

Impress Guide 7.2

Chapter 7
OLE, Spreadsheets, Charts, and Other Objects

Copyright

This document is Copyright © 2021 by the LibreOffice Documentation Team. Contributors are listed below. This document maybe distributed and/or modified under the terms of either the GNU General Public License (https://www.gnu.org/licenses/gpl.html), version 3 or later, or the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), version 4.0 or later.

All trademarks within this guide belong to their legitimate owners.

Contributors

To this edition

Peter Schofield Rachel Kartch

To previous editions

Peter Schofield Samantha Hamilton Michele Zarri

T. Elliot Turner Jean Hollis Weber

Feedback

Please direct any comments or suggestions about this document to the Documentation Team's mailing list: documentation@global.libreoffice.org



Everything sent to a mailing list, including email addresses and any other personal information that is written in the message, is publicly archived and cannot be deleted.

Publication date and software version

Published November 2021. Based on LibreOffice 7.2.

Using LibreOffice on macOS

Some keystrokes and menu items are different on macOS from those used in Windows and Linux. The table below gives some common substitutions for the instructions in this document. For a detailed list, see the application Help.

Windows or Linux	macOS equivalent	Effect
Tools > Options menu selection	LibreOffice > Preferences	Access setup options
Right-click	Control+click or right-click depending on computer setup	Open a context menu
Ctrl (Control)	\mathbb{H} (Command)	Used with other keys
F11		Open the Styles deck in the Sidebar

Contents

Copyright	2
Contributors	2
Feedback	2
Publication date and software version	
Using LibreOffice on macOS	
•	
OLE objects	5
Inserting new OLE objects	5
Inserting OLE objects from files	6
Editing OLE objects	7
Resizing and moving OLE objects	7
Spreadsheets	
•	
Editing spreadsheetsCell navigation	
Entering data	
Merging cells	
Splitting cells	
Inserting cells	
Inserting rows	
Inserting columns	
Deleting cells	12
Deleting rows	
Deleting columns	
Quickly inserting sheets	
Insert Sheet dialog	
Insert sheet from file	
Renaming sheets	
Deleting sheets	
Formatting spreadsheets	
Cell data formatting	
Row formatting	
Column formatting	
Using formatting styles	
Charts	
Inserting charts	
Selecting chart types	
Chart Types dislar	
Chart Type dialog	
Sidebar Chart Type	
Formatting charts	
Entering chart data	
Adding or removing chart elements	
Resizing and moving charts	
Audio and video	
Inserting audio or video	
Using a file browser	25

Drawings, text files, HTML files and other objects	
Formulas	27
Media playback	26
Using the Gallery	25

OLE objects

Object Linking and Embedding (OLE) is a software technology that allows linking and embedding of the following types of files into an Impress presentation.

- LibreOffice spreadsheets
- LibreOffice charts
- LibreOffice drawings
- LibreOffice formulas
- LibreOffice text

The major benefit of using OLE objects is that it provides a quick and easy method of editing an object using tools from the software that created the object. These file types can all be created using LibreOffice and OLE objects can be created from new or from an existing file.

Inserting new OLE objects

When inserting a new OLE object, it is only available in the presentation it is being inserted into and the OLE object can only be edited using Impress.

- 1) Select the slide in a presentation to insert an OLE object.
- 2) Go to **Insert > Object > OLE Object** on the Menu bar to open the Insert OLE Object dialog (Figure 1).
- 3) Select Create new and then select the type of OLE object in Object Type.
- 4) Click **OK** and a new OLE object is inserted in the center of the slide in edit mode. The toolbars displayed change providing the necessary tools to create a new OLE object.

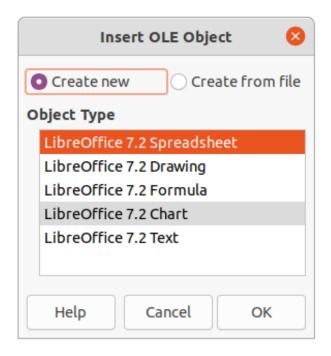


Figure 1: Insert OLE Object dialog for new objects

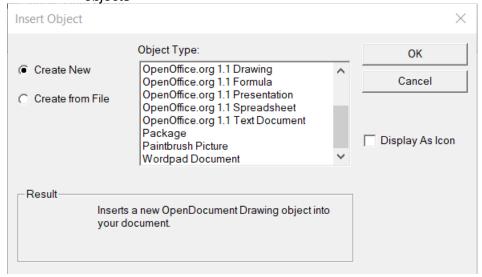


Figure 2: Insert OLE Object dialog for Windows Further Objects



For computers using the Windows operating system, an additional option of **Further objects** is available in the **Object Type** list. Clicking on **Further objects** opens an Insert Object dialog (Figure 2) allowing an OLE object using other software that is compatible with OLE and LibreOffice to be inserted. This option is available for new OLE objects and OLE objects from a file.

Inserting OLE objects from files

- 1) Select the slide in a presentation to insert an OLE object.
- Go to Insert > Object > OLE Object on the Menu bar to open the Insert OLE Object dialog.
- 3) Select **Create from file** and the dialog changes to a file search dialog (Figure 3).

- 4) Click on Search and a file browser window opens.
- 5) Navigate to where the file is located.
- 6) Select the file required and click Open. The filename appears in the **File** text box.
- 7) Insert the OLE object into the center of the slide in edit mode using one of the following methods:
 - Click **OK** to insert the file as an OLE object.
 - Select Link to file, then click OK to insert the OLE object with a link to the original file.
 - Select **Display as icon**, then click **OK** to insert the OLE object as an icon. When the icon is clicked on, the OLE object opens in a new window.



By default, when inserting a file into a slide as an OLE object, any changes made to the original file after insertion do not affect the copy of the file inserted into a presentation. Also, changes to the file copy in a presentation do not change the original file. If any changes made to the file, either in the original or in the presentation, are to appear in both versions the original file has to be linked with the presentation when the file is inserted.

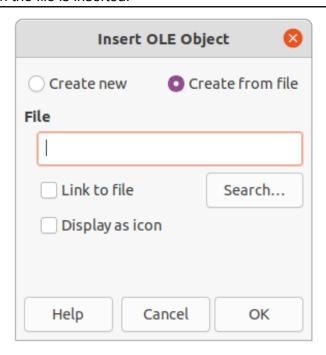


Figure 3: Insert OLE Object dialog when inserting from a file

Editing OLE objects

- 1) Double-click on the OLE object to open it in edit mode. The toolbars in Impress change to provide the necessary tools for editing the OLE object.
- 2) When editing the OLE object is complete, click anywhere outside the OLE object to exit editing.
- 3) Save the presentation. Any changes made to the OLE object are also saved.

Resizing and moving OLE objects

Resizing and moving OLE objects is exactly the same as resizing and moving graphic objects in Impress. For more information, see Chapter 5, Managing Graphic Objects.



When resizing or moving a spreadsheet in slides, ignore any horizontal and vertical scroll bars, and the first row and first column. The first row and first column are easily recognizable because of their light background color. They are only used for spreadsheet editing purposes and are not included in the spreadsheet that appears as an OLE object on the slide.



Do not double click on an OLE spreadsheet object when moving or resizing. Double clicking opens the OLE object editing mode for spreadsheets.

Spreadsheets

To include a spreadsheet in an Impress presentation, either insert an existing spreadsheet file or insert a new spreadsheet as an OLE object. For more information on spreadsheets, see the *Calc Guide* and the *Getting Started Guide*.

Embedding a spreadsheet into Impress includes most of the functionality of a Calc spreadsheet. Impress is capable of using Calc functions to carry out calculations and data analysis. However, if complex data or formulas are going to be used, it is recommended to perform those operations in a separate Calc spreadsheet first, then embed the spreadsheet into Impress with the results.

It is tempting to use spreadsheets in Impress for creating tables or presenting data in a tabular format. However, inserting a table into Impress is often more suitable and faster, depending on the complexity of the data. See Chapter 3, Adding and Formatting Text for more information on inserting and formatting tables.



The entire spreadsheet is inserted into a slide as an OLE object. If the spreadsheet contains more than one sheet and the one required is not visible, double-click the spreadsheet and then select a different sheet from the sheet tab row at the bottom. See "Editing OLE objects" on page 6 for more information on editing a spreadsheet as an OLE object.

Editing spreadsheets

When a spreadsheet is inserted into a slide, it is in edit mode ready for inserting or modifying data or modifying the format (Figure 4). The following also happens to provide tools and functions for spreadsheets:

- The Calc formula toolbar replaces the Line and Filling bar, as shown in Figure 4, with the following tools:
 - Name Box this gives the active cell reference or the name of a selected range of cells.
 - Function Wizard
 - Select Function
 - Formula.

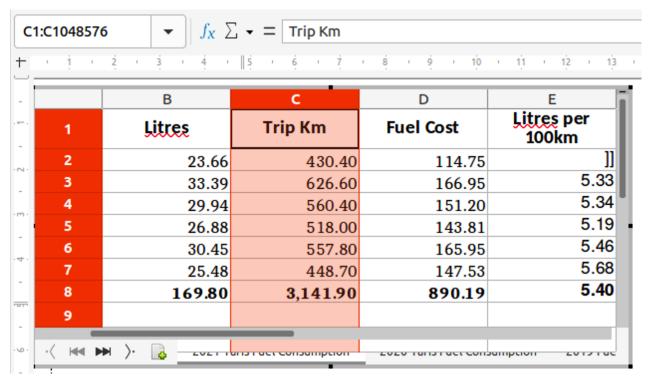


Figure 4: Example spreadsheet in Impress



Figure 5: Formatting toolbar for spreadsheets

- Input Line this is an edit box for entering data or reviewing the displayed contents
 of the active cell. If necessary, click on the small triangle ▼ on the right to expand the
 edit box and provide space for long functions requiring multiple lines.
- The Formatting toolbar (Figure 5) for spreadsheets opens providing tools required for basic formatting of a spreadsheet.
- The Menu bar changes to provide spreadsheet formatting options.

Cell navigation

By default, when an embedded spreadsheet is opened, the active cell is A1. To move around the spreadsheet to select a cell to make it active, use one of the following methods:

- Keyboard arrow keys.
- · Position the cursor in a cell and click.
- Press the Enter key to move one cell down and Shift+Enter combination to move one cell up.
- Press the Tab key to move one cell to the right and Shift+Tab combination to move one cell to the left.



Other keyboard shortcuts are available to navigate around a spreadsheet. Refer to Getting Started Guide for more information.

Entering data

Data input into a cell can only be done when a cell is active. An active cell is easily identified by a thickened and bolder border. The cell reference for the active cell is displayed in the Name Box at the left hand end of the Calc editing toolbar.

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Select a cell to make it active and start typing in the cell or in the **Input Line**. The data input displayed in the **Input Line** makes the data entry easier to read.
- 3) Use the various tools and options on the Menu bar to enter data, formula, function, text, or date into a cell.
- 4) To confirm data input into a cell use one of the following methods:
 - Select a different cell with the cursor.
 - Press the Enter key, or the Shift+Enter key combination.
 - Press the *Tab* key, or *Shift+Tab* key combination.
- 5) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.



Sometimes it is useful to treat numbers as text (for example, telephone numbers). To prevent Impress from removing the leading zeros or right aligning numbers in a cell, type a single quotation mark (') before entering a number as text.

Merging cells

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Highlight the required number of cells to be merged.
- 3) If there is no data in the cells being merged, use one of the following methods to merge cells:
 - Go to Format > Merge Cells > Merge and Center Cells on the Menu bar.
 - Go to Format > Merge Cells > Merge Cells on the Menu bar.
 - Right-click on the selected cells and select Merge Cells from the context menu.
- 4) If the selected cells for merging contain data, the Merge Cells dialog (Figure 6) automatically opens. Merge the selected cells as follows:
 - a) Use one of the methods in Step 3 to merge cells and open the Merge Cells dialog.
 - b) Select an option in the Merge Cells dialog.
 - c) Click **OK** to merge the cells and close the Merge Cells dialog.
- 5) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Splitting cells

Only multiple cells that have been merged can be split into separate cells.

1) Double-click on the embedded spreadsheet to open in edit mode.

- 2) Select a cell that was merged from multiple cells.
- 3) Split the merged cell into separate cells using one of the following methods:
 - Go to Format > Merge Cells > Split Cells on the Menu bar.
 - Right-click on the cell and select Split Cells from the context menu.

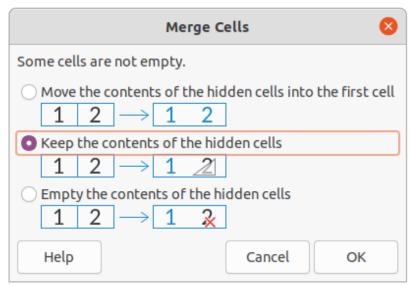


Figure 6: Merge Cells dialog

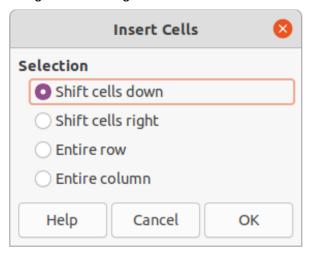


Figure 7: Insert Cells dialog

4) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Inserting cells

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Select the same number of cells on the embedded spreadsheet as are going to be inserted.
- 3) Insert cells using one of the following methods. Inserting cells opens the Insert Cells dialog (Figure 7).
 - Go to **Sheet > Insert Cells** on the Menu bar.
 - Right-click on the selected cells and select Insert from the context menu.
- 4) Select an insert option, then click **OK** to insert the cells and close the Insert Cells dialog.

5) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Inserting rows

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Select the same number of rows on the embedded spreadsheet as are going to be inserted.
- 3) Insert rows using one of the following methods:
 - Go to Sheet > Insert Rows > Rows Above or Sheet > Insert Rows > Rows Below on the Menu bar.
 - Right-click on the selected rows and select Insert Rows Above or Insert Rows
 Below from the context menu.
 - Open the Insert Cells dialog, as in "Inserting cells" above, and select Entire row to insert rows above the selected rows.
- 4) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Inserting columns

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Select the same number of columns on the embedded spreadsheet as are going to be inserted.
- 3) Insert columns using one of the following methods:
 - Go to Sheet > Insert Columns > Columns Before or Sheet > Insert Columns > Columns After on the Menu bar.
 - Right-click on the selected columns and select Insert Columns Before or Insert
 Columns After from the context menu.
 - Open the Insert Cells dialog, as in "Inserting cells" above, and select Entire column to insert columns to the left of the selected columns.
- 4) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Deleting cells

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Select the cells for deletion on the embedded spreadsheet.
- 3) Delete the selected cells using one of the following methods. Deleting cells opens the Delete Cells dialog (Figure 8).
 - Go to **Sheet > Delete Cells** on the Menu bar.
 - Right-click on the selected cells and select **Delete** from the context menu.
- 4) Select a delete option, then click **OK** to delete the cells and close the dialog.
- 5) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Deleting rows

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Select the rows for deletion on the embedded spreadsheet.
- 3) Delete the selected rows using one of the following methods:
 - Go to **Sheet > Delete Rows** on the Menu bar.

- Right-click on the selected rows and select **Delete Rows** from the context menu.
- Open the Delete Cells dialog, as in "Deleting cells" above, and select **Delete entire** row(s).
- 4) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Deleting columns

1) Double-click on the embedded spreadsheet to open in edit mode.

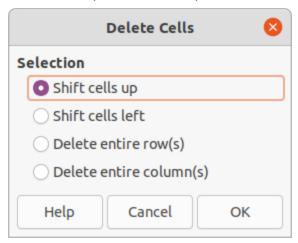


Figure 8: Delete Cells dialog

- 2) Select the columns for deletion on the embedded spreadsheet.
- 3) Delete the selected columns using one of the following methods:
 - Go to **Sheet > Delete Columns** on the Menu bar.
 - Right-click on the selected columns and select **Delete Columns** from the context menu.
 - Open the Delete Cells dialog, as in "Deleting cells" above, and select **Delete entire** column(s).
- 4) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Quickly inserting sheets

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Click on the plus sign to the left of the sheet names and a new sheet is added to the spreadsheet after the last sheet in the spreadsheet.
- 3) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.



If there are multiple sheets in an embedded spreadsheet, only the active sheet is shown on the slide after exiting edit mode.

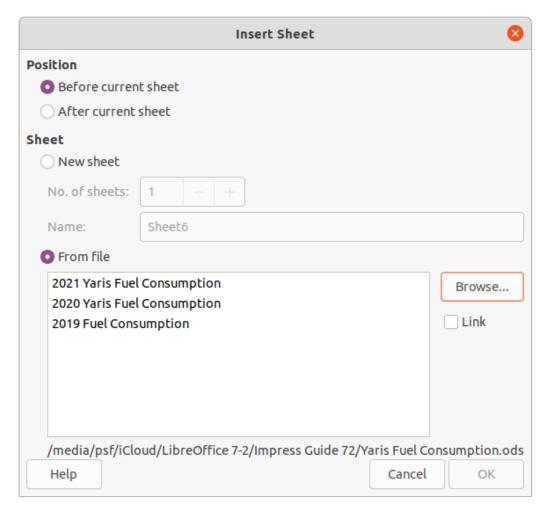


Figure 9: Insert Sheet dialog

Insert Sheet dialog

For more control over inserting sheets into an embedded spreadsheet, it is recommended to use the Insert Sheet dialog (Figure 9) as follows:

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Open the Insert Sheet dialog using one of the following methods:
 - Right-click on the sheet names and select Insert Sheet from the context menu.
 - Go to Sheet > Insert Sheet on the Menu bar.
- 3) In **Position** select one of the following options:
 - Before current sheet inserts sheets before the active sheet in the spreadsheet.
 - After current sheet inserts sheets after the active sheet in the spreadsheet.
- 4) In **Sheet** select *New sheet* and the *No. of sheets* required.
- 5) In the *Name* text box, enter a name for the new sheet. This option is not available if inserting multiple sheets.
- 6) Click **OK** to insert the sheet and close the Insert Sheet dialog.
- 7) When finished editing an embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Insert sheet from file

When inserting a sheet from a file, the Insert Sheet dialog has to be used.

- 1) Double-click on the embedded spreadsheet to open in edit mode.
- 2) Open the Insert Sheet dialog using one of the following methods:
 - Right-click on the sheet names and select Insert Sheet from the context menu.
 - Go to **Sheet > Insert Sheet** on the Menu bar.
- 3) In **Position** select one of the following options:
 - Before current sheet inserts sheets before the active sheet in the spreadsheet.
 - After current sheet inserts sheets after the active sheet in the spreadsheet.
- 4) In **Sheet**, select *From file* and click on **Browse** to open an Insert browser window.
- 5) Navigate to the file location and select the file.
- 6) Click on **Open** and the sheet names contained in the file appear in the preview box.
- 7) If necessary, click on **Link** to create a link to the original file.
- 8) Select the sheet required for insertion in the preview box.
- 9) Click **OK** to insert the selected sheet into the embedded spreadsheet and close the Insert Sheet dialog.
- 10) When finished editing an embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Renaming sheets

- 1) Double-click on the embedded spreadsheet to open it in edit mode.
- 2) Select the sheet for renaming to make it active.
- 3) Right-click on the sheet tab and select **Rename Sheet** from the context menu, or go to **Sheet > Rename Sheet** on the Menu bar.
- 4) Enter a new name for the sheet in the Rename Sheet dialog that opens.
- 5) Click **OK** to save the name change and close the Rename Sheet dialog.
- 6) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Moving or copying sheets

- 1) Double-click on the embedded spreadsheet to open it in edit mode.
- 2) Select the sheet for moving or copying to make it active.
- 3) Right-click on the sheet tab and select **Move or Copy Sheet** from the context menu, or go to **Sheet > Move or Copy Sheet** on the Menu bar to open the Move/Copy Sheet dialog (Figure 10).
- 4) Move or copy a sheet to another position within the embedded spreadsheet in the same presentation as follows:
 - a) In **Action**, select the *Move* option or *Copy* option.
 - b) In **Location**, select a destination from the options in the *To document* drop-down list. In Impress, the presentation is named as *Untitled 1 (current document)*.
 - c) In *Insert before*, select the position within the spreadsheet from the available list.
 - d) If necessary, enter a new name for the sheet in the **New name** text box.
 - e) Click **OK** to move or copy the sheet and close the Move/Copy sheet dialog.

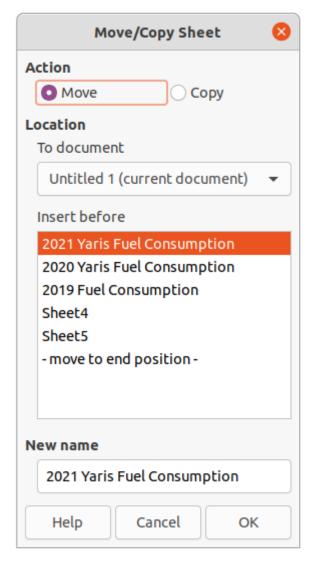


Figure 10: Move/Copy Sheet dialog



To move or copy a sheet from an embedded spreadsheet in an Impress presentation into another document, then the target document must be a Calc spreadsheet or a document that contains an embedded Calc spreadsheet.

- 5) Move or copy a sheet to another document containing a spreadsheet is as follows:
 - a) Make sure the spreadsheet in the target document is selected.
 - b) In **Action**, select the *Move* option or *Copy* option.
 - c) In **Location**, select a destination from the options in the *To document* drop-down list. In Impress, the presentation is named as Untitled 1 (current document). If the document is a Calc spreadsheet, the filename of the Calc spreadsheet is displayed.
 - d) In *Insert before*, select the position within the spreadsheet from the available list.
 - e) If necessary, enter a new name for the sheet in the **New name** text box.
 - f) Click **OK** to move or copy the sheet and close the Move/Copy sheet dialog.
- 6) To move the sheet within the embedded spreadsheet using a mouse, click on the sheet tab and drag the selected sheet to a new position.

7) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Deleting sheets

- 1) Double-click on the embedded spreadsheet to open it in edit mode.
- 2) Select the sheet for deletion to make it active.
- 3) Right-click on the sheet tab and select **Delete Sheet** from the context menu, or go to **Sheet > Delete Sheet** on the Menu bar.
- 4) Click **Yes** to confirm the deletion of the sheet.
- 5) When finished editing the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Formatting spreadsheets

For presentation purposes, it may be necessary to change the formatting of a spreadsheet to match the style used in the presentation.

When working on an embedded spreadsheet, any styles created in Calc are also available for use. However, if styles are going to be used, it is recommended to create specific styles for embedded spreadsheets. Calc styles maybe unsuitable when working in Impress.

Cell data formatting

- 1) Select a cell or a range of cells in an embedded spreadsheet using one of the following methods:
 - Click in a cell to select it.
 - To select the whole sheet, click on the blank cell at the top left corner between the row and column headers.
 - To select the whole sheet, use the keyboard shortcut Ctrl+A.
 - To select a column, click on the column header at the top of the spreadsheet.
 - To select a row, click on the row header on the left hand side of the spreadsheet.

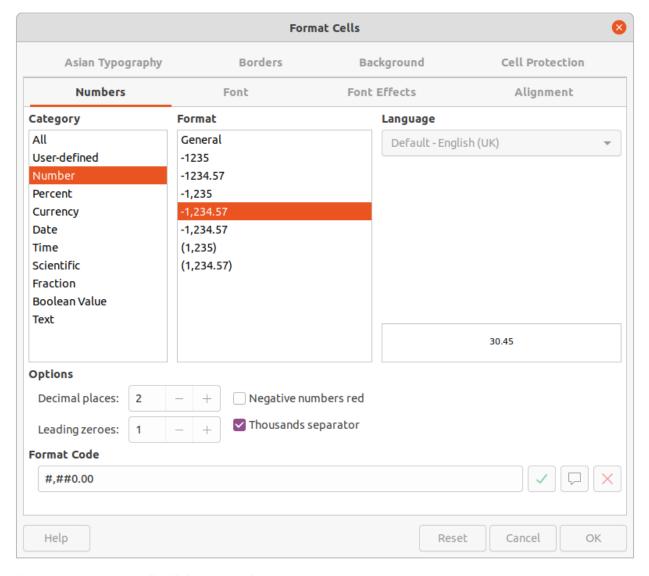


Figure 11: Format Cells dialog - Numbers page

- 2) Open the Format Cells dialog (Figure 11) using one of the following methods:
 - Right-click on a cell and select Format Cells from the context menu.
 - Go to **Format > Cells** on the Menu bar.
 - Use the keyboard shortcut Ctrl+1.
- Use the various pages in the Format Cells dialog to format the cell data so that it matches the style of the presentation.
- 4) Click **OK** to close the Format Cells dialog and save the formatting changes.
- 5) When finished formatting the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Row formatting

- 1) Select a row by clicking in the row header.
- 2) Adjust the row height using one of the following methods:
 - Right-click in the row header and select Row Height from the context menu to open the Row Height dialog and set the row height in the Height text box.
 - Right-click in the row header and select Row Height from the context menu to open the Row Height dialog and select Default value for row height.

- Right-click in the row header and select Optimal Height from the context menu to open the Optimal Height dialog. Enter an optimal height in the Add text box or select Default value. The optimal row height depends on the font size of the largest character in a row.
- Hover the cursor over the bottom border in the row header until it changes shape, then click and drag the border to increase or decrease the row height.
- 3) When finished formatting the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Column formatting

- 1) Select a column by clicking in the column header.
- 2) Adjust the column width using one of the following methods:
 - Right-click in the column header and select Column Width from the context menu to open the Column Width dialog and set the column width in the Width text box.
 - Right-click in the column header and select Column Width from the context menu to open the Column Width dialog and select the Default value for column width.
 - Right-click in the column header and select **Optimal Width** from the context menu to open the Optimal Column Width dialog. Enter an optimal width in the **Add** text box or select the **Default value**. The optimal column width depends on the longest entry within a column.
 - Hover the cursor over the left or right border in the column header until it changes shape, then click and drag the border to increase or decrease the column width.
- 3) When finished formatting the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Using formatting styles

When using styles in an embedded spreadsheet and the spreadsheet is in edit mode, Impress displays the available styles for a spreadsheet in the Styles deck on the Sidebar (Figure 12). Styles used in an embedded spreadsheet are similar to paragraph styles used in LibreOffice Writer.

- 1) Select the data in a cell or cells in the embedded spreadsheet.
- 2) Click on Styles to open the Styles deck in the Sidebar.

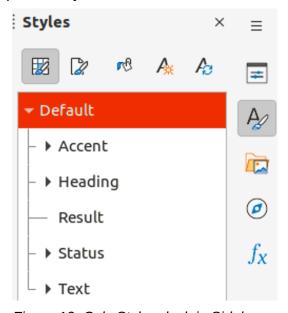


Figure 12: Calc Styles deck in Sidebar

- 3) Double-click on a style to apply that style to the cell data.
- 4) When finished formatting the embedded spreadsheet, click anywhere outside the border to exit edit mode and save the changes.

Charts

A chart is a graphical interpretation of information that is contained in a spreadsheet. For more information about charts and the use of charts, see the *Calc Guide*.

Inserting charts

- 1) Select a slide to insert a chart.
- 2) Use one of the following methods to insert a chart:
 - Go to Insert > Object > OLE Object on the Menu bar to insert a chart as an OLE object.
 - Go to Insert > Chart on the Menu bar and an example chart (Figure 13) is inserted at the center of the selected slide in editing mode.
 - Click on Chart on the Standard toolbar and an example chart is inserted in the center of the slide in editing mode.
- 3) If necessary, click outside the chart area to cancel editing mode.



When an embedded chart is in editing mode, the Formatting toolbar (Figure 14) for charts automatically opens replacing the Line and Filling and Standard toolbars.

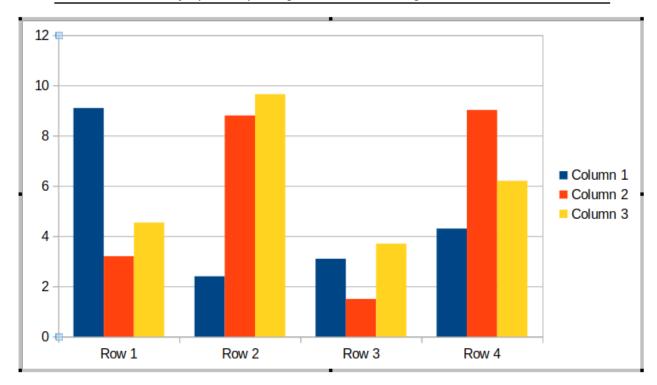


Figure 13: Example chart in editing mode



Figure 14: Formatting toolbar for charts

Selecting chart types

Data can be presented using a variety of different chart types. Impress contains several examples of chart types that will help to convey information to an audience. Select a chart type using the Chart Type dialog or the **Chart Type** panel in the Properties deck on the Sidebar.

Chart types

The following summary of available chart types to help selection of a chart type suitable for the data being used to create the chart. Column, bar, pie and area charts are available as 2D or 3D types. For more information on charts, see the *Calc Guide*.

- **Column** often used to display data that shows trends over time. This chart is the default chart type used when a chart is inserted into a slide. It is recommended to use column charts where there is a relatively small number of data points. If the data is a large time series, it is recommended to use a line chart.
- **Bar** give an immediate visual impact for data comparison where time is not important, for example comparing the popularity of products in a marketplace.
- **Pie** give a comparison of proportions. For example, when comparing what different departments spent on different items or what different departments actually spent overall. They work best with a small range of values, for example six or less. Using larger range of values, the visual impact of a pie chart begins to fade.
- Area are versions of line or column charts. They are useful when emphasis of volume change is required. Area charts have a greater visual impact than a line chart, but the type of data used does make a difference to the visual impact.
- **Line** are time series with progression. Ideal for raw data and useful for charts with data showing trends or changes over time where an emphasis in continuity is required. On line charts, the X-axis is ideal for representing time series data. 3D lines confuse the viewer, so just using a thicker line gives a better visual impact.
- XY (Scatter) are typically used for showing and comparing numeric values, like scientific, statistical, and engineering data. It combines x and y values into single data points and shows them in irregular intervals, or clusters. The X-axis usually plots the independent variable or control parameter (often a time series).
- **Bubble** are used to represent three variables. Two variables identify the position of the center of a bubble on a Cartesian graph, while the third variable indicates the radius of the bubble.
- Net are similar to polar or radar graphs and are useful for comparing data not in time series, but show different circumstances, such as variables in a scientific experiment. The poles of the net chart are the Y-axes of other charts. Generally, between three and eight axes are best; any more and this type of chart becomes confusing.
- Stock are specialized column graphs specifically used for stocks and shares. choose traditional lines, candlestick, and two-column charts. The data required for these charts is specialized with a series for opening price, closing price, and high and low prices. The X-axis represents a time series.
- Column and line are a combination of two other chart types. It is useful for combining
 two distinct, but related data series, for example sales over time (column) and the profit
 margin trends (line).

Chart Type dialog

1) Make sure the chart is selected and is in editing mode. The chart has a border and selection handles when in editing mode.

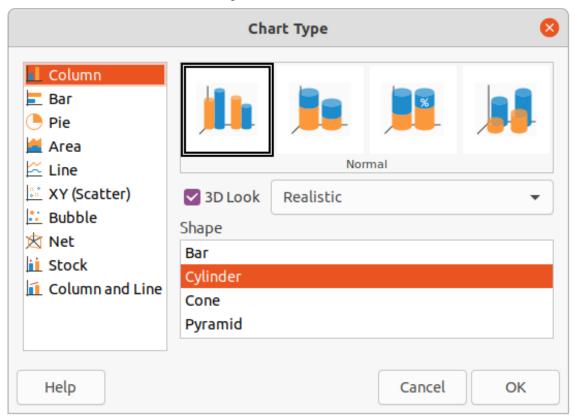


Figure 15: Chart Type dialog

- 2) Open the Chart Type dialog (Figure 15) using one of the following methods:
 - Click on Chart Type on the Formatting toolbar.
 - Go to Format > Chart Type on the Menu bar.
 - Right-click on the chart and select Chart Type from the context menu.
- 3) Select a chart type from the left-hand preview box and the chart examples on the right change. Also, the available options for chart types change to match the chart type.
- 4) Select a chart example from the right-hand preview box.
- 5) Select the options required for the chart type selected.
- 6) Click **OK** to close the Chart Type dialog and return to the edit window.
- 7) Continue to format the chart, add data to the chart, or click outside the chart to return to normal view.

Sidebar Chart Type

- 1) Make sure the chart is selected and is in editing mode. The chart has a border and selection handles when in editing mode.
- 2) Click on **Properties** on the Sidebar to open the Properties deck.
- 3) Click on the Chart Type title bar to open the **Chart Type** panel (Figure 16).
- 4) Select the chart type from the *Chart Type* drop-down list.
- 5) Select a chart example from the preview box.

- 6) Select the chart elements required for the chart type from the **Elements** panel on the Sidebar (Figure 17).
- 7) Continue to format the chart, add data to the chart, or click outside the chart to return to normal view.

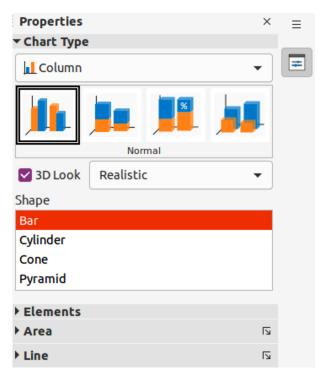


Figure 16: Chart Type panel in Properties deck on Sidebar

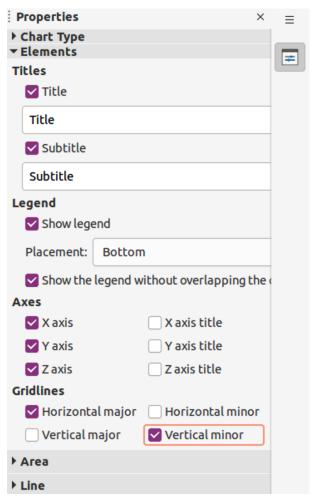


Figure 17: Elements panel in Properties deck on Sidebar

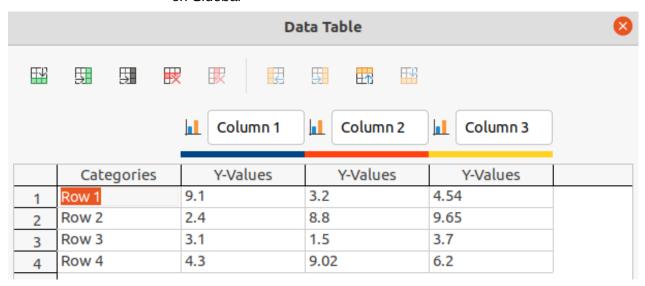


Figure 18: Data Table dialog

Formatting charts

Entering chart data

1) Make sure the chart is selected and is in editing mode. The chart has a border and selection handles when in editing mode.

- 2) Open the Data Table dialog (Figure 18) using one of the following methods:
 - Click on **Data Table** on the Formatting toolbar for charts.
 - Go to View > Data Table on the Menu bar.
 - Right-click on the chart and select **Data Table** from the context menu.
- 3) Type or paste information into the cells to enter data into the Data Table dialog.
- 4) Use the tools in the top of the Data Table dialog to insert, delete or reposition rows or columns.
- 5) Click on **Close** to save the changes and close the Data Table dialog.
- 6) Click outside the chart to return to normal view.



To insert, delete or reposition a column, use the tools **Insert Series**, **Delete Series**, **Move Series Left**, and **Move Series Right** in the Data Table dialog.

Adding or removing chart elements

- 1) Make sure the chart is selected and is in editing mode. The chart has a border and selection handles when in editing mode.
- 2) Add an element to the chart using one of the following methods:
 - Go to **Insert** on the Menu bar and select an element from the submenu.
 - Right-click directly on the chart and select an element from the context menu.
 - Right-click directly on the chart wall and select an element from the context menu
 - Open the Elements panel in the Properties deck on the Sidebar (Figure 19) and select an element from the options available.

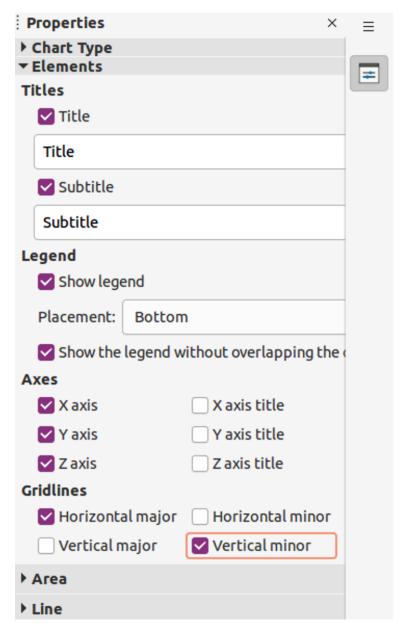


Figure 19: Elements panel in Properties deck on Sidebar



The method selected to add an element changes the type of element that can be added to the chart. Also, when adding some elements to the chart, a dialog may open with more options to select for the element being added.

- 3) Remove an element from a chart using one of the following methods:
 - Right-click on the chart element and select the delete option from the context menu.
 The type of element selected for removal changes the delete options in the context menu.
 - Select a chart element and press the *Delete* or *Backspace* key to remove the element from the chart.
 - Open the **Elements** panel in the Properties deck on the Sidebar and deselect the element.
- 4) Click outside the chart to return to normal view.

Chart and chart elements formatting

For more information on formatting a chart, chart elements, and the formatting options available, see the *Calc Guide*.

- 1) Make sure the chart is selected and is in editing mode. The chart has a border and selection handles when in editing mode.
- 2) Format an element on the chart using one of the following methods:
 - Go to Format on the Menu bar and select an element for formatting.
 - Right-click on an element and select Format XXXX from the context menu. The
 format options available depend on which chart element has been selected. For
 example, select the chart wall and the format option is called Format Chart Wall.
 - Use the various tools on the Formatting toolbar for charts to format a chart element.
- 3) Select an element and open a formatting dialog specific for the element selected.
- 4) Use the various options in the formatting dialog to format the element.

Resizing and moving charts

A chart and its chart elements can be resized and moved just like other objects on a slide. For more information on resizing and moving a chart, see Chapter 5, Managing Graphic Objects and the *Calc Guide*.

Audio and video

Inserting audio or video

Using a file browser

- 1) Go to **Insert > Audio or Video** on the Menu bar and a file browser for Insert Audio or Video opens (Figure 20).
- 2) Navigate to the folder where the audio or video file is located. Only the audio and video files that are compatible with Impress will be highlighted in the file browser.
- 3) Select a compatible audio or video file and click **Open** to embed the file in the center of the slide. The Media Playback toolbar (Figure 21) automatically opens.
- 4) Reposition and/or resize the audio or video file. See Chapter 5, Managing Graphic Objects for more information.

Using the Gallery

- If the Gallery deck is not already open, use one of the following methods to open the Gallery deck:
 - Go to View > Sidebar on the Menu bar to open the Sidebar and select Gallery from the options available.
 - Use the keyboard shortcut Ctrl+F5 to open the Sidebar and select Gallery from the options available.
 - Go to View > Gallery on the Menu bar.
- 2) Browse to a theme containing media files, for example **Sounds**.
- 3) Click on the audio or video option required and drag it onto the slide. The Media Playback toolbar automatically opens.
- 4) Reposition and/or resize the audio or video file. See Chapter 5, Managing Graphic Objects for more information.

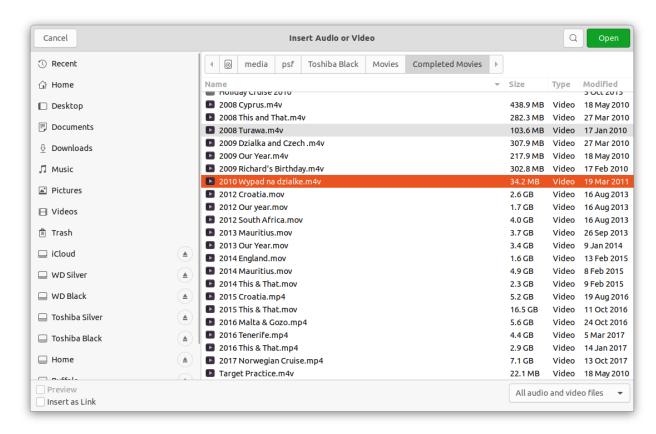


Figure 20: Example of Insert Audio or Video file browser



Figure 21: Media Playback toolbar

Media playback

The Media Playback toolbar automatically opens when an audio or video file is selected. The Media Playback toolbar contains the following tools from left to right:

- Insert Audio or Video opens the Insert Audio or Video file browser where a media file is selected for insertion into a slide.
- Play plays the media playback.
- Pause pauses the playing of the media.
- Stop stops the playing of media.
- Repeat if selected, repeats the playing of the media until the tool is deselected.
- Position selects the position of where to start playing from within the media file.
- Mute suppresses the volume of a media file.
- Volume adjusts the volume of the media file.
- Media Path indicates where the media file is stored on a computer

Formulas

Go to **Insert > Object > Formula Object** on the Menu bar to create a formula in a slide. A formula can also be inserted as an OLE object; see "OLE objects" on page 4 for more information.

When editing a formula, the Math menu becomes available allowing the creation or editing of a formula. For more information on how to create formulas, see the *Math Guide* or the *Getting Started Guide*.

When creating formulas, care should be taken with font sizes to make sure formulas are similar in size to the font used in the presentation. To change font attributes of a formula, go to **Format > Font Size** on the Menu bar. To change font type, go to **Format > Fonts** on the Menu bar.



Unlike formulas in Writer, a formula in Impress is treated as an object and is not automatically aligned with the rest of the objects on the slide. The formula can be moved around like other objects in Impress, but cannot be resized.

Drawings, text files, HTML files and other objects

Drawings, text files, HTML files and other objects can be inserted into an Impress presentation, but only objects that are compatible with Impress can be inserted. Go to **Insert > File** on the Menu bar to open a file selection dialog. Only files compatible with Impress are available for selection. Drawings, text files, HTML files and other objects can also be inserted as OLE objects; see "OLE objects" on page 4 for more information.