Accessible Electronic Document

AED COP

Community Of Practice
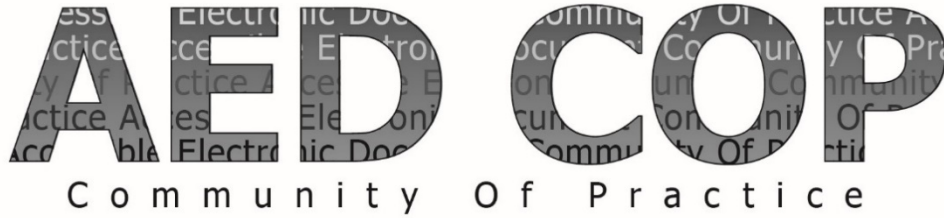
SECTION 508
BASIC AUTHORING AND TESTING GUIDE
MICROSOFT OUTLOOK FOR PC (July Update 1708)

Version 1.0

December 2017

Contents

Introduction

In October 2012, subject matter experts from several federal agencies developed an Accessible Electronic Document Community of Practice (AED COP) with the goal of improving accessible content, advancing the field of accessibility, and creating accessible artifacts reusable across many agencies.

This document contains the minimum steps required to make an Outlook e-mail Section 508 conformantn This information includes how to author and how to check your work.

Federal agencies and other institutions create millions of e-mails each year. Making e-mailss accessible is important so that individuals with disabilities can access information. Individuals with disabilities may include, but are not limited to: Blind or Low Vision, Deaf or Hard of Hearing, Physical Disability and Intellectual Disability.

Assistive technology (AT) is used by individuals to help them understand electronic information. For example, screen readers or text-to-speech software is one tool available and assists individuals who are blind, have low vision, or a learning disability. This technology interprets words on the page and translates them to a computerized voice that reads the information. Accessible documents work in partnership with assistive technology to ensure individuals with disabilities have access to information.

As you create your Outlook e-mails, it might be helpful to think about the concept of equal access. When you adhere to the following accessibility requirements, you are creating a document that allows individuals with disabilities to have equal access to the important information that you are creating.

To retreave the latest version of this document and other authoring and testing guides for dofferent file formats, distribution by the AED COP, please visit http://www.section508.gov/refresh-toolkit .

This document covers Outlook PC formats and is divided into the following 5 categories:

- Document Formatting
- Text Formatting
- Object Formatting
- Color Formatting
- Miscellaneous

This document does NOT cover:

- An Outlook e-mail with macros. E-mails containing macros should be tested using the Software Baseline test process found at http://www.section508.gov/refresh-toolkit .
- An Outlook e-mail with forms enabled (see the Forms section).

1. USE A DESCRIPTIVE EMAIL SUBJECT

A descriptive email subject that identifies the email or its purpose helps everyone (including people with disabilities) locate, open, and switch between emails.

Author Accessibly

1) Start a new email
2) Use the Subject field to give a descriptive subject

Check Your Work

Look at the title bar in MS Outlook for the email window you created.

1) Check that the subject is descriptive and identifies the email or its purpose.

2. USE BUILT-IN FEATURES TO CREATE LISTS

Lists are used to break-up and simplify content. Screen readers cannot infer meaning from just formatting (if you Tab and use a dash as a bullet). Using built-in list features creates a structure that screen readers can identify.

Author Accessibly

Go to Home>Paragraph and use Bullets, Numbering or Multilevel List features when putting lists in your document.
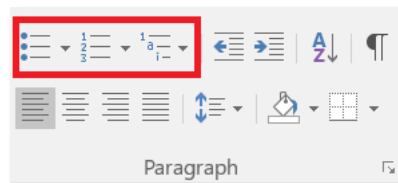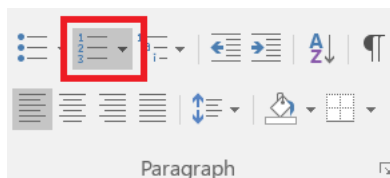
To use the built-in list features, you can either:

1) Click on the list feature you want and then type your list item, **OR**
2) Type your list item and then click on the list you want to use.

Check Your Work

To check your work, you:

1) Click on a list item.
2) Check that one of the built-in list features is highlighted in the ribbon.

3. USE BUILT-IN FEATURES TO ORGANIZE CONTENT IN LAYOUT TABLES

You can also use layout tables to organize content. A layout table does not require row or column headers to describe the cell's content. For example, you could create an agenda with Agenda Item (Introduction), Presenter (Chair), and Time (9 – 9:15) in a layout table.

This item doesn't mean that you are required to use layout tables when organizing information, but when you are using a table format, you must use the built-in table feature rather than creating the appearance of a table by using tabs or spaces. Layout Tables create a structure that screen readers and AT can use to read information in the correct order (left to right then top to bottom).

When you use a layout table you:

1) Must ensure you have removed data table styles
2) Must ensure you have a reading order that matches the visual layout.
3) Must ensure the table is placed in-line so that AT can access the content.

Author Accessibly
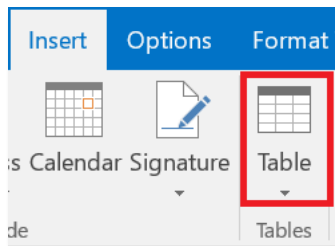
Go to Insert>Tables

To use Tables you:

1) Insert the number of columns and rows you need for your layout table.
2) Remove the default data table style in Table Tools>Design>Table Styles and choose "Clear"
3) Unselect Table Style Options for "Header row" and "First Column" from Table Tools>Design>Table Style Options
4) Insert the information in your layout table.

Plain Tables
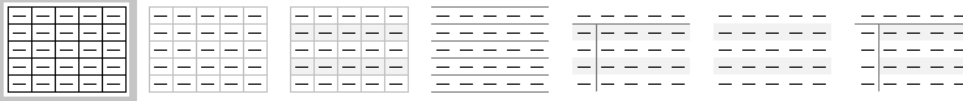
Grid Tables
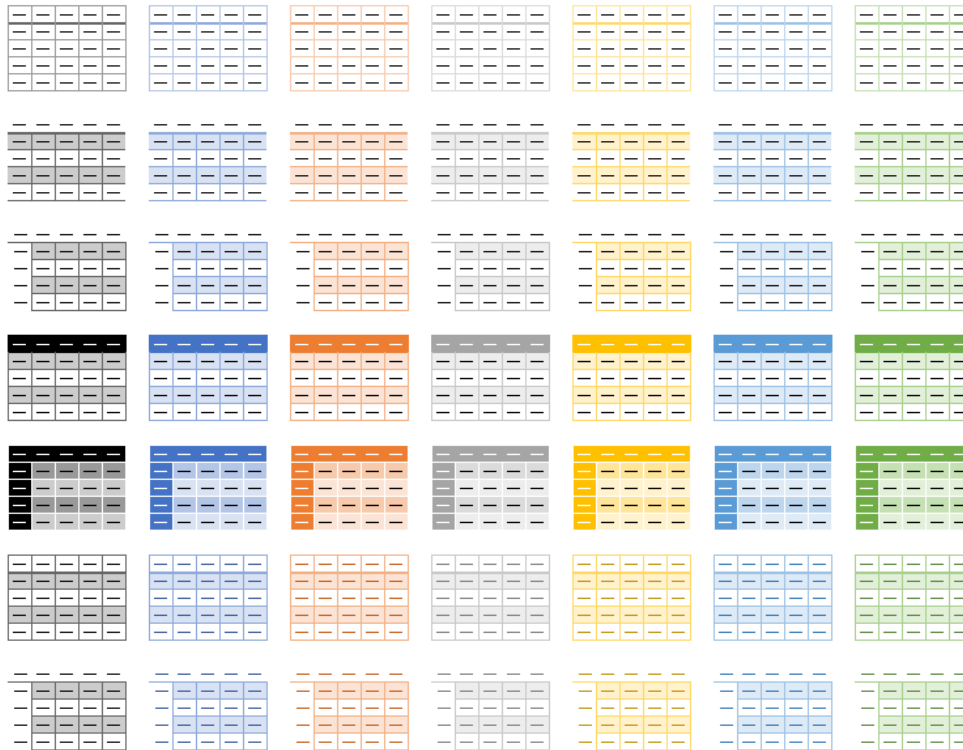
List Tables
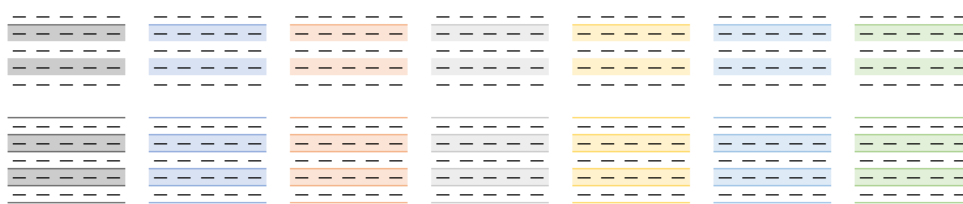
Modify Table Style...

Clear

New Table Style...
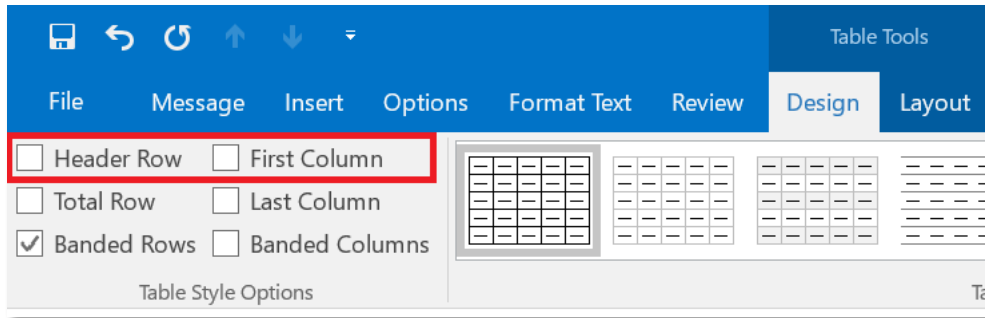
Check Your Work

To check your work, you:

1) Run the Accessibility Checker and see if you get any "Check reading order" tips. These tips indicate MS Outlook knows this table is a layout table.
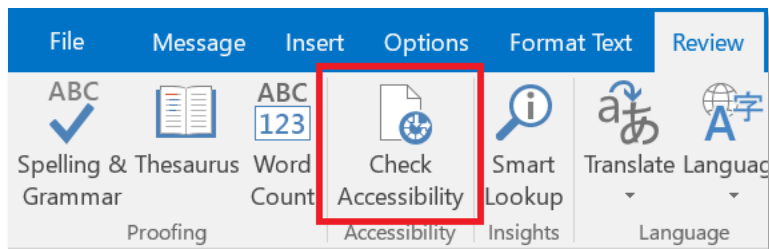
2) Place your cursor on the first cell of your layout table. Use your Tab key to navigate through the table and ensure the tab order matches the visual layout.

3) When you create a table using the directions above, MS Outlook automatically places the table inline. However, you can check this by right clicking (or Shift F10) on your table, select Table Properties>Text Wrapping and ensure "None" is highlighted.

4. IDENTIFY DISTINCT LANGUAGES

A document can contain sections written in different languages. Screen readers cannot infer meaning from just text. Identifying distinct languages creates a structure that allows AT to identify and read all languages correctly. You do not have to set a section language for proper names, technical terms, or foreign words that have become part of common use.

Author Accessibly

Go to Review>Language>Set Proofing Language

To set a different language, you:

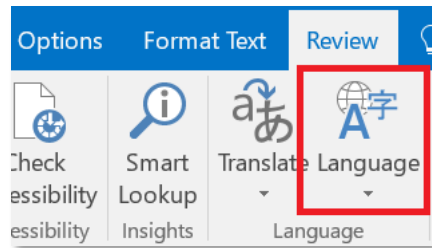1) Select text written in a different language.
2) Go to Review>Language>Set proofing Language.
3) Select the appropriate language from the list.

Check Your Work

To check your work, you:

1) Place your cursor on any section of text that is in a different language.
2) Go to Review>Language>Set Proofing Language.
3) Check that the text is identified as the correct language.

5. CREATE UNAMBIGUOUS NAMES FOR LINKS

It is important to provide unambiguous names or context for links that describe the destination, function or purpose so that AT can correctly identify information. For example, if you have several links and you name them all "click here," then AT will not be able to convey to individuals with disabilities information that distinguishes distinct links.

Author Accessibly

Ensure that the destination, purpose or function is described in surrounding text

OR

Go to Insert>Link
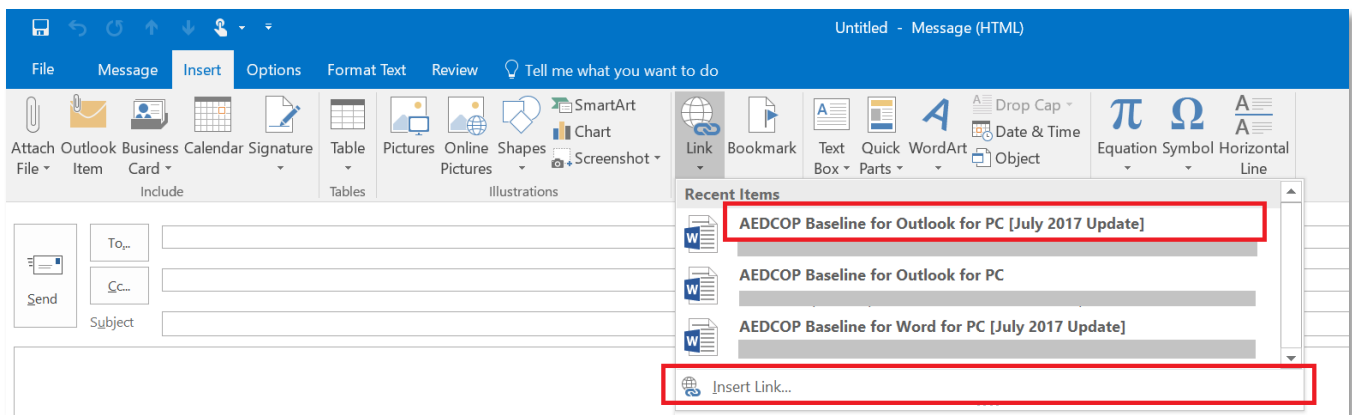
To set a hyperlink name, you:

1) Type an unambiguous name in your document that describes the destination, function, and/or purpose.
2) Select the text in your document that you want to be a hyperlink (this text will show in "Text to Display").
3) Go to Insert>Insert Link or use Ctrl + k
   a. If "Existing File or Web Page," type the accurate URL in Address.
   b. If "Place in this Document," click on the appropriate line in "Select a Place in this Document."
   c. If "Create a New Document," type in the document name in "Name of New Document."
   d. If "Email Address," type a valid email address in "E-mail address."

Tip: Use the items in the Link list to automatically enter an accessible link to any of your recently used Office documents. This will insert a link to that document, using its title as the link's display name.

Check Your Work

To check your work, you:

1) Check to ensure your link has an unambiguous name that describes the destination, function, and/or purpose **OR** that this is determinable within context. For example:

a. Uniquely Named Link:
…additional details are available on [OPM.gov](OPM.gov).

b. Links Determinable within Context:
Further details are listed in the Company Annual Report.

c. Ambiguous Links Not Determinable Within Context:
Information about each topic is available click here / click here.

6. USE BUILT-IN FEATURES TO CREATE DATA TABLES

Data tables are those tables where the information in a cell requires information from a row and/or column header to adequately describe the cell's content. (If a table is used for placement of text and objects, then it is a layout table - See Use built-in features to organize content in layout tables). When you create a data table you must:

1) Insert tables. You cannot make images of tables accessible.
2) Keep data tables simple (use one row of column headers and no merged or split cells).
3) Identify the header row.
4) Place data tables in-line so that AT can access the content.

If you need to create complex data tables (data tables with more than one header row, one or more header column, and/or merged or split cells), then you must convert the document to an accessible format. Complex data tables cannot be made accessible in MS Outlook.

Author Accessibly

Go to Insert >Tables
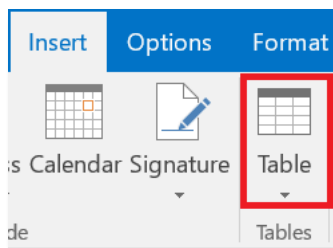
To create a data table you:

1) Insert the number of columns and rows you need for your data table.
2) Do not merge or split cells.
3) Only type headers into the first row and identify the header row. With the cursor anywhere in the table, go to Table Tools > Table Style Options and select "first column" and/or "header row".

Check Your Work

To check your work, you:

1) Click on your table and make sure it's not a picture. (If the Picture Tools Tab shows in the Ribbon, then it is a picture).
2) Run the Accessibility Checker and see if you get any of the following violations for the table you created. These indicate that MS Outlook understands it as a data table and has found issues you should address.
   a. "No header row" errors
   b. "Merged or split cells in a table" warnings

3) When you create a table using the directions above, MS Outlook automatically places the table inline. However, you can check this by right clicking (or Shift F10) on your table, selecting Table Properties>Text Wrapping and ensuring "None" is highlighted.

7. CREATE ACCESSIBLE IMAGES AND OTHER OBJECTS

Screen readers cannot infer meaning from images and other objects. Images and other objects include pictures, images of text, images of tables, shapes, icons with hyperlinks, etc. Therefore, you:

1) Must add descriptive text to images and other objects by:
    a. Adding Alt-Text to images and other objects **OR**
    b. Putting in captions **OR**
    c. Putting information in surrounding text or in an appendix.
2) Must place objects in line so that AT can read them in the proper reading order.

If adding Alt-Text to images and other objects, you must add:

1) text that describes the purpose and/or function for **meaningful** objects. If the object is an image of text, the Alt-Text must match the text verbatim.
2) a space or "double-quote, space, double-quote" for **decorative** objects .

Author Accessibly

To enter Alt-Text, you

1) Click on the image or object to select it.
2) Right click and select "Edit alt text…", and in "Description:" enter information that states the purpose and/or function of the object (in about 250 characters or less) for a meaningful image or object **OR** enter a space or "double-quote, space, double-quote" for a decorative object. Then click the X to "close."
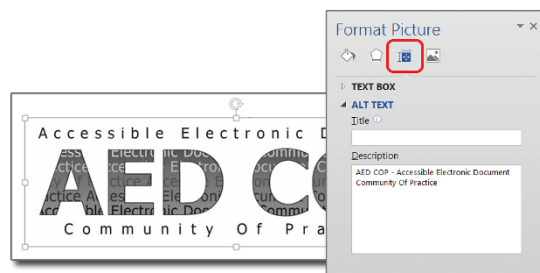
To place images and objects in line you:

1) Click on the image or object.
2) Select Page Layout>Position>In Line with Text.

Check Your Work

To check your work, you:

1) Check that you have descriptive text either as Alt-Text, a Caption, or information in surrounding text or an appendix.

2) If you are using Alt-Text, right click and select Format Picture>Alt Text and check that there is a description of about 250 characters or less that states the purpose and/or function for meaningful images or objects **OR** that a "double-quote, space, double-quote" has been entered for decorative objects.

3) Run the Accessibility Checker and see if you get any "Object not Inline" or "Missing Alternative Text" errors.

8. CREATE ACCESSIBLE TEXT BOXES

Screen readers and other assistive technology cannot access information in text boxes unless they are placed in line with text. Therefore, you must place text boxes in line so that AT can read the text you type inside the text box.

Author Accessibly

To place a text box in line you:

1) Click on the text box.
2) Select Page Layout>Position>In Line with Text.
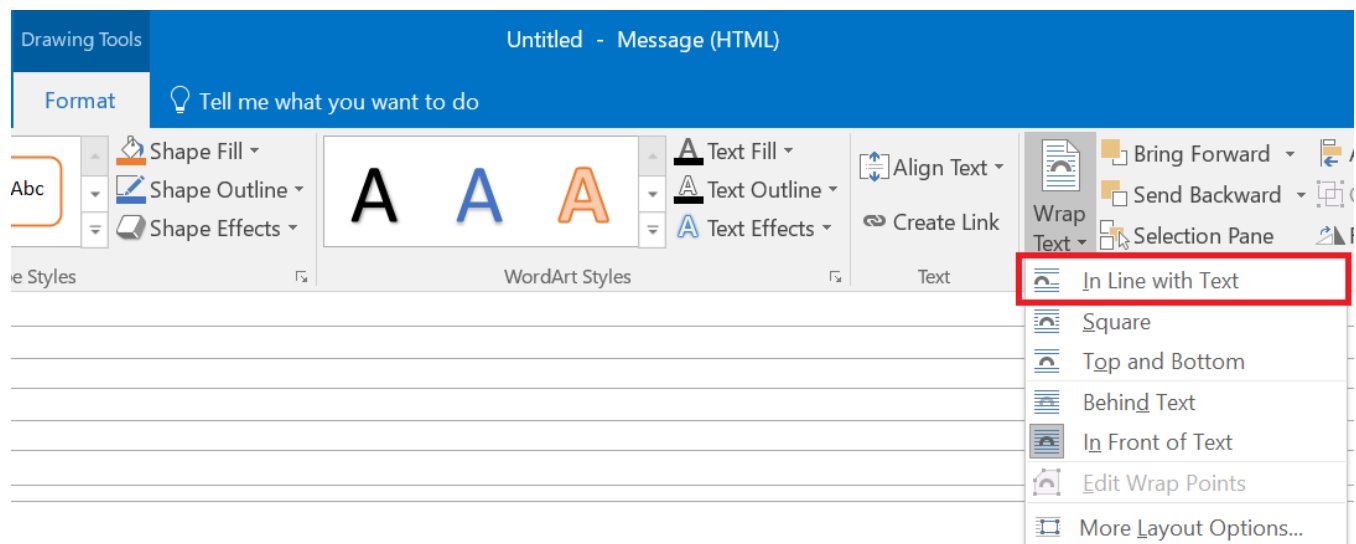
Check Your Work

To check your work, you:

1) Run the Accessibility Checker and see if you get any 'Object not Inline' errors.

9. USE COLOR (AND OTHER SENSORY CHARACTERISTICS) PLUS TEXT TO CONVEY MEANING

In order to use color and other sensory characteristics (such as size, shape, and location) accessibly, ensure that you do not use color alone to convey meaning. If you do, then individuals with disabilities who are blind, have low vision or are color blind will not have access to comparable information.

Author Accessibly

To use color accessibly:

1) Use color and other sensory characteristics (such as size, shape, and location) to convey meaning.
2) Create text that duplicates the meaning of the color or other sensory characteristic).

Check Your Work

To check your work, you:

1) Find where you have used color and other characteristics.
2) Ensure that you have created text that duplicates the meaning of the color or other sensory characteristics. For example, if you use a layout table to convey status on a project, use text and color to convey meaning.

Table 1: Example of a Status Layout Table Using Color and Text

Project A	**ON TIME**
Project B	**AT RISK**
Project C	**LATE**

10. CREATE THE REQUIRED COLOR CONTRAST

Having a high level of contrast between foreground and background results in more people being able to see and use the content. However, there are standards that are required and listed below:

**Table 2: Table with Color Contrast Ratios by Text Size or Type**

Type or Size of Text	Contrast Ratio
Standard	4.5:1
Large Text (14 pt bold or 18 pt regular)	3:1
Incidental text, text overlaid on images, and logotypes	Excluded from requirement

Author Accessibly

Create content with text or images of text that use color or shading with sufficient color contrast.

Check Your Work

1) Execute the color contrast analyzer. Click download (the application can be executed without installing it onto your computer).
2) Use the color contrast analyzer to check that you have authored with the correct color contrast ratio. Drag the Foreground eyedropper icon over a sample of your text or image of text. Drag the Background eyedropper icon over a sample of your background color. If the contrast ratio does not pass, then adjust your foreground or background until it does pass.
3) Screen shot of Color Contrast Analyzer
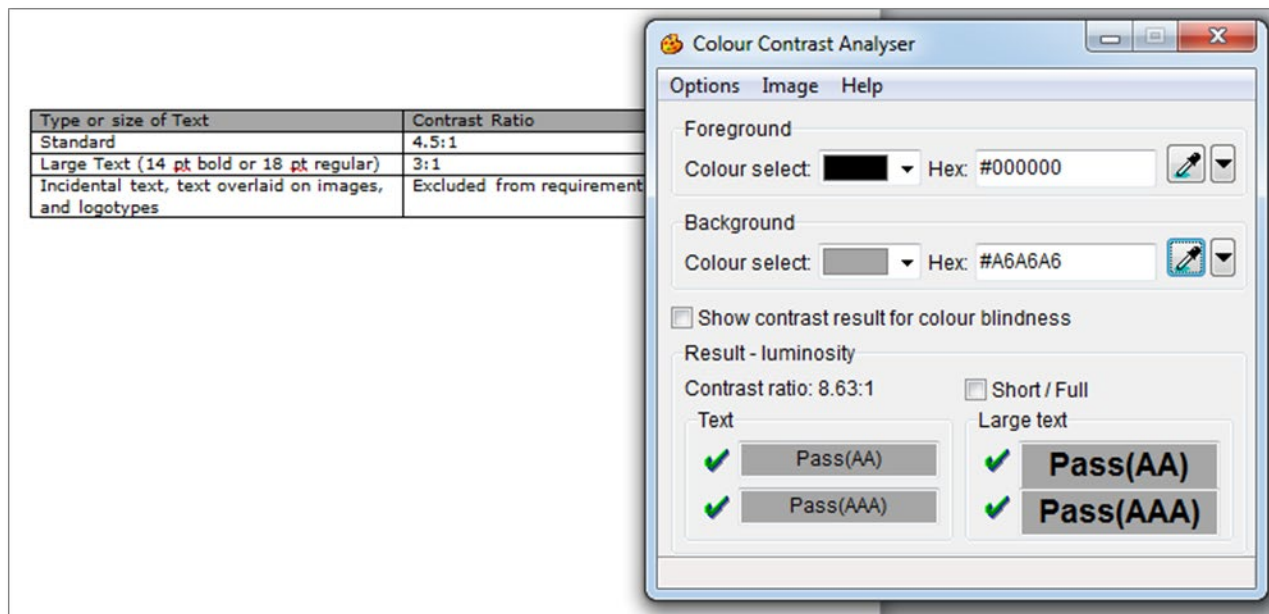
11.   CREATE ACCESSIBLE EMBEDED FILES

If you embed an audio-only, video-only or multimedia file that contains meaningful information into your MS Outlook document, you must also provide additional information so that individuals with disabilities have comparable access to the information.

Author Accessibly

Table 3: Table Identifying Type of File and Additional Document Required

Type of File	Also include:	What is this?
Audio-only	Accurate and complete transcript	A transcript is a text version of exactly what is being said in the audio-only file.
Video-only	Accurate and complete text description	A description is a text version of what is being shown in a video-only file.
Sycronized Media (audio and video)	Accurate and complete synchronized captions and audio descriptions	Captions are a time-synchronized text version of exactly what is being said and/or a description of the relevant sounds in the multimedia file. Audio descriptions are time-synchronized descriptions of what is being shown in the multimedia file. Ausio discripotions must be used if key information is conveyed visually only.

Check Your Work

To check your work, you:

1) Activate the meaningful audio-only, video-only or multimedia file.
2) Compare the corresponding text transcript, text description, or synchronized captions and audio description to ensure it is accurate and complete.

12.   EXCLUDE FLASHING OBJECTS

Federal agencies do not typically see flashing objects embedded into MS Outlook documents. Since flashing objects may be a public safety issue for individuals with photosensitive epilepsy and there is not typically a compelling business need, flashing objects should be excluded. If you feel you do have a compelling business need, please contact the AT Team for assistance in ensuring your object flashes below 3Hz.

13.   ALTERNATIVE ACCESSIBLE VERSION

Federal agencies have the goal to produce one accessible document for everyone. However, there may be times when this is not feasible. Therefore, it is recommended that you contact the AT Team to ensure an alternative version is necessary as you are still required to create an alternative version that is accessible, up-to-date and has equivalent content.