



Creating Accessible PDF Files Using Microsoft Word 2010 and Adobe Acrobat X Pro

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Introduction

A Portable Document Format (PDF) file is accessible if it can be used by everyone, including people with disabilities. A PDF document must be tagged in order to be accessible. Tags define the structure of the document and communicate the order in which the items should be read. PDF documents are not typically created in Acrobat. They are usually created in another program and converted to PDF. This handout provides instructions on how to create accessible PDF files using Microsoft Word 2010 and Adobe Acrobat X Pro.

Characteristics of Accessible PDF Documents

An accessible PDF document has the following characteristics:

- The document consists of searchable text (not scanned images of text).
- The document contains navigational aids such as bookmarks, headings, links, and a table of contents.
- Images and graphics have alternative text descriptions.
- Forms contain interactive form fields and have a defined tab order.
- The document's structural elements are indicated by tags.
- The document's reading order is clear and easy to follow.
- The document's language is specified.
- The document's security settings do not interfere with assistive technology.

Creating Accessible Word Documents

Creating an accessible PDF file from a Word document will take less time if you design the original source document with accessibility in mind. This means that you should add structure to the document by using styles rather than direct formatting for such items as headings and lists, add alternative text descriptions to images and graphics, use tables to organize and present data, use columns to create a multi-column document, etc. If the source document does not include accessible mark-up, you will need to spend more time in Acrobat after the conversion to make the PDF file accessible.


Headings

A good heading structure is one of the most important accessibility considerations in Word documents. Headings allow screen reader users to easily navigate through a document. They can also be used to create a table of contents in Word documents and bookmarks in PDF documents.

- Use the built-in heading styles (Heading 1, Heading 2, etc.) to format headings; do not apply direct formatting. If you do not like the appearance of a built-in heading style, you can easily modify it to suit your needs.
- Do not skip heading levels (i.e., do not jump from a Heading 1 to a Heading 3).
- Use meaningful and concise headings.

To apply a heading style:

1. Create a new document or open an existing document in **Microsoft Word 2010**.
2. Select the text that you want to apply a heading style to.
3. Do one of the following:
 - On the **Home** tab, in the **Styles** group, select the appropriate heading style from the **Quick Styles** gallery (see Figure 1).

NOTE: If the heading style you want to apply is not displayed, click the **More** button  in the lower-right corner of the **Quick Styles** gallery to expand it.

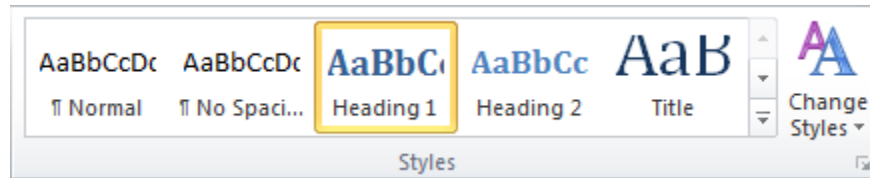



Figure 1 – Styles Group on the Home Tab

- Select the appropriate heading style from the **Styles** pane (see Figure 2).

NOTE: To open the **Styles** pane, click the dialog box launcher  in the lower-right corner of the **Styles** group.

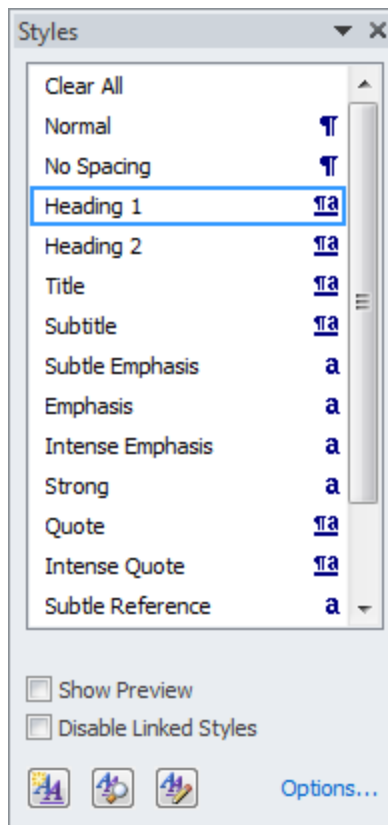


Figure 2 – Styles Pane

To modify a heading style:


1. Select the heading text in the document and apply the desired formatting (font type, font size, font color, spacing above and below, etc.).
2. Right-click the heading style you want to modify in the **Quick Styles** gallery or **Styles** pane and select **Update Heading to Match Selection** from the shortcut menu.

Lists

Bulleted and numbered lists make documents easier to read and understand.

- Use a numbered list to present a sequence of information; use a bulleted list when the order of items in the list is not important.
- Use the Bullets and Numbering commands to create lists; do not manually type characters or numbers.

To create a bulleted list as you type:

1. Click where you want to add the list.
2. On the **Home** tab, in the **Paragraph** group, click the **Bullets** button .
3. Type the text for the first list item.
4. Press the **Enter** key to add the next list item.
5. To end the list, press the **Enter** key twice.

NOTE: You can change the bullet symbol by clicking the **Bullets** arrow and making a selection from the **Bullets** gallery (see Figure 3).

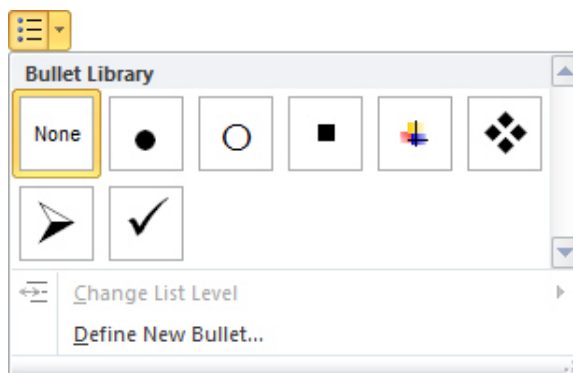



Figure 3 – Bullets Gallery

To create a numbered list as you type:

1. Click where you want to add the list.
2. On the **Home** tab, in the **Paragraph** group, click the **Numbering** button .
3. Type the text for the first list item.
4. Press the **Enter** key to add the next list item.
5. To end the list, press the **Enter** key twice.

NOTE: You can change the number style by clicking the **Numbering** arrow and making a selection from the **Numbering** gallery (see Figure 4).

NOTE: If the numbering sequence is incorrect, right-click the list item, and then select **Restart at 1** or **Continue Numbering** from the shortcut menu.

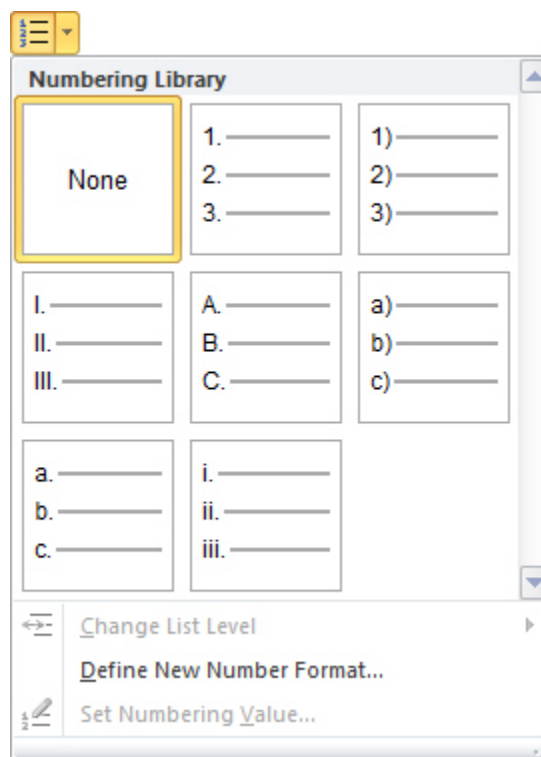


Figure 4 – Numbering Gallery

To add bullets or numbers to existing text:

1. Select the text that you want to add bullets or numbers to.
2. On the **Home** tab, in the **Paragraph** group, click the **Bullets** or **Numbering** button.

Images

Alternative text, also known as alt text, is a text-based description of non-textual content such as images. It is read by screen readers in place of an image, allowing the content and function of the image to be accessible to people with visual or cognitive disabilities. Alternative text added in a Word document is retained when the document is converted to PDF.

- Provide alternative text descriptions for all images that convey important information.
- Use clear, concise, and accurate descriptions.
- Make sure that the alternative text conveys the same essential information as the image.

- Do not provide alternative text descriptions for decorative images.
- Avoid placing images too close to text; this can cause problems when converting to PDF.

To insert an image:

1. Click where you want to insert the image.
2. On the **Insert** tab, in the **Illustrations** group, click the **Picture** button (see Figure 5). The **Insert Picture** dialog box opens (see Figure 6).

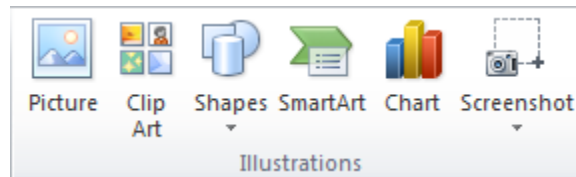


Figure 5 – Illustrations Group on the Insert Tab

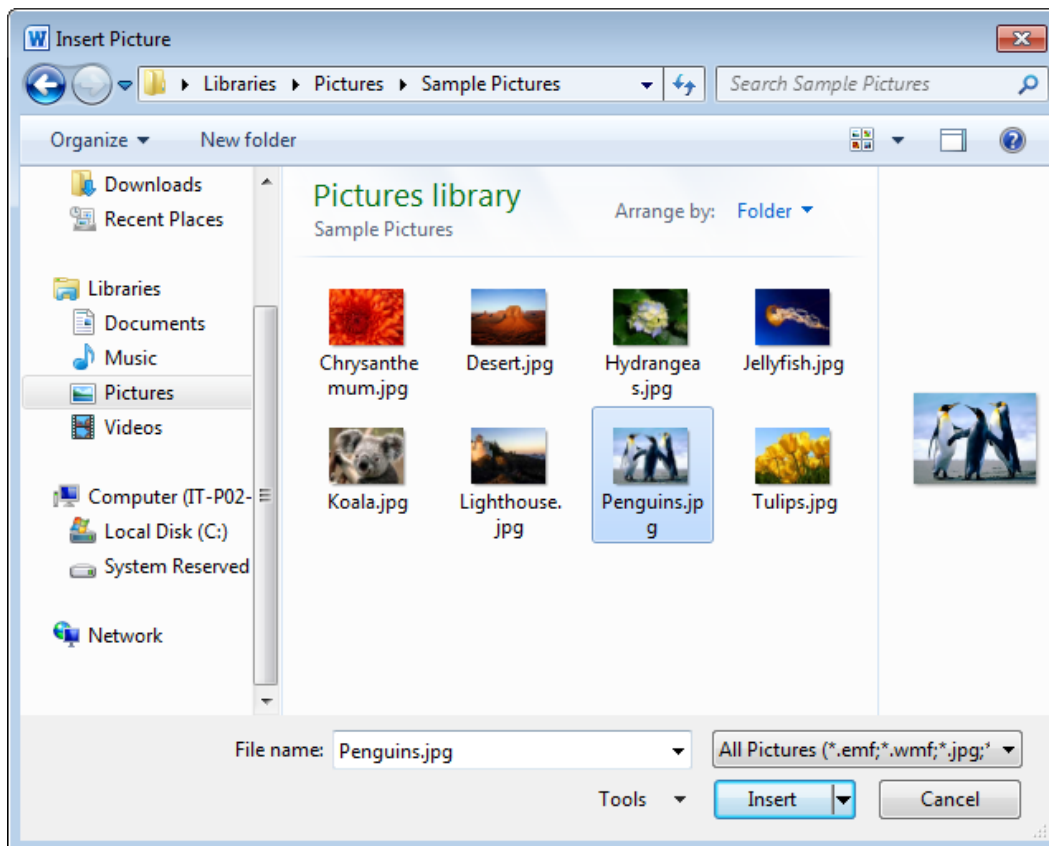


Figure 6 – Insert Picture Dialog Box

3. Locate and select the image that you want to insert.
4. Click the **Insert** button.

To add alternative text to an image:

1. Right-click the image and select **Format Picture** from the shortcut menu. The **Format Picture** dialog box opens (see Figure 7).
2. Click **Alt Text** in the left pane.
3. In the **Description** box, type a brief description of the image.
4. Click the **Close** button.

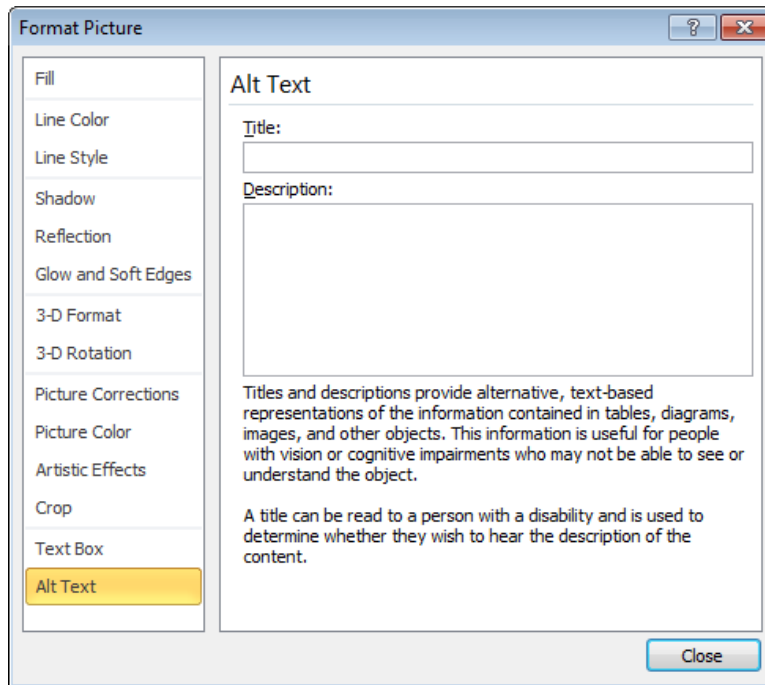


Figure 7 – Format Picture Dialog Box

Tables

Tables are often used to organize and present data in rows and columns. They should not be used to create page layouts.

- Use the Table command to create a table; do not use tabs or spaces.
- Use a simple table structure. Avoid merging or splitting cells or using nested tables because these can make the reading order confusing.
- Specify row and/or column headers to provide context and assist navigation of the table's contents.
- If a table spans multiple pages, prevent table rows from breaking across pages and make the header row repeat at the top of each page.
- Add a caption before the table to provide information about the table.

To create a table:

1. Click where you want to insert the table.
2. On the **Insert** tab, in the **Tables** group, click the **Table** button.
3. In the **Table** gallery, move the mouse pointer down and to the right until the number of rows and columns you want in the table is selected on the grid, and then click to insert the table into the document (see Figure 8).

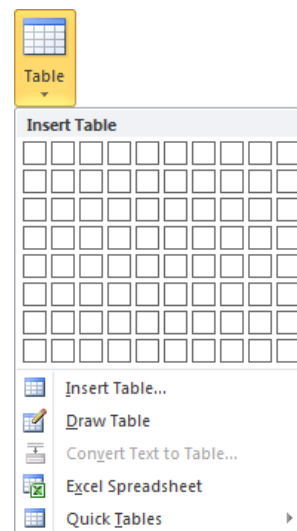


Figure 8 – Table Gallery

To specify a header row in a table:

1. Click anywhere in the table.
2. On the **Design** contextual tab, in the **Table Style Options** group, make sure that the **Header Row** check box is selected (see Figure 9).

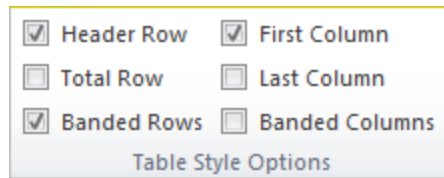


Figure 9 – Table Style Options Group on the Design Contextual Tab

To repeat a header row at the top of each page:

1. Select the header row.
2. On the **Layout** contextual tab, in the **Data** group, click the **Repeat Header Rows** button (see Figure 10).

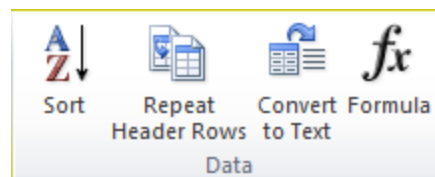


Figure 10 – Data Group on the Layout Contextual Tab

To prevent table rows from breaking across pages:

1. Click anywhere in the table.
2. On the **Layout** contextual tab, in the **Table** group, click the **Properties** button (see Figure 11). The **Table Properties** dialog box opens.

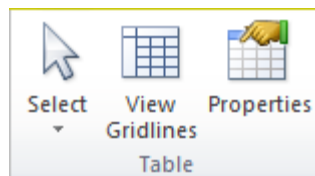


Figure 11 – Table Group on the Layout Contextual Tab

3. Click the **Row** tab (see Figure 12).
4. Under **Options**, deselect the **Allow row to break across pages** check box.
5. Click the **OK** button.

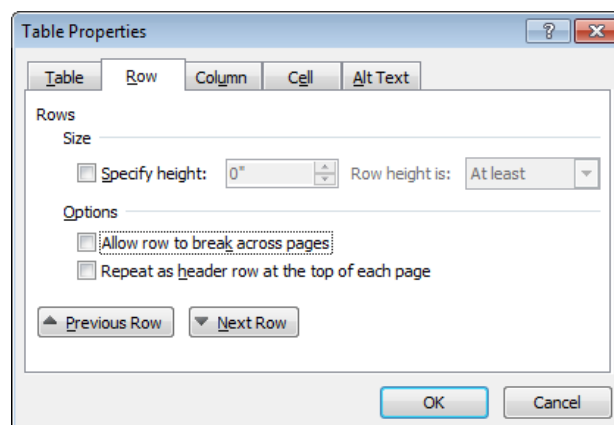


Figure 12 – Table Properties Dialog Box: Row Tab

Columns

Flowing text in multiple columns is a common practice when creating documents such as newspapers, magazines, newsletters, flyers, and brochures. You can format an entire document or a section of a document in columns.

- Use the Columns command to create a multi-column layout; do not use tabs, spaces, or tables.
- Leave ample space between columns to increase readability.

To create a multi-column layout:

1. Select the text that you want to format in columns.

NOTE: If you want to format the entire document with the same number of columns, click anywhere in the document.

2. On the **Page Layout** tab, in the **Page Setup** group, click the **Columns** button and select a preset layout from the **Columns** gallery (see Figure 13).

NOTE: For more options, click **More Columns** in the **Columns** gallery.

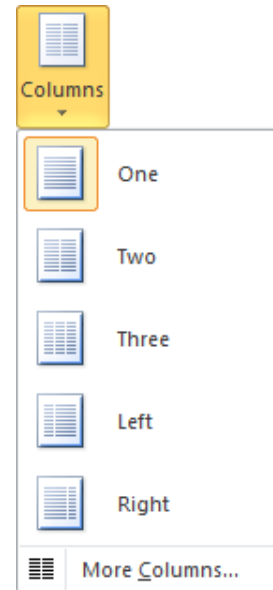


Figure 13 – Columns Gallery

Additional Accessibility Guidelines

Below is a list of additional guidelines on how to make Word documents accessible.

- Make font sizes 10 points or larger.
- Use fonts consistently. Use sans-serif fonts such as Verdana, Arial, or Helvetica. Avoid decorative or serif fonts such as Brush Script because they are harder to read.
- Use text to convey information. Do not use graphics in place of text.
- Avoid using animated text which can make the words harder to read.
- Avoid using flashing or blinking elements because they can cause seizures.
- Provide sufficient contrast between foreground and background colors. The greater the contrast, the easier it will be to read the text. Black text on a white background is ideal.
- Do not convey information or instructions exclusively with color (e.g., press the red button) because users who are blind, color-blind, or have limited vision may miss the information.
- Avoid using image watermarks to communicate information. If you must use a watermark, make sure that the information it contains is also included elsewhere in your document.
- Avoid using floating objects. Objects that are not in line with text are challenging to navigate and may be inaccessible to users with visual disabilities. Set text wrapping around objects to *Top and Bottom* or *In Line with Text*.
- For long documents, include a table of contents to provide context and navigation.
- Place header and footer information (e.g., page numbers, the document's title) in the header and footer areas rather than manually positioning them at the top or bottom of the page.

- Avoid using repeated blank spaces, tabs, and empty paragraphs. Instead, use formatting, indenting, and styles to create whitespace.
- Make hyperlink text meaningful. Do not use *Click here* or *More*. If the document may be both printed and read electronically, include the web address.

Checking Document Accessibility

Word 2010 includes a new feature called the *Accessibility Checker* to help you identify and repair accessibility issues in your document. The Accessibility Checker checks your document against a set of possible issues that users who have disabilities might experience. Whenever an issue is found, it is classified as an error, a warning, or a tip and is listed in the Accessibility Checker pane. Selecting an issue in the Accessibility Checker pane provides information about why the content might be inaccessible and how to repair it.

To run the Accessibility Checker:

1. Click the **File** tab on the **Ribbon**.
2. On the **Info** tab, click the **Check for Issues** button and select **Check Accessibility** from the menu (see Figure 14). The **Accessibility Checker** pane opens, showing the inspection results (see Figure 15).
3. Select and fix each issue listed in the **Accessibility Checker** pane to make your document accessible.

NOTE: Selecting an issue in the **Accessibility Checker** pane will select the corresponding item in the document.

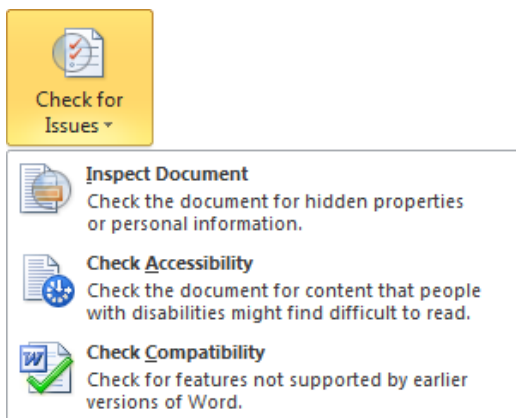


Figure 14 – Check for Issues Menu

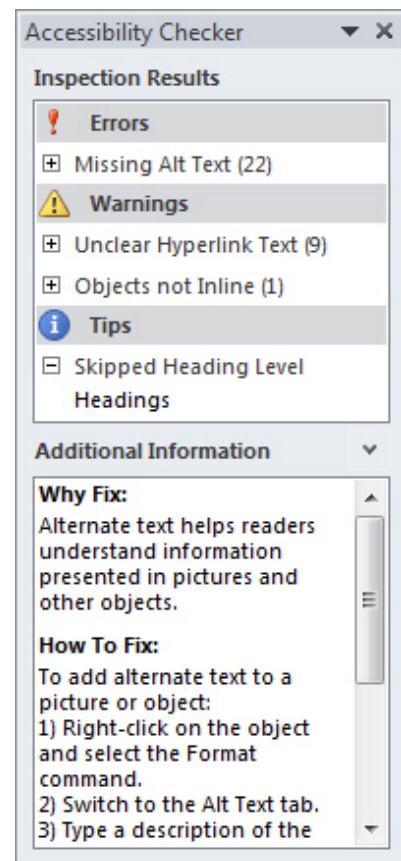


Figure 15 – Accessibility Checker Pane

Configuring the PDFMaker

The Acrobat PDFMaker add-in, which is automatically installed into Microsoft Office 2010 applications when Adobe Acrobat X is installed, allows you to easily convert Word documents to PDF from within Word. The default conversion settings used by PDFMaker produce a tagged PDF file. Before converting Word documents to PDF, it is recommended to check the PDFMaker conversion settings for accessibility. These settings remain in effect until they are changed.

To view or change the PDFMaker conversion settings:

1. On the **Acrobat** tab, in the **Create Adobe PDF** group, click the **Preferences** button (see Figure 16). The **Acrobat PDFMaker** dialog box opens (see Figure 17).

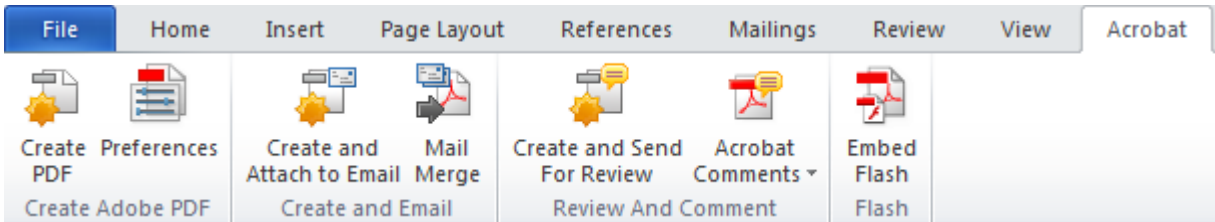


Figure 16 – Acrobat Tab on the Ribbon

2. On the **Settings** tab, under **Application Settings**, make sure that the **Create Bookmarks**, **Add Links**, and **Enable Accessibility and Reflow with tagged Adobe PDF** check boxes are selected (see Figure 17).

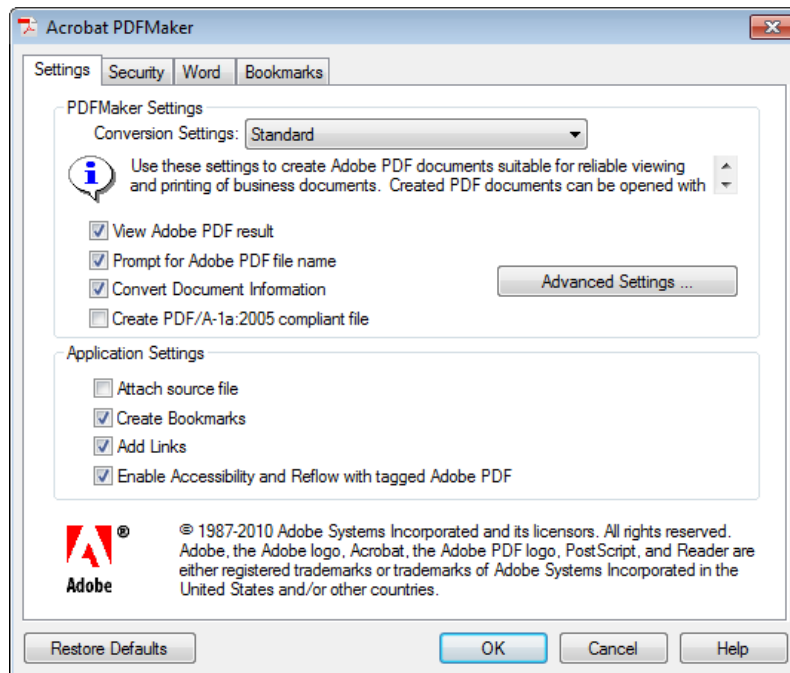


Figure 17 – Acrobat PDFMaker Dialog Box: Settings Tab

3. On the **Security** tab, do not apply permissions (see Figure 18). Wait until the document is converted to PDF and processed in Adobe Acrobat X and then add password security.

NOTE: If you do apply permissions to the document in Word, make sure that the **Enable text access for screen reader devices for the visually impaired** check box is selected.

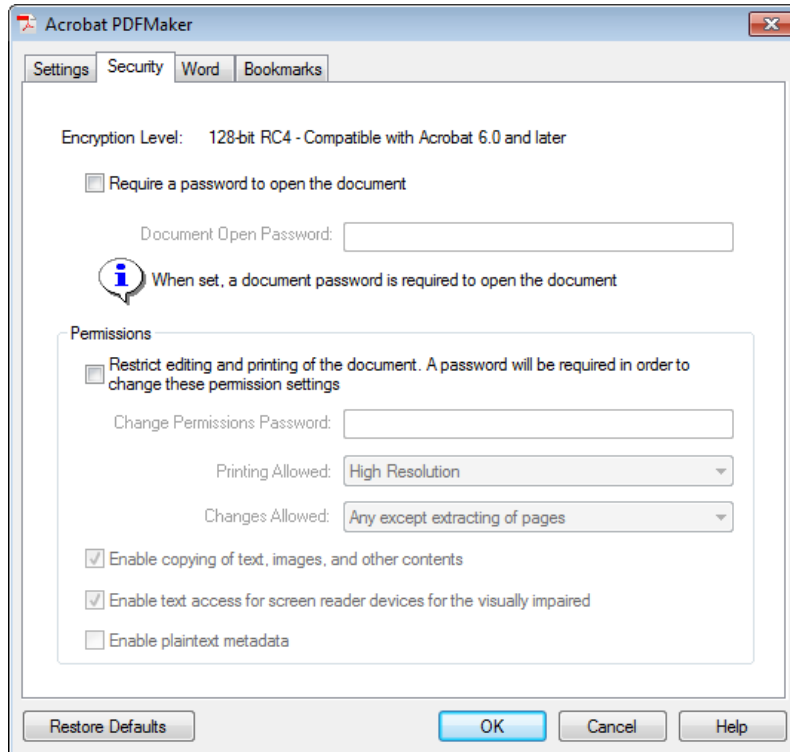


Figure 18 – Acrobat PDFMaker Dialog Box: Security Tab

4. On the **Word** tab, under **Word Features**, make sure that the **Convert footnote and endnote links** check box is selected (see Figure 19).

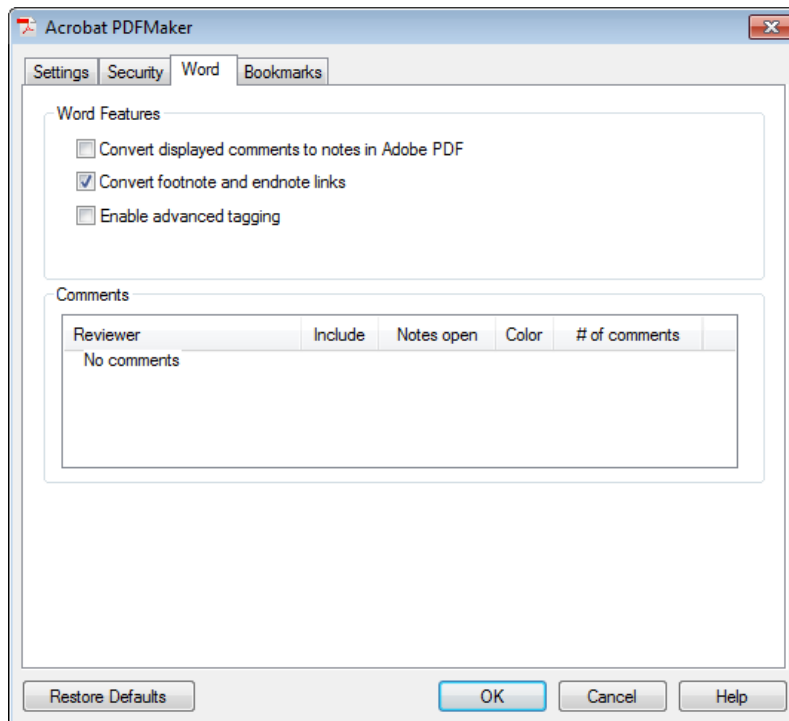


Figure 19 – Acrobat PDFMaker Dialog Box: Word Tab

5. On the **Bookmarks** tab, under **Bookmark Options**, make sure that the **Convert Word Headings to Bookmarks** check box is selected (see Figure 20).

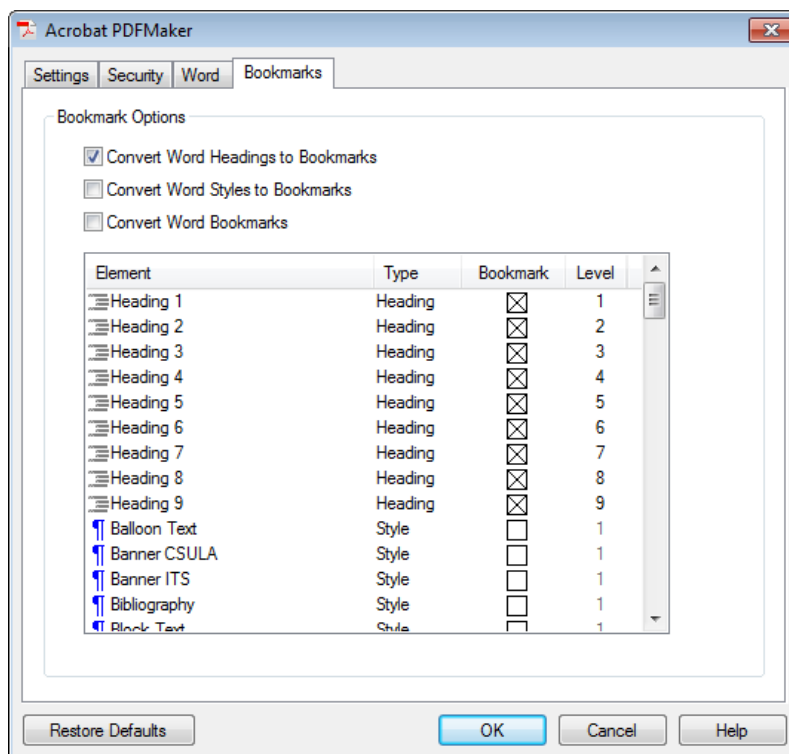


Figure 20 – Acrobat PDFMaker Dialog Box: Bookmarks Tab


6. Click the **OK** button.

Converting Word Documents to PDF

Once you create an accessible Word document and set the PDFMaker conversion settings, you are ready to convert the Word document to PDF.

NOTE: It is not recommended to convert a Word document by printing to PDF; this creates an untagged PDF document and requires that you add tags and alt text to the PDF document using Acrobat.

To convert a Word document to PDF:

1. If there are any unsaved changes in the document, click the **Save** button  on the **Quick Access** toolbar or press **Ctrl+S** to save the changes.
2. On the **Acrobat** tab, in the **Create Adobe PDF** group, click the **Create PDF** button (see Figure 16). Or, click the **File** tab and select **Save as Adobe PDF** (see Figure 21). The **Save Adobe PDF File As** dialog box opens (see Figure 22).

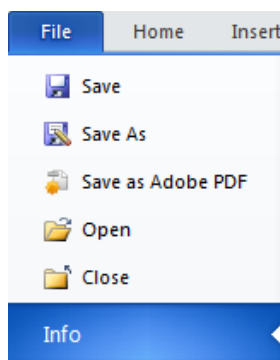


Figure 21 – File Tab

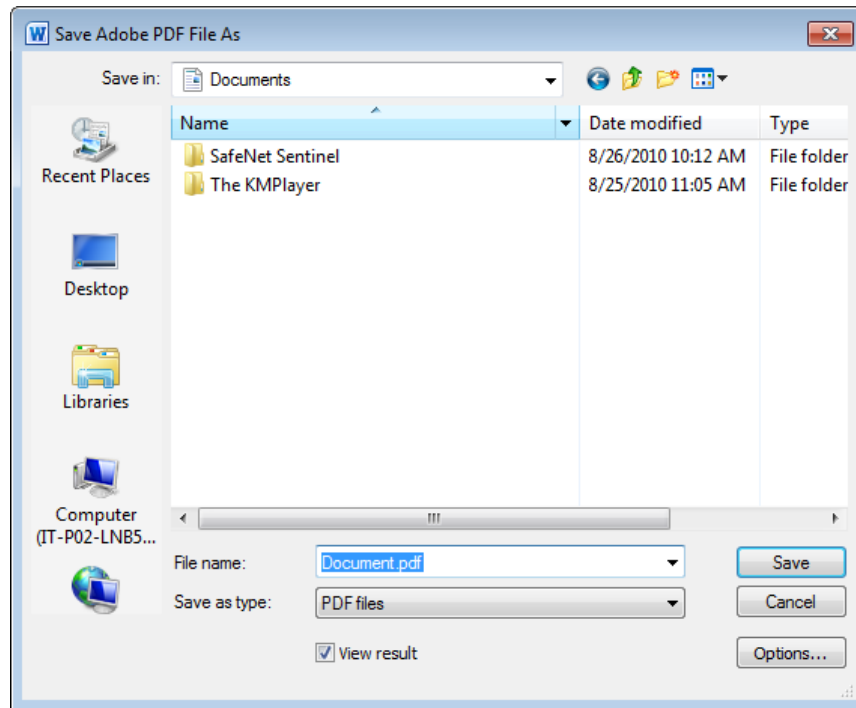


Figure 22 – Save Adobe PDF File As Dialog Box

3. Click the **Save in** arrow and select a location to save the PDF file.
4. In the **File name** box, type a name for the PDF file.
5. Click the **Save** button. The **Acrobat PDFMaker** dialog box opens indicating that the document is being converted (see Figure 23). After the conversion is completed, the PDF file opens in **Adobe Acrobat X**.

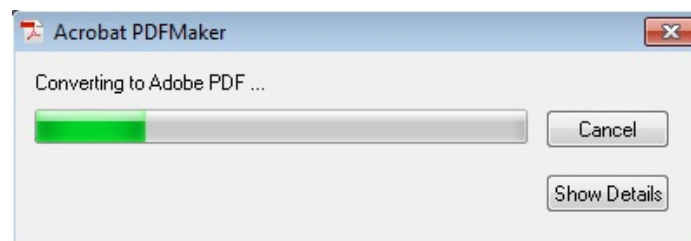


Figure 23 – Acrobat PDFMaker Dialog Box

Checking the Accessibility of PDF Files

The best way to test the accessibility of a PDF document is to attempt to use the document with the tools that your readers will use. However, even if you do not have a screen reader or Braille printer, you can still use any of the following methods provided by Adobe Acrobat X to check the accessibility of the document.

- Use the Full Check feature to perform a detailed accessibility analysis on the document.
- Use Reflow view to quickly check the reading order of the document.
- Use the Read Out Loud feature to experience the document as it will be experienced by readers who use this text-to-speech conversion tool.
- Save the document as accessible text and then read the text file in a word-processing application to experience the document as it will be experienced by readers who use a Braille printer.
- Use the TouchUp Reading Order tool, Tags tab, and Content tab to examine the structure, reading order, and contents of the document in detail.

Running a Full Check

The Full Check feature can be used to perform a detailed accessibility analysis on the PDF document. You can choose which guidelines to reference (Adobe PDF, Section 508, or W3C), which kinds of accessibility issues to look for, and how you want to view the results.

To run a full check:

1. Open the PDF file in **Adobe Acrobat X** if it is not already open.
2. Click **Tools** on the right side of the application window. The **Tools** pane displays (see Figure 24).

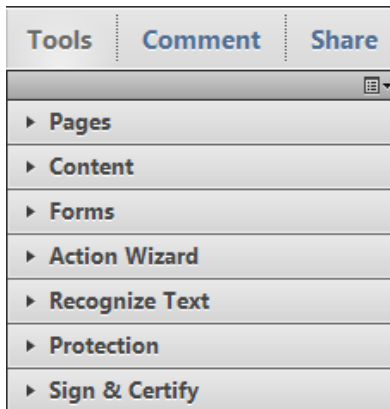



Figure 24 – Tools Pane

3. Click the **Show or hide panels** button  and select **Accessibility** from the list. The **Accessibility** panel opens and is added to the **Tools** pane (see Figure 25).

NOTE: Once a panel is added to a task pane, it will remain visible each time Adobe Access X is opened.

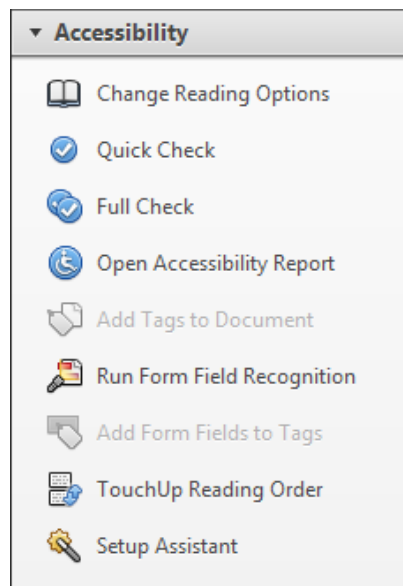


Figure 25 – Accessibility Panel

4. In the **Accessibility** panel, click **Full Check**. The **Accessibility Full Check** dialog box opens (see Figure 26).
5. Under **Report and Comment Options**, select options for how you want to view the results.

NOTE: You can save the results as an HTML file or as comments that are located where the accessibility issues are detected.

6. Under **Page Range**, do one of the following:
 - If you want to perform a full check on the entire document, leave the **All pages in document** option selected.
 - If you want to perform a full check on individual sections of the document, select the **Pages from** option and type the desired page range.
7. Under **Checking Options**, click the **Name** arrow and select the **Section 508 Web-based intranet and internet information and applications (1194.22)** accessibility standard from the list. Leave all accessibility options selected.

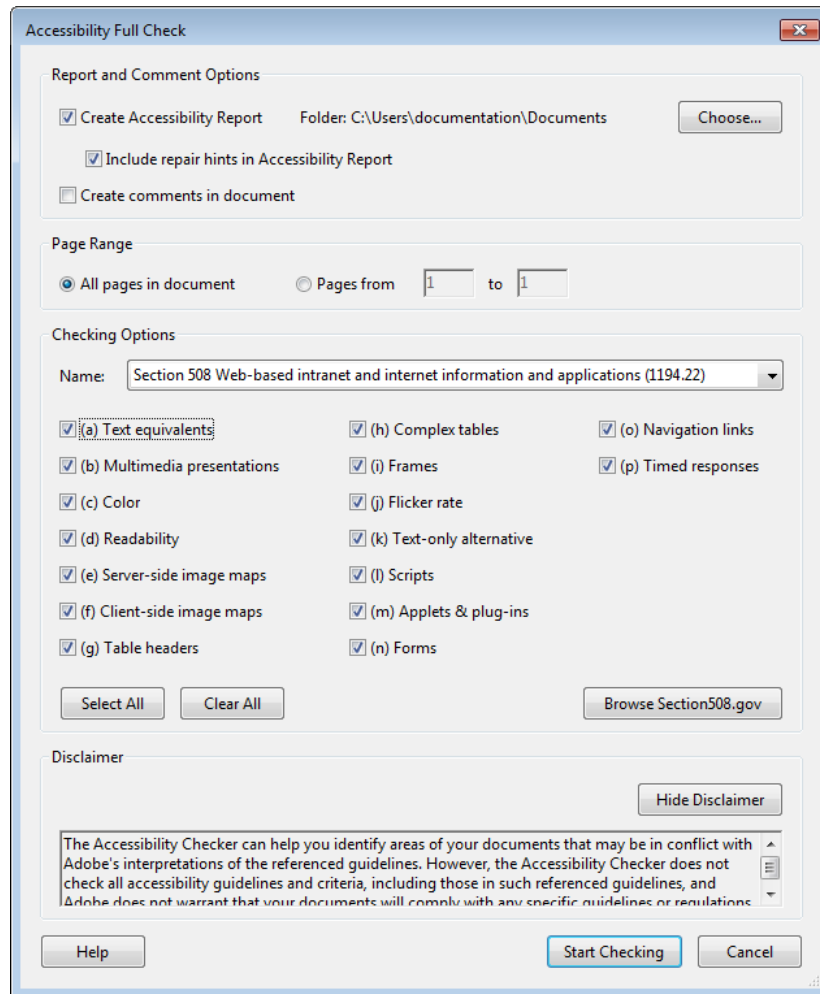


Figure 26 – Accessibility Full Check Dialog Box

8. Click the **Start Checking** button. The **Adobe Acrobat** dialog box opens (see Figure 27).

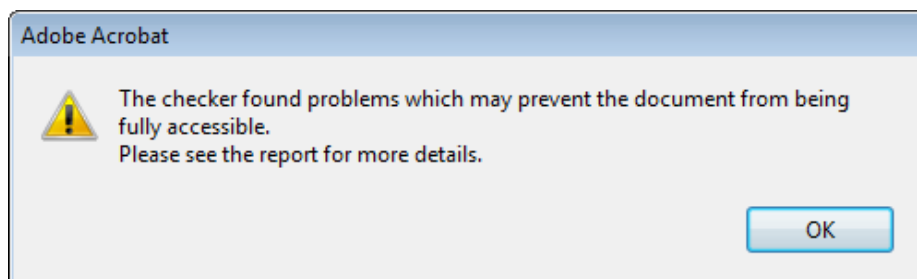


Figure 27 – Adobe Acrobat Dialog Box

9. Click the **OK** button. The results are displayed in the **Accessibility Report** panel, which also includes helpful links and hints on how to repair issues (see Figure 28).

NOTE: Clicking a link in the report will highlight the inaccessible element in the PDF document.

10. Review all issues listed in the **Accessibility Report** panel to determine which ones require correction.
11. Repair the issues as necessary, save the file, and rerun a full check. Repeat this process until all issues are addressed.

NOTE: Some repairs (e.g., missing alternative text descriptions) can be made in the PDF document, but they will be erased the next time a PDF document is created from the same source file. Whenever possible, you should return to the source file and add accessibility features in the authoring application. Repairing the source file ensures that you do not have to repeatedly touch up future iterations of the PDF document in Acrobat.

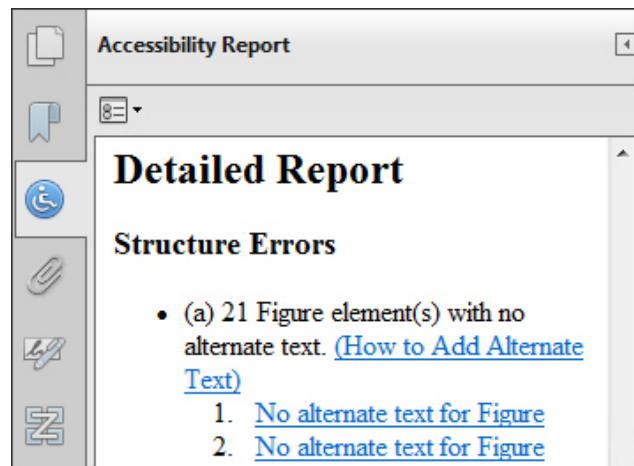


Figure 28 – Accessibility Report Panel

Reflowing a PDF Document

A screen reader reads a PDF document by the order of its tags, but the order of the tags may not be the same as the visual reading order. This is especially likely if the PDF document contains multiple columns or complex nested lists. Reflow view allows you to see the visual order of the document's content as determined by the order of the tags. If the document does not appear in the correct order while in Reflow view, the order of the tags will need to be changed.

NOTE: A PDF document cannot be saved, edited, or printed while it is in Reflow view.

To reflow a PDF document:

1. Click the **View** menu, point to **Zoom**, and select **Reflow**.

To return a reflowed PDF document to normal view:

1. Click the **View** menu, point to **Zoom**, and select **Reflow**.

Reading a PDF Document Out Loud

Read Out Loud is a voice synthesizer that reads aloud the text in a PDF document, including the text in comments and alternative text descriptions for images and fillable fields. The content is read in the order in which it appears in the document's logical structure tree. This tool can give developers an idea of how a PDF document will be read by a screen reader.

NOTE: You must activate the Read Out Loud tool before you can use it. When not in use, you should deactivate it to free system resources and improve performance of other operations.

To have a PDF document read out loud:

1. Click the **View** menu, point to **Read Out Loud**, and select **Activate Read Out Loud**.
2. Navigate to the page that you want to have read out loud.
3. Click the **View** menu, point to **Read Out Loud**, and select **Read This Page Only** or **Read To End of Document**.
4. To interrupt or resume reading out loud, do one of the following:
 - Click the **View** menu, point to **Read Out Loud**, and select **Pause**.
 - Click the **View** menu, point to **Read Out Loud**, and select **Resume**.
 - Click the **View** menu, point to **Read Out Loud**, and select **Stop**.
5. When finished, click the **View** menu, point to **Read Out Loud**, and select **Deactivate Read Out Loud**.

Saving a PDF Document as Accessible Text

You can save a PDF document as accessible text and then read the text file in a word-processing application to experience the document as it will be experienced by readers who use a Braille printer. A text version of a PDF document does not contain images or multimedia objects, but it will contain alternative text descriptions for such objects if they have been provided.

To save a PDF document as accessible text:

1. Click the **File** menu, point to **Save As**, point to **More Options**, and select **Text (Accessible)**. The **Save As** dialog box opens (see Figure 29).

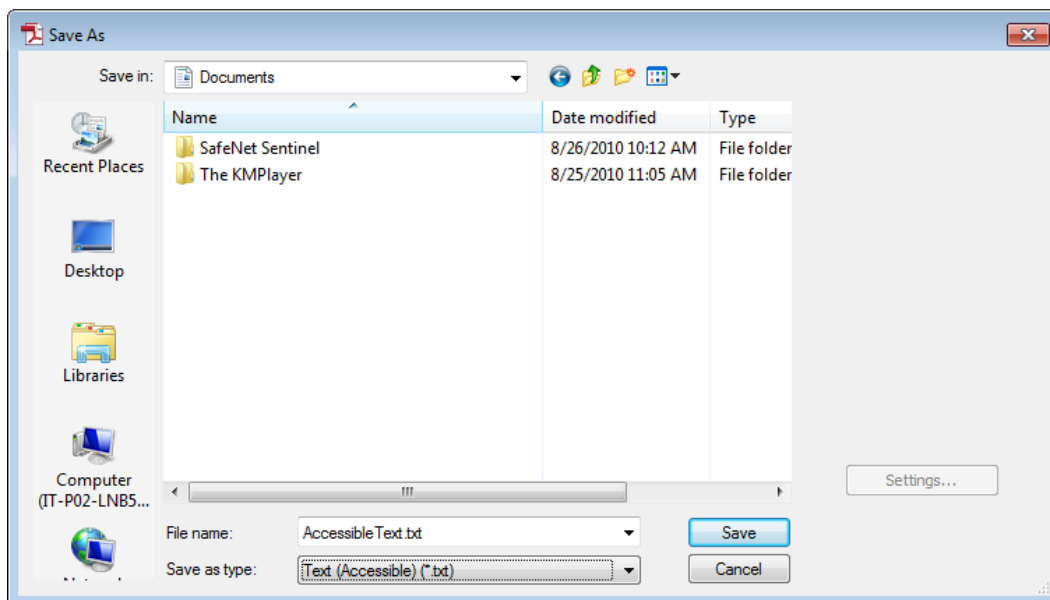


Figure 29 – Save As Dialog Box

2. Click the **Save in** arrow and select a location to save the text file.
3. In the **File name** box, type a name for the text file.
4. Click the **Save** button.

Making PDF Files Accessible

Adobe Acrobat X includes a number of tools that can be used to repair issues and enhance the accessibility of a PDF document. You can use the TouchUp Reading Order tool to repair reading order and basic tagging problems. You can also use Acrobat to set the document language, display bookmarks, and add password security that does not interfere with screen readers.

Using the TouchUp Reading Order Tool

The TouchUp Reading Order tool provides the easiest and quickest way to repair reading order and basic tagging problems. When you select the tool, the TouchUp Reading Order dialog box opens and the document is overlaid with highlights that show the order of the page content (see Figure 30 and Figure 31).

NOTE: Save the PDF document (or a copy of it) before using the TouchUp Reading Order tool. You cannot use the Undo command to reverse changes made with this tool, so reverting to a saved document is the only way to undo a change.

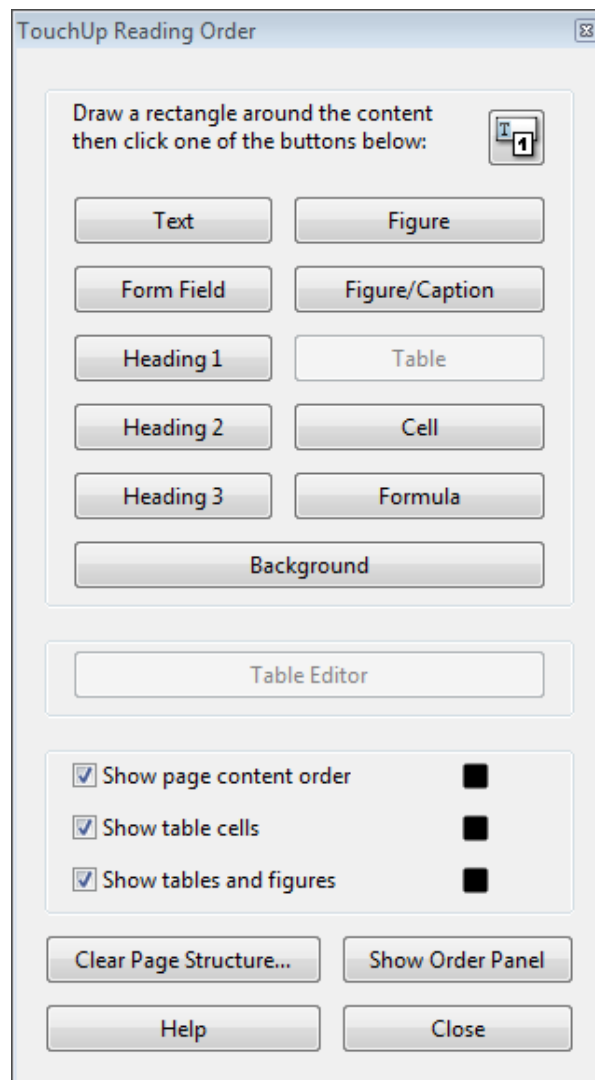


Figure 30 – TouchUp Reading Order Dialog Box

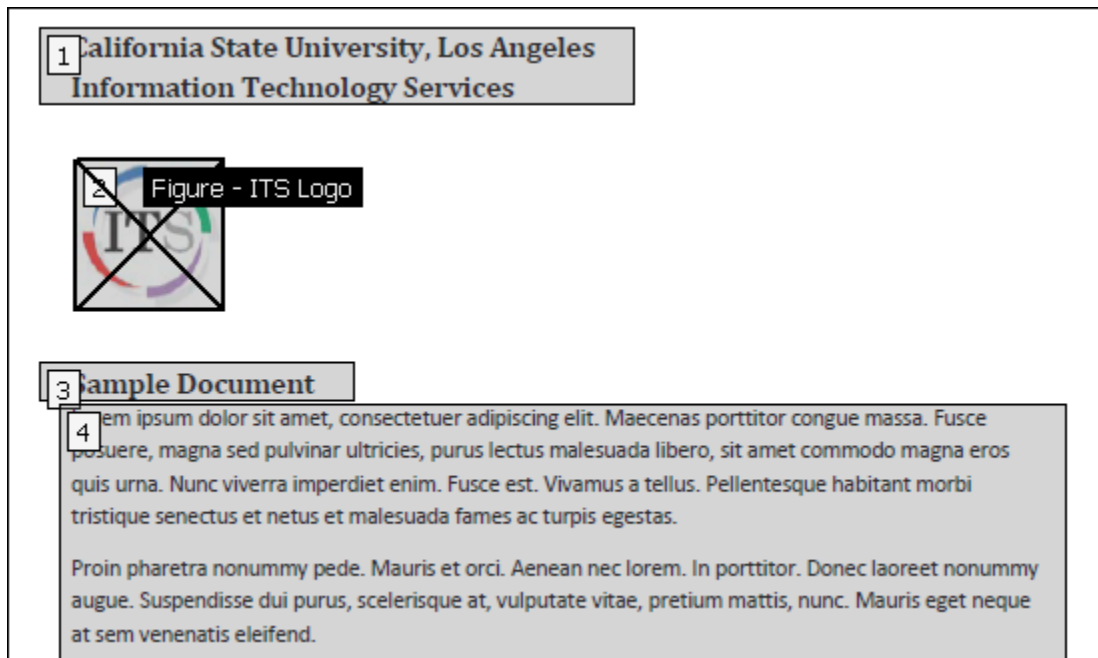


Figure 31 – Document Overlaid with Highlights

The TouchUp Reading Order tool includes the following options (see Figure 30):

- **Text:** Tags the selection as text.
- **Form Field:** Tags the selection as a form field.
- **Heading 1, Heading 2, Heading 3:** Tags the selection as a first, second, or third level heading tag.
- **Figure:** Tags the selection as a figure. Text contained within a figure tag is defined as part of the image and is not read by screen readers.
- **Figure/Caption:** Tags the selected figure and caption as a single tag. Any text contained in the tag is defined as a caption. This option is useful for tagging figures and captions and preventing caption text from being incorrectly added to adjacent text blocks.
- **Table:** Tags the selection as a table.
- **Cell:** Tags the selection as a table or header cell. Use this option to merge cells that are incorrectly split.
- **Formula:** Tags the selection as a formula.
- **Background:** Tags the selection as a background element, or artifact, removing the item from the tag tree so that it does not appear in the reflowed document and is not read by screen readers.
- **Table Editor:** Automatically analyzes the selected table into its components and applies the appropriate tags. The table must be tagged as a table before you can use the Table Editor command on it.
- **Show page content order:** Shows content elements as highlighted areas that contain numbers to indicate the reading order.
- **Show table cells:** Highlights the content of individual table cells.
- **Show tables and figures:** Outlines each table and figure with a crossed-out box. The box also indicates whether the element includes alternative text.
- **Clear Page Structure:** Removes the tagging structure from the page. Use this option to start over and create a new structure if the existing structure contains too many problems.
- **Show Order Panel:** Opens the Order panel which can be used to reorder highlighted content.

Tagging a Region

You can use the TouchUp Reading Order tool to create tags in an untagged PDF document or to add new tags to an existing structure.

To tag a region:

1. In the **Accessibility** panel, click **TouchUp Reading Order**. The **TouchUp Reading Order** dialog box opens.
2. In the **Document** pane, drag to select a region of the page that contains one type of content (e.g., a text block).

NOTE: To add more page content to the current selection, hold down the **Shift** key and drag to select the content that you want to add. To remove page content from the current selection, hold down the **Ctrl** key and drag to select the content that you want to remove.

3. In the **TouchUp Reading Order** dialog box, click the appropriate button to specify the tag type.
4. When finished, click the **Close** button in the **TouchUp Reading Order** dialog box.

Changing a Tag Type

If Acrobat tags a page element incorrectly, you can use the TouchUp Reading Order tool to change the tag type.

To change the tag type for an element:

1. In the **Accessibility** panel, click **TouchUp Reading Order**.
2. In the **TouchUp Reading Order** dialog box, make sure that the **Show page content order** check box is selected.
3. In the **Document** pane, select the element by dragging a box around the element or by clicking the number in the upper-left corner of the highlighted region.
4. In the **TouchUp Reading Order** dialog box, click the button for the tag type that you want for the selected element.
5. When finished, click the **Close** button in the **TouchUp Reading Order** dialog box.

Removing a Page Element from the Tag Structure

If a tagged element in a PDF document does not contain useful information for the user (e.g., decorative images, extra spaces), you can remove the element from the tag structure so that it is not read out loud or reflowed.

To remove a page element from the tag structure:

1. In the **Accessibility** panel, click **TouchUp Reading Order**.
2. In the **TouchUp Reading Order** dialog box, make sure that the **Show page content order** and **Show tables and figures** check boxes are selected.
3. In the **Document** pane, select the element by dragging a box around the element or by clicking the number in the upper-left corner of the highlighted region.
4. In the **TouchUp Reading Order** dialog box, click the **Background** button.
5. When finished, click the **Close** button in the **TouchUp Reading Order** dialog box.

Adding Alternative Text to Figures

Figures are not recognized or read by screen readers unless they have alternative text. When an image is tagged as a figure, the alternative text will appear at the top of the image (see Figure 32). If it has no alternative text, the phrase *No alternate text exists* will appear at the top of the image (see Figure 33).

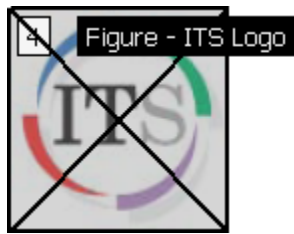


Figure 32 – Figure with Alternative Text

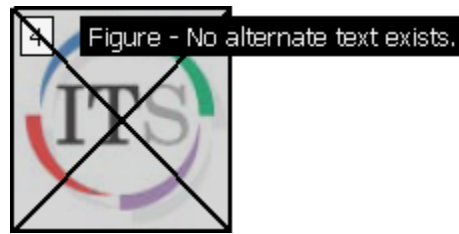


Figure 33 – Figure with No Alternative Text

To add alternative text to a figure:

1. In the **Accessibility** panel, click **TouchUp Reading Order**.
2. In the **TouchUp Reading Order** dialog box, make sure that the **Show tables and figures** check box is selected.
3. In the **Document** pane, right-click the figure and select **Edit Alternate Text** from the shortcut menu. The **Alternate Text** dialog box opens (see Figure 34).

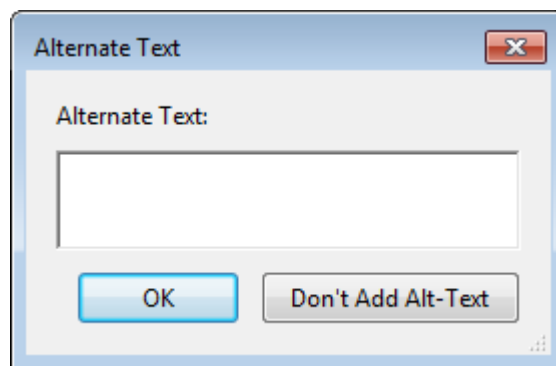


Figure 34 – Alternate Text Dialog Box

4. In the **Alternate Text** box, type a brief description of the figure.
5. Click the **OK** button.
6. When finished, click the **Close** button in the **TouchUp Reading Order** dialog box.

Checking and Correcting the Reading Order

You can quickly check and correct the reading order of a tagged PDF document by using the TouchUp Reading Order tool. When the tool is selected, each section of contiguous page content appears as a separate highlighted region and is numbered according to its placement in the page's reading order.

To check the reading order:

1. In the **Accessibility** panel, click **TouchUp Reading Order**.
2. In the **TouchUp Reading Order** dialog box, make sure that the **Show page content order** check box is selected.
3. In the **Document** pane, visually check the numbered order of all highlighted regions to make sure that they are in the correct reading order.

To change the reading order of an element:

1. In the **TouchUp Reading Order** dialog box, click the **Show Order Panel** button. The **Order** panel displays.
2. In the **Order** panel, click the plus sign to expand the page that contains the content you want to reorder. A list of tagged elements appears below the page number; the number to the left of each tag indicates its reading order (see Figure 35).

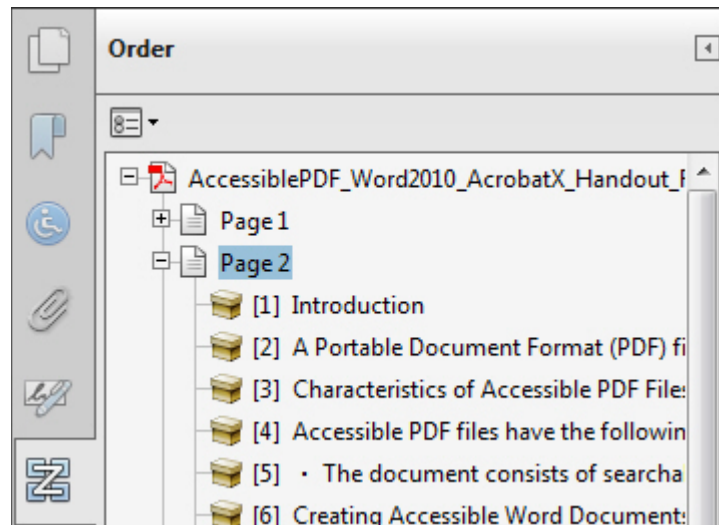


Figure 35 – Order Panel

NOTE: Selecting a tag in the **Order** panel will highlight that content region in the **Document** pane.

3. In the **Order** panel, drag the tag to the location that reflects the correct reading order. As you drag, a line appears to show potential locations (see Figure 36). After you move the tag to a new location, the highlighted regions in the **Document** pane are renumbered to show the new reading order.

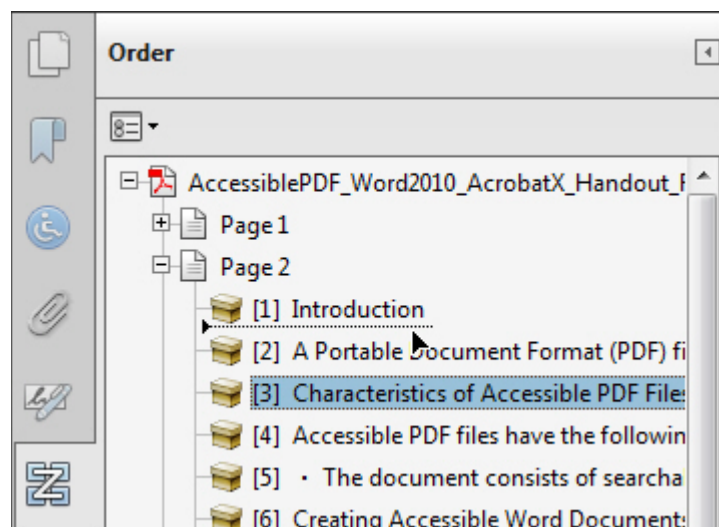


Figure 36 – Dragging a Tag in the Order Panel

Setting the Document Language

Specifying the language of a PDF document enables screen readers to switch to the appropriate language.

To set the document language:

1. Click the **File** menu and select **Properties**. The **Document Properties** dialog box opens.
2. On the **Advanced** tab, under **Reading Options**, click the **Language** arrow and select the appropriate language from the list (see Figure 37).

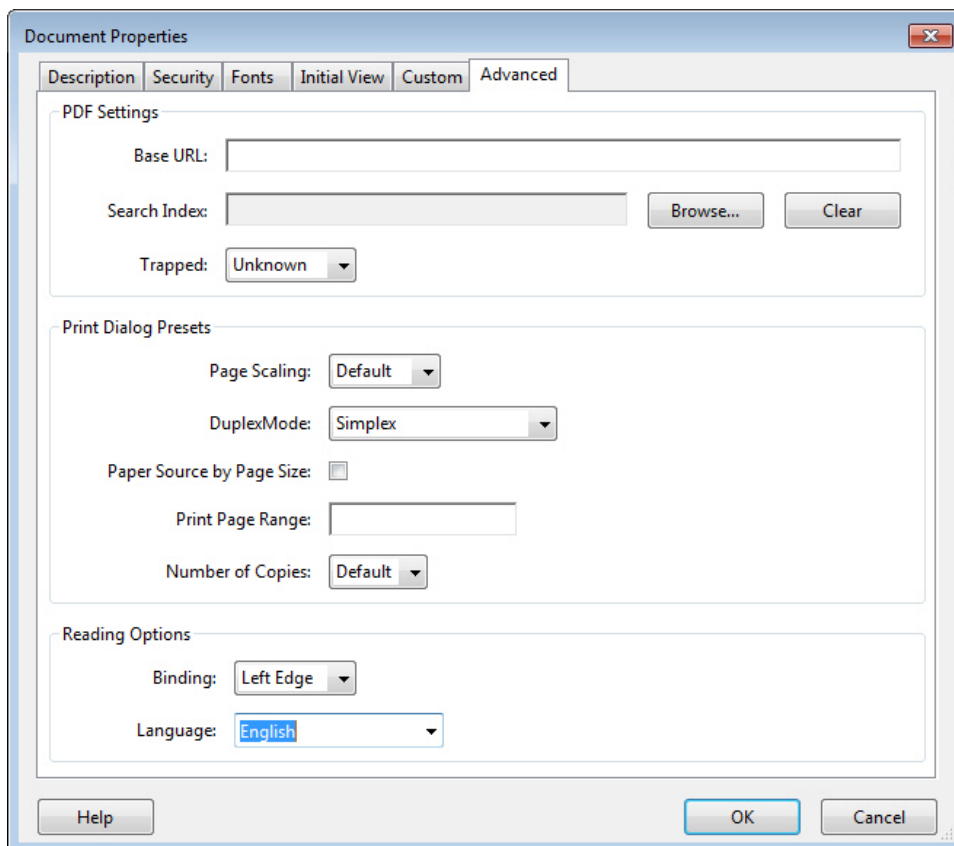


Figure 37 – Document Properties Dialog Box: Advanced Tab

3. Click the **OK** button.
4. Click the **File** menu and select **Save** to save the changes.

Displaying Bookmarks

Bookmarks help readers easily navigate a PDF document. They appear in the Navigation pane and link to specific content in the document. Bookmarks are generated automatically during the PDF creation process from the Word document headings. If a PDF document includes bookmarks, you can set the Initial View options so that the Bookmarks panel displays automatically when the document is first opened.

To view the bookmarks in a PDF document:

1. Click the **Bookmarks** button  in the **Navigation** pane. The **Bookmarks** panel displays all existing bookmarks (see Figure 38).

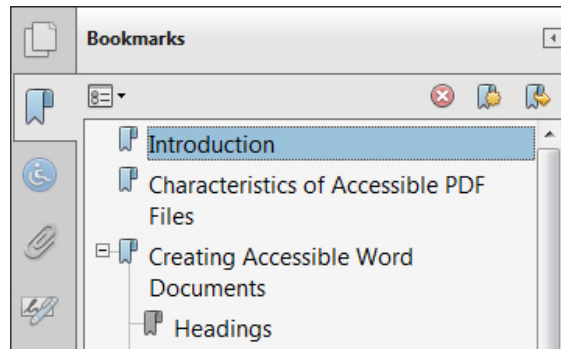


Figure 38 – Bookmarks Panel

To automatically display the Bookmarks panel:

1. Click the **File** menu and select **Properties**. The **Document Properties** dialog box opens.
2. On the **Initial View** tab, under **Layout and Magnification**, click the **Navigation tab** arrow and select **Bookmarks Panel and Page** from the list (see Figure 39).

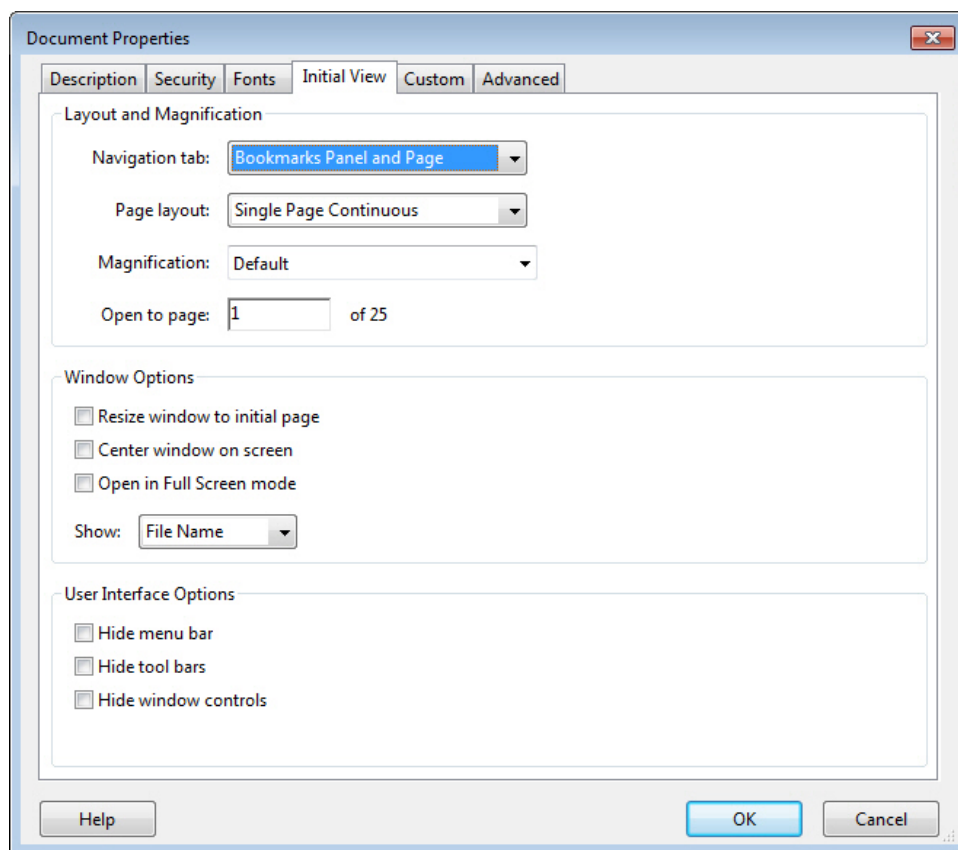


Figure 39 – Document Properties Dialog Box: Initial View Tab

3. Click the **OK** button.
4. Click the **File** menu and select **Save** to save the changes.
5. Close and reopen the file to see the effect.

Adding Password Security

You can use passwords to restrict users from editing and printing a PDF document. You can also prevent users from copying text, images, and other content. When securing a PDF document, make sure that security settings do not interfere with screen readers.

NOTE: Forgotten passwords cannot be recovered.

To add password security:

1. Click the **File** menu and select **Properties**. The **Document Properties** dialog box opens.
2. On the **Security** tab, under **Document Security**, click the **Security Method** arrow and select **Password Security** from the list (see Figure 40). The **Password Security Settings** dialog box opens.

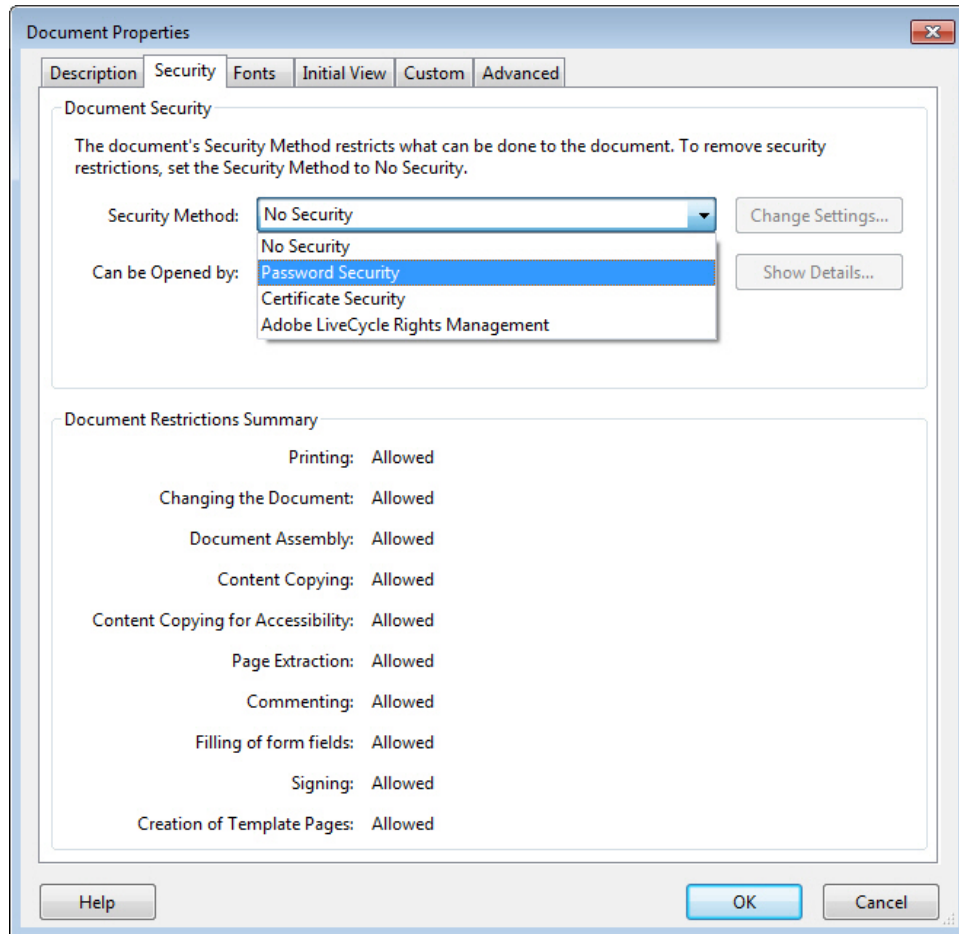


Figure 40 – Document Properties Dialog Box: Security Tab

3. Under **Permissions**, select the **Restrict editing and printing of the document** check box. The options in the **Permissions** section become available (see Figure 41).
4. In the **Change Permissions Password** box, enter a password.

NOTE: Acrobat provides a password strength meter next to the **Change Permissions Password** box. For each keystroke, the password strength meter evaluates your password and indicates the password strength using color patterns.

5. Make sure that the **Enable text access for screen reader devices for the visually impaired** check box is selected.
6. Set other options as desired.

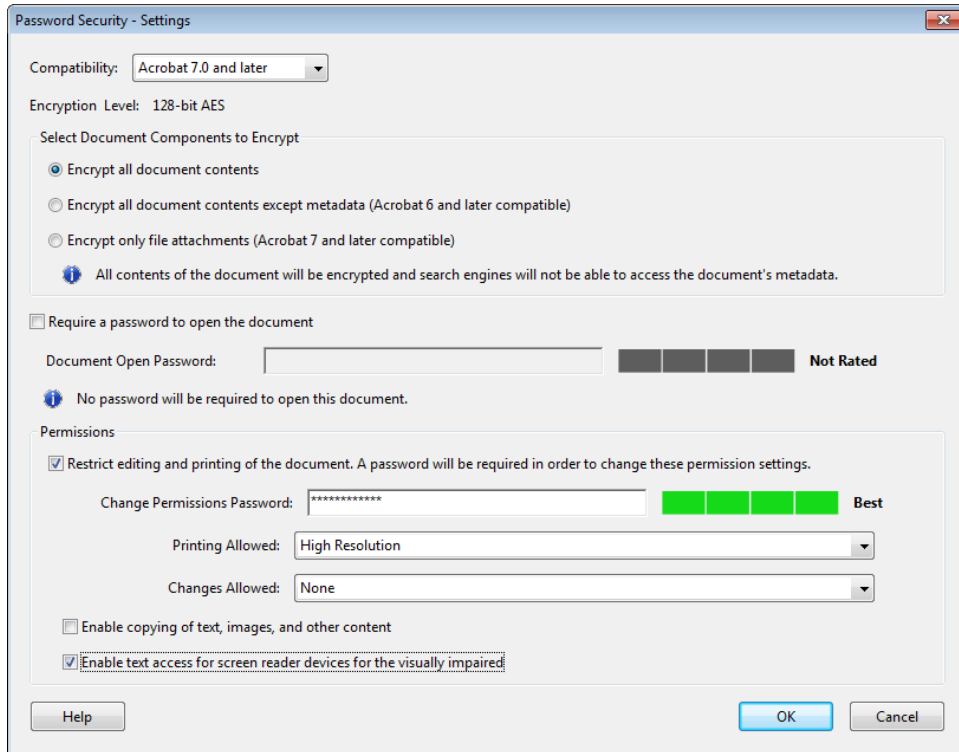


Figure 41 – Password Security Settings Dialog Box

7. Click the **OK** button. The **Adobe Acrobat** dialog boxes open (see Figure 42).

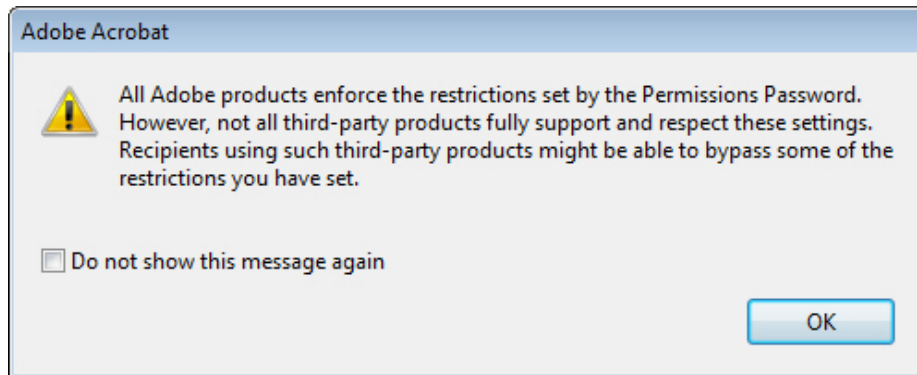


Figure 42 – Adobe Acrobat Dialog Box

8. Read the message, and then click the **OK** button. The **Adobe Acrobat Confirm Permissions Password** dialog box opens (see Figure 43).

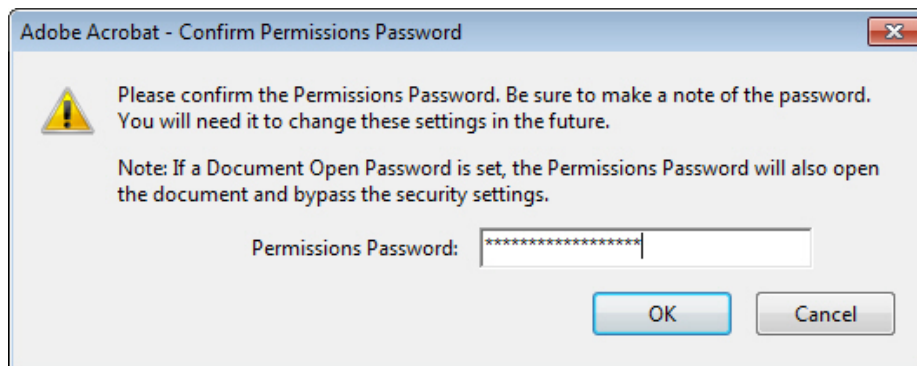


Figure 43 – Adobe Acrobat Confirm Permissions Password Dialog Box

9. In the **Permissions Password** box, re-enter the password, and then click the **OK** button. The **Adobe Acrobat** dialog box opens (see Figure 44).

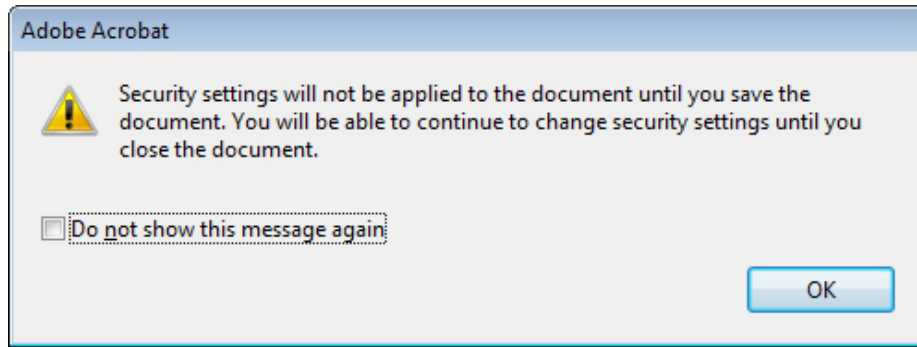


Figure 44 – Adobe Acrobat Dialog Box

10. Read the message, and then click the **OK** button.
11. In the **Document Properties** dialog box, click the **OK** button to apply the changes.
12. Click the **File** menu and select **Save** to save the changes.

Resources

Below is a list of online resources related to creating accessible documents.

- CSULA: Tutorials for Creating Accessible Documents and Media
<http://www.calstatela.edu/accessibility/tutorials.php>
- CSU: Tips and Tutorials for Creating Accessible Microsoft Word Documents
<http://www.calstate.edu/accessibility/tutorials/word.shtml>
- Adobe Acrobat X Accessibility
<http://www.adobe.com/accessibility/products/acrobat/>
- WebAIM: Microsoft Word Accessibility
<http://webaim.org/techniques/word/>
- WebAIM: PDF Accessibility
<http://webaim.org/techniques/acrobat/>