

Make Your Excel Workbooks Accessible

This document gives you step-by-step instructions to make your Excel spreadsheets accessible to people with disabilities.

People with visual impairments, particularly those who use screen readers, can understand your data more easily if you create your MS Excel workbooks and charts with accessibility in mind. Excel 2010 has many built-in features that help people with different abilities read and create workbooks; more recent versions have similar or enhanced features. Among these features is the **Accessibility Checker**, which locates elements that might cause problems for people with disabilities.

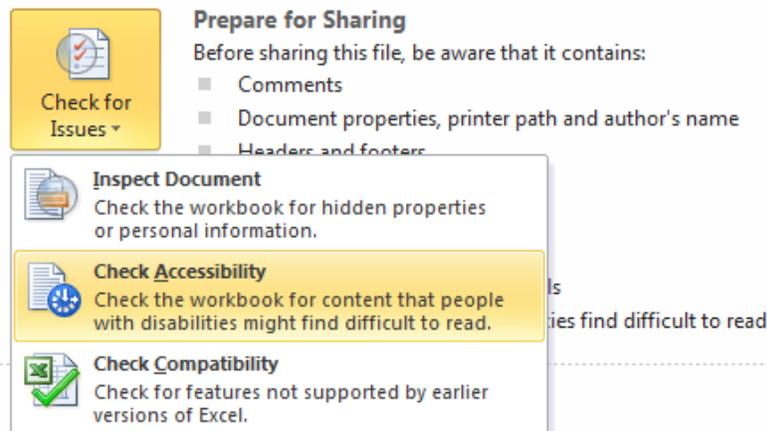
The screenshots and instructions in most of this document refer to MS Excel 2010. The equivalent screenshots and instructions for more recent versions of Excel may not be exactly the same, but are somewhat similar.

Using the Accessibility Checker

The easiest way to find ways to improve a document's accessibility is the built-in Accessibility Checker feature. This tool is especially useful for large and complex documents that include graphics and tables. It examines various elements of a document and detects where accessibility elements are lacking, such as alt text, heading styles, and table headers.

To launch the Accessibility Checker:

1. Click the **File** ribbon.
2. On the **Info** tab, click the **Check for Issues** button.
3. Select **Check Accessibility** from the menu.



To learn more about how the Accessibility Checker works, see [Rules for the Accessibility Checker](#).

Best practices for making Excel spreadsheets accessible

The following table includes key best practices for creating Excel workbooks that are accessible to people with disabilities.

What to fix	How to find it	Why fix it	How to fix it
<p>Alt Text Include alternative text with all graphical content and tables. Graphical content includes pictures, clip art, SmartArt graphics, shapes, groups, charts, embedded objects, ink, and videos.</p>	<p>To find all instances of missing alternative text in the spreadsheet, use the Accessibility Checker.</p>	<p>Alt text helps people who can't see the screen to understand what's important in images and other visuals. Avoid using text within images as the sole method of conveying important information. If you must use an image with text in it, repeat that text in the document. In alt text, briefly describe the image and mention the existence of the text and its intent.</p>	<p>Add alt text to</p> <ul style="list-style-type: none"> • images • SmartArt graphics • shapes • PivotCharts • data tables <ol style="list-style-type: none"> 1. Right-click the element. 2. Select Format [object] 3. Click the Alt Text tab. 4. Type a Description and, if necessary, a Title.
<p>Hyperlink Text Add meaningful hyperlink text, whether the hyperlink appears in a data cell or on graphical elements such as charts and shapes.</p>	<p>To determine whether hyperlink text makes sense as standalone information and whether it gives readers accurate information about the destination target, visually scan the workbook.</p>	<p>People who use screen readers sometimes scan a list of links. Links should convey clear and accurate information about the destination. For example, instead of linking to the text Click here, include the full title of the destination page. Tip: You can also add ScreenTips that appear when your cursor hovers over a cell that includes a hyperlink.</p>	<p>If necessary and possible, change the text of the hyperlink to something that conveys the nature of the link's destination.</p>
<p>Comments Insert a Comment to explain a cell's contents when the mouse hovers over it.</p>	<p>The Review ribbon contains buttons to navigate through the comments in a workbook. The Show</p>	<p>Comments serve as "footnotes" or "meta-data" to provide additional information about unexpected values in</p>	<p>To insert a Comment:</p> <ol style="list-style-type: none"> 1. Right-click the cell. 2. Select Insert Comment. 3. Type the Comment

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	<p>All Comments button reveals all Comment boxes without having to hover the mouse over the cells.</p>	<p>spreadsheets and data tables. Screen reader applications can explain these anomalies audibly.</p>	<p>directly into the box</p> <ol style="list-style-type: none"> 4. Click elsewhere on the sheet.
<p>Naming Sheets Give all sheet tabs unique and meaningful names (31 characters or fewer). Remove blank or unneeded sheets.</p>	<p>To find out whether all sheets that contain content in a workbook have descriptive names and whether there are any blank sheets, use the Accessibility Checker.</p>	<p>Screen readers read sheet names, which provide information about what is found on the worksheet, making it easier to understand the contents of a workbook and to navigate through it.</p>	<p>To rename a sheet:</p> <ol style="list-style-type: none"> 1. Right-click the worksheet tab. 2. Select Rename. 3. Type the new name, and press Enter (Return). <p>To delete a sheet:</p> <ol style="list-style-type: none"> 1. Right-click the worksheet tab. 2. Select Delete. 3. Click the Delete button in the message box to confirm.
<p>Data Tables Use a simple table structure, and specify column header information.</p>	<p>To ensure that tables don't contain split cells, merged cells, nested tables, or completely blank rows or columns, use the Accessibility Checker.</p>	<p>Screen readers keep track of their location in a table by counting table cells. If a table is nested within another table or if a cell is merged or split, the screen reader loses count and can't provide helpful information about the table after that point. Blank cells in a table could also mislead someone using a screen reader into thinking that there is nothing more in the table. Screen readers also use header information to identify rows and columns.</p>	<p>Add headers to a new table, or use headers in an existing table.</p> <p>To verify that the top row of a table is identified as a header row:</p> <ol style="list-style-type: none"> 1. Click any cell within the table. 2. On the Home ribbon, click Sort & Filter, and select Custom Sort. 3. If necessary, check the My data has headers checkbox, and click OK.

Add alt text to visuals and tables

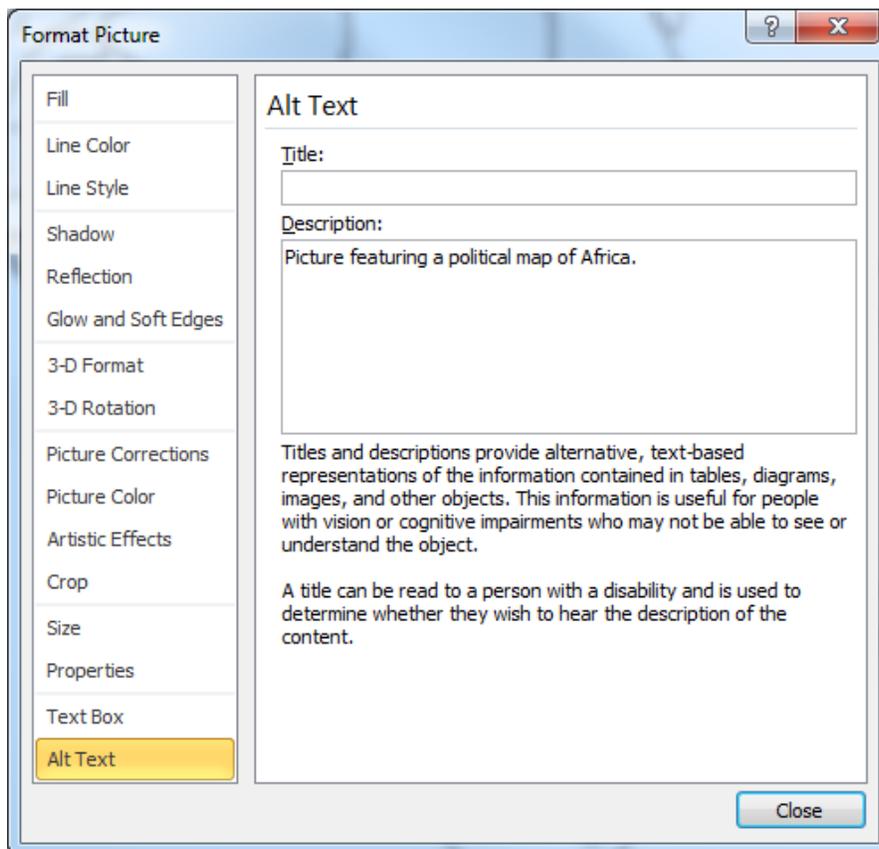
The following procedures describe how to add alt text to visuals and tables in your Excel spreadsheets.

Note: We recommend only putting text in the description field and leaving the title blank. This will provide the best experience with most major screen readers including Narrator. For audio and video content, in addition to alt text, include closed captioning for people who are deaf or have limited hearing.

Add alt text to images, SmartArt graphics, and shapes

Add alt text to images, such as pictures, clip art, and screenshots, so that screen readers can read the text to describe the image to users who can't see the image. This also applies to SmartArt graphics and shapes included in the document.

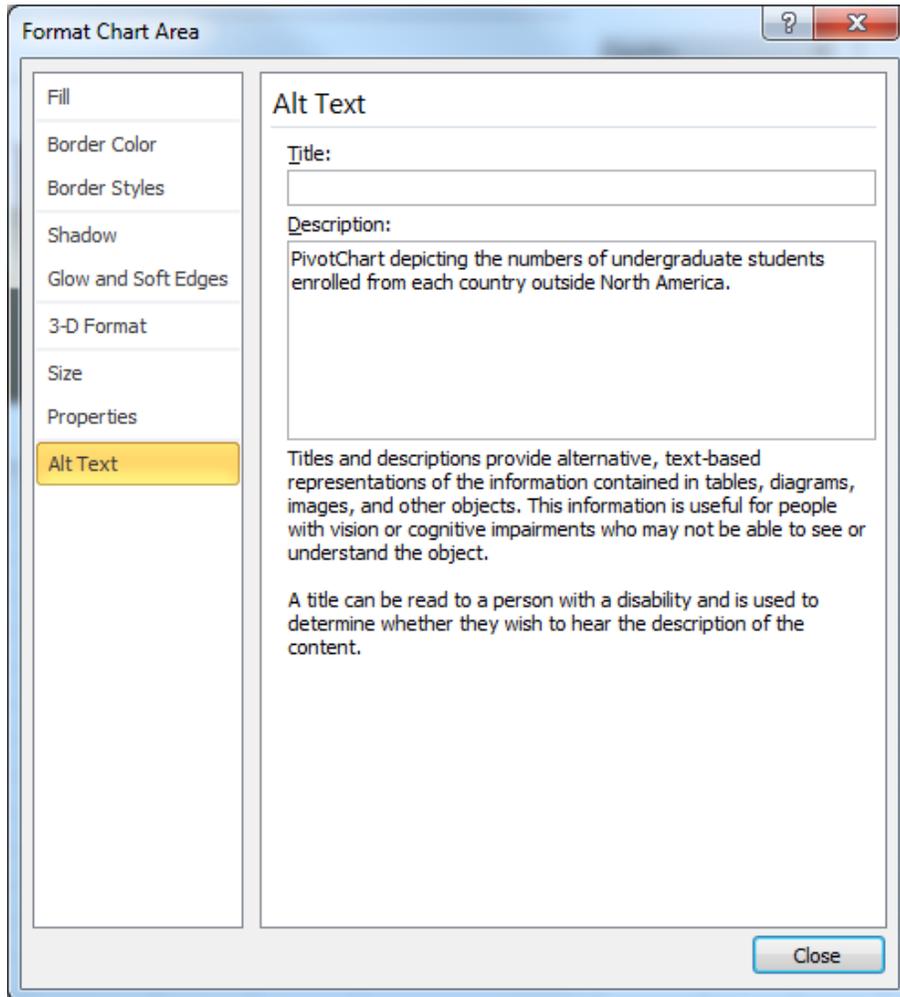
1. Right-click the object.
2. Select **Format [object]**.
3. Select **Alt Text**.
4. Type a description and, if necessary, a title.



Tip: Include the most important information in the first line, and be as concise as possible.

Add alt text to PivotCharts

1. Right-click a PivotChart.
2. Select **Format Chart Area**.
3. Select **Alt Text**.
4. Type a description and, if necessary, a title.



Tip: Include the most important information in the first line, and be as concise as possible.

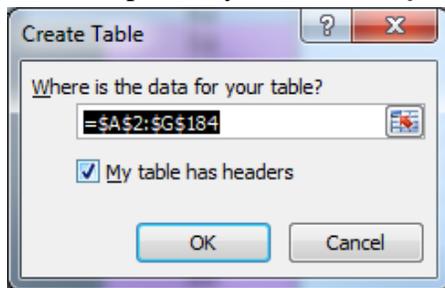
Add alt text to data tables

Excel allows you to pre-define a specified range as a table, which enables you to designate column headers (which repeat at the top of each page in the printout) and use various formatting and design tools for easier reading.

To create a table:

1. On the Insert ribbon, click **Table**.

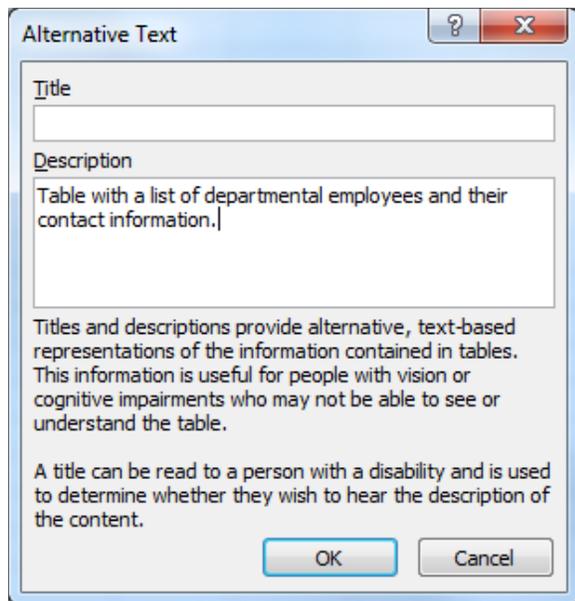
2. Select the range of cells defined by the table, whether or not the range already contains data.
3. Optionally check the **My table has headers** checkbox, and click **OK**.



If the checkbox is checked, and the top row of the range is empty, Excel adds generic headers: Column1, Column2, etc.

To add alt text to a table:

1. Right-click a table.
2. On the contextual menu, select **Table > Alternative Text**.
3. Type a description and, if necessary, a title.



Tip: Include the most important information in the first line, and be as concise as possible.

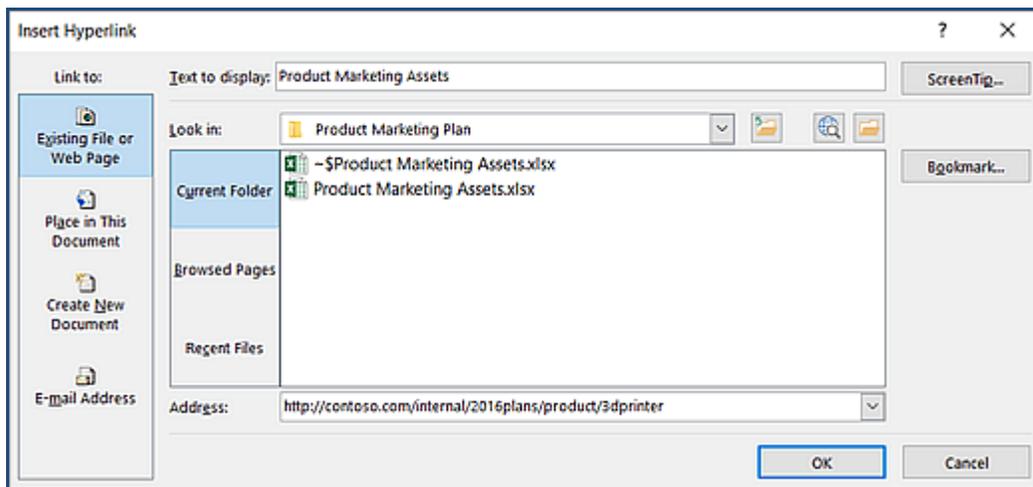
Make hyperlinks, tables, and sheet tabs accessible

The following procedures describe how to make the hyperlinks, tables, and sheet tabs in Excel spreadsheets accessible.

Add hyperlink text and ScreenTips

1. Right-click a cell.
2. Select Hyperlink.
3. In the **Text to display** box, type the hyperlink text.
4. In the **Address** box, type or paste the destination address for the hyperlink.
5. Select the **ScreenTip** button and, in the **ScreenTip text** box, type a ScreenTip.

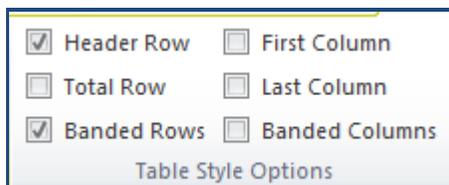
Tip: If the title on the hyperlink's destination page gives an accurate summary of what is on the page, simply use it for the text to display. For example, the hyperlink text in this link, [Templates and Themes for Office Online](#), matches the title on the destination page.



Use headers in an existing table

Specify a header row in a block of cells marked as a table.

1. Position the cursor anywhere in a table.
2. On the **Table Tools Design** ribbon, in the **Table Style Options** group, check the **Header Row** check box.
3. If necessary, type appropriate column headings in the top row.

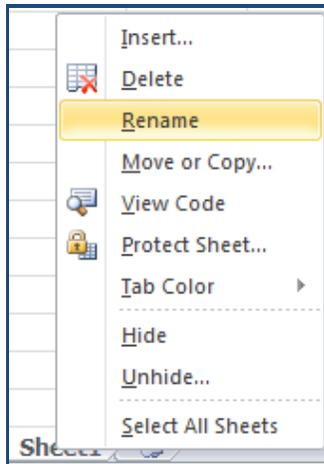


Tip: Keep header text simple. Excel has a set of rules about what characters can appear in the header row of a table. Header text should not be all numeric or dates. Column headers should not contain certain reserved characters, such as backslashes, asterisks, and square brackets (\ * []).

Rename sheet tabs

Worksheet tabs should designate what data appears on the sheets, rather than the generic **Sheet1**, **Sheet2**, etc. Names are limited to 31 characters, which may not include forward or backward slashes, square brackets, asterisks, colons, or question marks (/ \ [] * : ?)

1. Right-click a sheet tab, and select **Rename**.
2. Type a brief, unique name for the sheet.
3. Press Enter (Return).

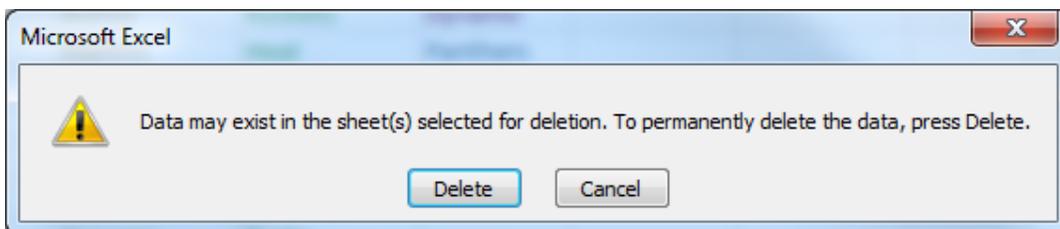


Delete or hide sheet tabs

Remove worksheets that you do not intend to use. You can also hide worksheets if necessary. See the menu illustrated above.

1. Right-click a sheet tab.
2. Select **Delete** or **Hide**.

When deleting a sheet, if the sheet contains no data or cell formatting, Excel *will not* prompt you for confirmation; otherwise, it will.



Use the **Unhide** command to select a sheet that you wish to bring out of hiding.

Acknowledgments

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