Artifact> or does not contain alternative text, mark 22 Web (a), FPC 31 (a) and (b) as NC.

- If all images have an equivalent text description, mark Web 22 (a), FPC 31 (a) and (b) as C.

- If decorative images are marked as <Artifacts> mark Web 22 (a), FPC 31 (a) and (b) as C.

- If the document contains no images, mark Web 22 (a), FPC 31 (a) and (b) as NA.

Applicable 508 Standards:

1194.22 Web (a)
1194.31 FPC (a)
1194.31 FPC (b)

4.2. Audio-only and Video-only Files

Overview

Audio or video only files must be accompanied with an accurate text equivalent. Audio files only play audible words or sounds and are considered non-text interface elements. Video files that only display visual information are also considered non-text interface elements. Both file types require equivalent text descriptions to describe the content. Usually, this is a transcript for audio-only files. For video files with no sound, a description of the content is sufficient.

Audio or Video Players

Software players must meet 1194.21 Software standards. For assistance testing the software player for Section 508 compliance contact the Accessibility Helpdesk at Accessibility.DHS.gov or via
 e-mail at Accessibility@dhs.gov.

	Audio or Video How to Test
1	Visually check to see if the document contains an audio file. If so verify it includes a text description that includes all relevant audio cues (ex: door bell rings, car honks, etc.)? If a text description is available, read the text description while listening to the audio file to ensure all necessary information is captured.
2	Visually check the document to see if it contains a video file. If so, verify that it includes a text description which includes all visual cues (ex: driver hands license to officer). If a text description is available, read the text description while watching the video file to ensure all necessary information is captured.
3	Verify that the target is tagged.

Audio or video Test Results

- If an audio interface element does not have an equivalent text transcript mark Web 22 (a), FPC 31 (c) and (d) as NC.

- If video interface elements do not have an equivalent audio description mark Web 22 (a), FPC 31 (a), (b) as NC.

- If the target for the audio and/or video file is not tagged mark Web 22 (d), FPC 31 (a), (b), (c) and (d) as NC.

- If all audio and video interface elements have an equivalent text (transcript), or video-description and the target for the audio and/or video file is tagged mark Web 22 (a), (d), FPC 31 (a), (b), (c) and (d) as C.

- If the content is text only, mark Web 22 (a), FPC 31 (a), (b), (c) and (d) as NA.

Applicable 508 Standards:

1194.22 Web (a)
1194.22 Web (d)
1194.31 FPC (a)
1194.31 FPC (b)
1194.31 FPC (c)
1194.31 FPC (d)

4.3. Multimedia

Overview

Multimedia is the combination of more than one time-based medium including visuals and sound to match at the same rate and exactly together to convey information and instruction. All multimedia presentations must contain captioning for auditory information and audio descriptions for information conveyed visually only.

Multimedia Players

Multimedia players must meet 1194.21 Software standards. For assistance testing the multimedia player for Section 508 compliance contact the Accessibility Helpdesk at Accessibility.DHS.gov or via
 e-mail at Accessibility@dhs.gov.

Multimedia How to Test:	
1	Visually inspect the document for multimedia. If the document contains multimedia, manually check the multimedia for captioning that is synchronized with the audible sounds and dialogue. Descriptions of important sounds must be included in captions. If there are visual actions necessary for comprehension, check that they are adequately described in the audio track. All relevant audible and visual information from the multimedia should be available if the speakers are off or if the monitor is off.

Multimedia Test Results

- If there are no synchronized captions, mark Web 22 (b) and 24 (c) as NC.

- If audio descriptions are needed and not provided, mark Web 22 (b) and 24 (d) as NC.

- If the multimedia includes synchronized captions and audio descriptions, mark Web 22 (b), 24 (c) and (d) as C.

- If there is no multimedia, mark Web 22 (b), 24 (c) and (d) as NA.

Applicable 508 Standards:

1194.22 Web (b)
1194.24 Multimedia (c)
1194.24 Multimedia (d)

5. Security

Overview

Although security settings can be set to protect a document from being modified, security settings must never prevent assistive technology from being able to read a document.

Security How to Test	
1	Go to File>Properties>Security> and check to see if Content Copying for Accessibility is "Allowed".

Security Test Results

- If Content Copying for Accessibility is not allowed mark FPC 31 (a) and (b) as NC.

- If Content Copying for Accessibility is allowed mark FPC 31 (a) and (b) as C.

Applicable 508 Standards:

1194.31 FPC (a)
1194.31 FPC (b)

6. Accessible Version

Overview

Alternative versions for accessibility are only permitted when the primary content cannot be made compliant.

Check for a Text only or alternative version of content:

- If the primary content is not compliant but can be made compliant, then it must be remediated.

- Text only files must be maintained and updated with the primary content.

Note: *PDFs created via Flash Paper cannot be made compliant. Decision charts may require a text alternative*.

Accessible Version How to Test	
1	Manually verify that the primary content cannot be made accessible. Verify that the text only or alternative version contains identical information as the primary source.

Accessible Version Test Results

- If there is no alternative version(s), mark Web 22 (k) as NA.

- If the primary document can be made compliant, mark Web 22 (k) as NC.

- If the alternative accessible version is not compliant, mark Web 22 (k) as NC. The alternative version must be fully tested.

- If the primary content cannot be made accessible, and the alternative version contains equivalent accessible information, mark Web 22 (k) as C.

Applicable 508 Standards:

1194.22 Web (k)

Adobe Acrobat Accessibility Full Check Tool

The Accessibility Full Check tool can help to identify areas of a document that may be in conflict with Adobe's interpretations of accessibility guidelines, such as the document lacking actual text, a specified language and having security settings that prevents access by screen readers. However, the tool does not check documents against all accessibility criteria.   Therefore, Acrobat's Accessibility Full Check tool must be used in conjunction with a manual testing process to correctly evaluate PDFs for Section 508 compliance.

How to Set Up Accessibility Full Check Tool

1. Go to Tools>Accessibility>Full Check to access the Accessibility Full check tool.

2. Under Reports and Comments Options check

    a. Create Accessibility Report

    b. Include repair hints in Accessibility Report

3. Under Page Range select

    a. All pages in document

4. Under Checking Options select

    a. (Name) Acrobat PDF

    b. Alternative descriptions are provided

    c. Text language is specified

    d. Reliable character encoding is provided

    e. All content is contained in the document structure

    f. All form fields have descriptions

    g. Tab order is consistent with the structure order

    h. List and Table structure is correct

5. Select Start Checking to run the Accessibility Full Check tool

What does the Accessibility Full Check Tool Do?

This tool allows users to quickly identify the following issues:

- If the document does or does not contain tags

- If a language has been set in the document's properties

- If content is not tagged

- If the font in the document is related to reliable character encoding

- If the tab order is consistent with the documents structure.

- If alternative text has been applied to images

- If tooltips have been applied to form fields

- If list and tables have a correct tag structure

What are the limitations of the Full Check Tool?

Elements that the tool cannot accurately evaluate for Section 508 compliance includes but is not limited to:

- Validating if all of the content is contained in the structure tree and follows a logical Reading and Tab order
- Validating if Color alone is not being used to convey information
- Validating if images contain accurate alternative text descriptions
- Validating if form fields are associated with proper tooltips

Additionally, the Accessibility Full Check tool may also generate Acrobat structure errors that are unrelated to Section 508. These errors include, but are not limited to:

- **Unspecified Unicode-** Acrobat does not recognize the font type used in the document
- **Untagged Annotations-** Meta data in Microsoft Office was not cleared before converting the document into a PDF
- **Inaccessible Link-** At this time it is unknown why Acrobat generates this error

List of Acrobat Full Check Errors

Source: The information located under the "Meaning" column was taken from the *Social Security Administration's draft guidance for testing PDFs*, April 2012. Used with permission.

Full Check Error	Meaning	508 Reference
Figure element(s) with no alternate text	Figures (pictures, images) do not have any alternate text added. **Note:** This check does not account for the following, which must be checked manually: 1. Images that contain alternate text that is insufficient for a reader to comprehend the purpose of the image, and/or alternate text that is incorrect, or not helpful in the context of the surrounding image. 2. Images that contain paths or filenames in place of correct alternate text. 3. Images that are part of the background (i.e., purposefully have no alternate text) will be incorrectly flagged as errors by this test.	36 CFR 1194.22(a) 36 CFR 1194.31(a) 36 CFR 1194.31(b)
All of the text on this page lacks a language specification	The default language has not been set in the document properties. **Note**: *This checks only that there is a language specified; it does not check whether the correct language is specified.*	36 CFR 1194.31(a) 36 CFR 1194.31(b)
Word(s) that contain characters with no reliable mapping to Unicode	This is error occurs when non-standard fonts are used, either for the whole document, chunks of text, or bullet characters. Screen reader software will typically not pronounce these correctly. **Note:** *The fonts that are erroneous can be easily inspected, as errors are clearly annotated in the Document Properties Panel (Fonts tab).*	36 CFR 1194.31(a) 36 CFR 1194.31(b)
Element(s) that are not contained within the structure tree	This error means there are elements on the page for which there is no corresponding tag. This error usually occurs if an element has been added to an existing PDF using Acrobat's editing tools (e.g., a link or an image is added). In the editing process, tags are not automatically added.	36 CFR 1194.22(d)

Full Check Error	Meaning	508 Reference
None of the comments or other types of annotations on this page are contained in the structure tree	This error usually occurs if a comment has been added to an existing PDF using Acrobat's editing tools. In the editing process, tags are not automatically added. **Note***: If in running the 'Accessibility Full Check' dialog box the reviewer has selected 'Create comments in the document', and then the check is run a subsequent time, the checker's own comments will generate this error.* If this error occurs, but the document is intended for an audience that is relying on editorial comments and tracking for its work, then the error can be ignored. However, if there are Assistive Technology users working with the document, then additional verification tasks may be needed to determine whether the comments and other annotations are accessible.	36 CFR 1194.22(d)
Form field(s) with no description	This error will only occur when form fields are used.	36 CFR 1194.22(n)
Page(s) with tab order that may be inconsistent with the structure order	This error will only occur when form fields are used.	36 CFR 1194.31(a) 36 CFR 1194.31(b)
Tab order may be inconsistent with the structure order	This error occurs when the Page Tab Order is set to something other than "Use Document Structure"'	36 CFR 1194.31(a) 36 CFR 1194.31(b)
List tags/item(s) with no parent(s)	The correct list tagging structure has not been used. **Note***: This automated test does not check for chunks of text that should be marked as lists but which is actually formatted as regular paragraph text. Lists formatted as regular paragraph text must be checked manually.*	36 CFR 1194.22(d)
TH or TD element(s) with no TR parent	This error occurs if table tags have been edited incorrectly in Acrobat (e.g., moved around in the tag tree, where they are outside of the normal table tag structure). **Note***: This automated test does not check for tables that have no tags, have incorrect tags, or tables that are rendered as images. Tables that are irregularly formatted, and tables that are not tagged, must be checked manually.*	36 CFR 1194.22(d)
Other errors	Other errors may be generated. Follow on-screen instructions for more details. **Note***: The above lists the common errors that can be generated by the Adobe Acrobat X Accessibility Checker at the time of writing. Future software updates may alter the checker's results.*	N/A

Standard Acrobat PDF Tags

Source: Excerpted from Adobe Systems, Inc. (2011) *Using Adobe Acrobat X Pro*, (pp.301-303), Adobe Systems Incorporated, 345 Park Avenue, San Jose, California 95110, USA. Available:
http://help.adobe.com/en_US/acrobat/pro/using/acrobat_X_pro_help.pdf

Container Elements

Container elements are the highest level of element and provide hierarchical grouping for other block-level elements.

Document
Document element. The root element of a document's tag tree.

Part
Part element. A large division of a document; may group smaller units of content together, such as division elements, article elements, or section elements.

Div
Division element. A generic block-level element or group of block-level elements.

Art
Article element. A self-contained body of text considered to be a single narrative.

Sect
Section element. A general container element type, comparable to Division (DIV Class="Sect") in HTML, which is usually a component of a part element or an article element.

Heading and Paragraph Elements

Heading and paragraph elements are paragraph-like, block-level elements that include specific level heading and generic paragraph (P) tags. A heading (H) element should appear as the first child of any higher-level division. Six levels of headings (H1 to H6) are available for applications that don't hierarchically nest sections.

Label and List Elements

Label and list elements are block-level elements used for structuring lists.

L
List element. Any sequence of items of similar meaning or other relevance; immediate child elements should be list item elements.

LI
List item element. Any one member of a list; may have a label element (optional) and a list body element (required) as a child.

LBL

Label element. A bullet, name, or number that identifies and distinguishes an element from others in the same list.

LBody

List item body element. The descriptive content of a list item.

Special Text Elements

Special text elements identify text that isn't used as a generic paragraph (P).

BlockQuote

Block quote element. One or more paragraphs of text attributed to someone other than the author of the immediate surrounding text.

Caption

Caption element. A brief portion of text that describes a table or a figure.

Index

Index element. A sequence of entries that contain identifying text and reference elements that point out the occurrence of the text in the main body of the document.

TOC

Table of contents element. An element that contains a structured list of items and labels identifying those items; has its own discrete hierarchy.

TOCI

Table of contents item element. An item contained in a list associated with a table of contents element.

Table Elements

Table elements are special elements for structuring tables.

Table

Table element. A two-dimensional arrangement of data or text cells that contains table row elements as child elements and may have a caption element as its first or last child element.

TR

Table row element. One row of headings or data in a table; may contain table header cell elements and table data cell elements.

TD

Table data cell element. A table cell that contains nonheader data.

TH

Table header cell element. A table cell that contains header text or data describing one or more rows or columns of a table.

Inline-level Elements

Inline-level elements identify a span of text that has specific formatting or behavior. They are differentiated from block-level elements. Inline-level elements may be contained in or contain block-level elements.

BibEntry

Bibliography entry element. A description of where some cited information may be found.

Quote

Quote entry element. An inline portion of text that is attributed to someone other than the author of the text surrounding it; different from a block quote, which is a whole paragraph or multiple paragraphs, as opposed to inline text.

Span

Span entry element. Any inline segment of text; commonly used to delimit text that is associated with a set of styling properties.

Special Inline-level Elements

Similar to inline-level elements, special inline-level elements describe an inline portion of text that has special formatting or behavior.

Code

Code entry element. Computer program text embedded within a document.

Figure

Figure entry element. A graphic or graphic representation associated with text.

Form

Form entry element. A PDF form annotation that can be or has been filled out.

Formula

Formula entry element. A mathematical formula.

Link

Link entry element. A hyperlink that is embedded within a document. The target can be in the same document, in another PDF document, or on a website.

Note

Note entry element. Explanatory text or documentation, such as a footnote or endnote, that is referred to in the main body of text.

Reference

Reference entry element. A citation to text or data that is found elsewhere in the document.

Section 508 Standards Mapped to DHS PDF Document Test Process

Each Section 508 standard is mapped to the DHS PDF Testing Process for testers who are more familiar with the alphabetical approach. Only the standards that are applicable to PDFs are listed. For a full list of the Section 508 standards of the Rehabilitation Act of 1973, as amended (29 U.S.C., go to Seciton 508 standards (http://section508.gov/index.cfm?fuseAction=stdsdoc)

1194.22 Web

Standard	Test Process
(a) Images	A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).
(b) Multimedia Presentations	Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.
(c) Color	Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.
(d) Readability	**Original Access-Board standard:** Documents shall be organized so they are readable without requiring an associated style sheet. **Modified for PDFs:** The Content and Tag views should be consistent with the physical view, meaning that the document should be read from the structure without requiring the physical view. **Note:** *This modified language was provided by NetCentric*.
(g) Data Table	Row and column headers shall be identified for data tables.
(h) Data Tables with multiple headers	Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.
(k) Text-Only Alternative	A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of these standards, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.
(n) Electronic Forms	When electronic forms are designed to be completed on-line, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.

1194.24 Multimedia

Standard	Test Process
(c) Captioning	Multimedia that contains speech or other audio information necessary for the comprehension of the content shall be open or closed captioned and the captioning must be synchronized and spelled correctly.
(d) Audio Description	All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.

1194.31 Functional Performance

Standard	Test Process
(a) Blind	At least one mode of operation and information retrieval or support for assistive technology shall be provided that does not require:
(b) Low Vision	At least one mode of operation and information retrieval or support for assistive technology shall be provided that does not require:
(c) Deaf	At least one mode of operation and information retrieval or support for assistive technology shall be provided that does not require:
(d) Hard of Hearing	At least one mode of operation and information retrieval or support for assistive technology shall be provided that does not require:
(f) Mobility	At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.