# INSERTING CHARTS AND OTHER OLE OBJECTS





## **Learning Content**

- Inserting OLE Objects
- Chart
- Using media files
- Formulas



## **OLE objects**

Object Linking and Embedding (OLE) is a software technology that allows embedding and linking of the following types of files or documents 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 the object using tools from the software used to create 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 you insert a new OLE object into your presentation, it is only available in your presentation and can only be edited using Impress.

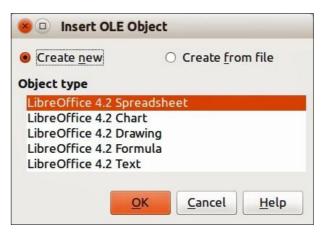


Figure 139: Inserting a new OLE object

To add a new OLE object into your presentation:

- 1) Go to the slide where you want to insert the OLE object.
- 2) Select Insert > Object > OLE Object from the main menu bar.
- 3) On the Insert OLE Object dialog (Figure 139), select Create new.
- 4) Select the type of OLE object you want to create and click **OK**.
- 5) A new OLE object is inserted in the center of the slide in edit mode. The toolbars displayed in Impress will change providing the necessary tools for you to create the new OLE object.

Note

For computers operating Microsoft Windows there is an additional option of **Further objects** in the *Object type* list. Clicking on this option opens another Insert Object dialog allowing you to create an OLE object using other software that is compatible with OLE and LibreOffice. This option is available for new OLE objects and OLE objects from a file.

#### **Inserting OLE objects from files**

When you insert an existing file into your slide as an OLE object, by default any subsequent changes that are made to the original file do not affect the copy of the file inserted into your presentation. Similarly, changes to the file copy in your presentation do not change the original file. If you want any changes made to the file, either in the original or in your presentation, to appear in both versions you have to link the original file with your presentation when it is inserted.

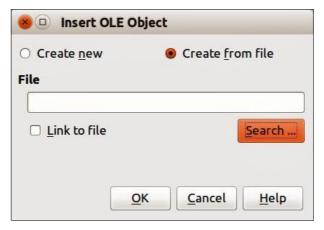


Figure 140: Inserting an OLE object from file

To insert a file into your presentation as an OLE object:

- 1) Go to the slide where you want to insert the spreadsheet.
- 2) Choose Insert > Object > OLE Object from the menu bar.
- 3) On the Insert OLE Object dialog, select **Create from file**. The dialog changes to show a File text box (Figure 140).
- 4) Click **Search** and the Open dialog is displayed.
- 5) Locate the file you want to insert and click **Open**.
- 6) Select the **Link to file** option if you wish to insert the file as a live link so that anychanges made are synchronized in both the original file and your presentation.
- 7) Click **OK** to insert the file as an OLE object.

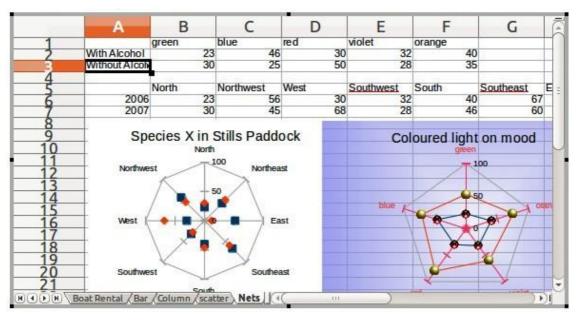


Figure 141: Example OLE object in edit mode

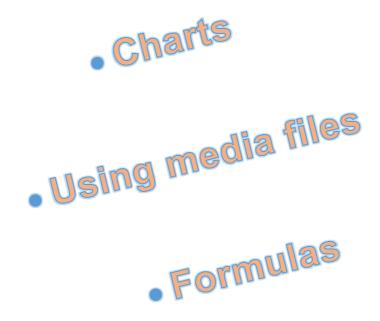
## **Editing OLE objects**

To edit an OLE object after it has been created or inserted from a file:

- 1) Double-click on the OLE object to open it in edit mode (Figure 141). The toolbars displayed in Impress will change to provide the tools necessary to edit the OLE object (Figure 142).
- 2) When finished editing the OLE object, click anywhere outside the OLE object tocancel editing.
- 3) Save your presentation. Any changes made to the OLE object are also saved.



Figure 142: Example toolbars for OLE object editing



#### **Charts**

A chart is a graphical interpretation of information that is contained in a spreadsheet. More information about charts and the use of charts is described the *Calc Guide Chapter 3 Creating Charts and Graphs*.

## **Inserting charts**

You can insert a chart to your presentation as an OLE object or using the tools within Impress. See "OLE objects" on page 170 for more information on how to insert a chart as an OLE object.

To insert a chart using Impress tools:

1) Go to **Insert > Slide** on the main menu bar, or right-click on the Workspace and select **Slide > New Slide** from the context menu, or right-click on the Slides pane and select **New Slide** from the context menu to insert a new slide into your presentation.

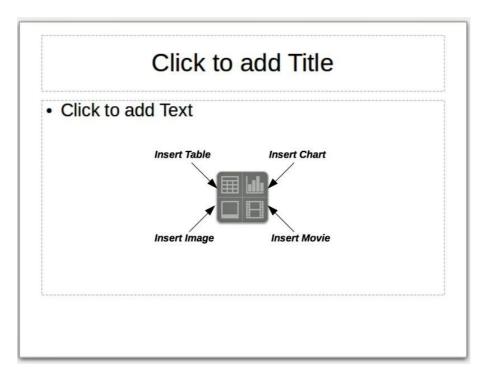


Figure 146: Inserting objects into a slide

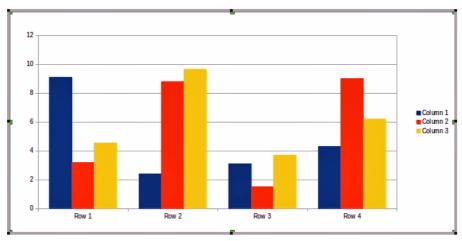


Figure 147: Chart with sample data

2) Select the **Insert Chart** icon on the new slide (Figure 146), or use **Insert > Chart** on the main menu bar, or click the **Chart** icon on the Standard toolbar and a sample chart is inserted into the slide containing sample data (Figure 147). To change chart type, see "Selecting chart type" below and to enter data into the chart, see "Entering chart data" on page 181.

## Selecting chart type

Your data can be presented using a variety of different charts. Impress contains several chart types that will help you convey your message to your audience. See "Chart types" on page 180 for an explanation of the different chart types available.

1) Make sure that your chart is selected. The chart has a border and selection handles when selected.

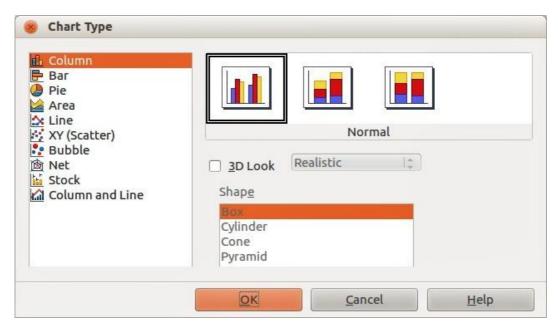


Figure 148: Chart Type dialog showing two-dimensional charts

- 2) Click the **Chart Type** icon on the Formatting toolbar or go to **Format** > **Chart Type** on the main menu bar, or right-click on the chart and select **Chart Type** from the context menu to open Chart Type dialog (Figure 148).
- 3) As you change selections in the left-hand list, the chart examples on the right change. If you move the Chart Type dialog to one side, you can see the effect in your chart.
- 4) As you change chart types, other selections become available on the right-hand side. For example, some chart types have both 3D and 2D variants. When 3D charts are selected, more options become available for selection of shapes for the columns or bars.
- 5) Choose the chart characteristics you want and click **OK**. The ChartType dialog closes and you return to the edit window.
- 6) Continue to format the chart, add data to the chart, or click outside the chart to return to normal view.

## **Chart types**

The following summary of the chart types available will help you choose a type suitable for your data. Column, bar, pie and area charts are available as 2D or 3D types. For more information on charts, see the *Calc Guide Chapter 3 Creating Charts and Graphs*.

#### Column charts

Column charts displays data that shows trends over time and this the default type of chart used when a chart is inserted into your slide. It is recommended to use column charts where there is a relatively small number of data points. If you have a large time series as your data, it is recommended to use a line chart.

#### Bar charts

Bar charts give an immediate visual impact for data comparison where time is not important, for example comparing the popularity of products in a marketplace.

#### Pie charts

Pie charts 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 charts

Area charts are versions of line or column charts. They are useful when you want to emphasize volume of change. Area charts have a greater visual impact than a line chart, but the type of data you use does make a difference to the visual impact.

#### Line charts

Line charts are time series with progression. Ideal for raw data and useful for charts with data showing trends or changes over time where you want to emphasize continuity. 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.

#### Scatter or XY charts

Scatter charts are great for visualizing data that you have not had time to analyze and may be best for data where you have a constant value for comparison: for example weather data, reactions under different acidity levels, conditions at altitude, or any data which matches two numeric series. The X-axis usually plots the independent variable or control parameter (often a time series).

#### **Bubble charts**

Bubble charts 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 charts

Net charts 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 charts

Stock charts are specialized column graphs specifically used for stocks and shares. You can 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 charts

Column and line charts 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).

## **Entering chart data**

- 1) Make sure that your chart is selected and you have selected your chart type.
- 2) Click on the **Chart Data Table** icon , or select **View** > **Chart Data Table**, or right-click on the chart and select **Chart Data Table** from the context menu to open the Data Table dialog (Figure 149).
- 3) Type or paste information into the cells within the desired rows and columns to enter data into the Data Table dialog. You can also use the icons in the top left corner of the Data Table dialog to insert, delete or move data.

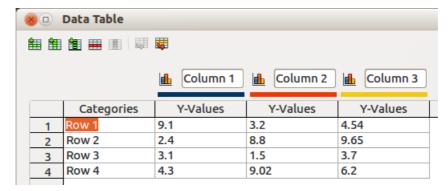


Figure 149: Chart Data Table dialog

## Adding or removing chart elements

The specimen chart inserted into a slide only includes two elements: a chart wall and a chart legend (also known as the key). You can add or remove elements to or from a chart as follows:

- 1) Make sure the chart is selected and in edit mode.
- 2) Go to **Insert** on the main menu bar and select from the submenu an element that youwant to add to the chart, or right-click on the chart wall or a chart element and select an element you want to add from the context menu. Selecting an element opens a dialog where you can specify options for the element.

Note

Right-clicking on a chart element will give you more options to choose from when adding elements to your chart. The number of available insert options in the context menu depends on the type of element selected.

- 3) To remove an element from a chart, right-click on the chart element you want to remove and select the Delete option from the context menu. The type of element selected for removal will change the delete options in the context menu.
- 4) Select a chart element and press the *Del* or *Backspace* ( $\leftarrow$ ) key to remove it from your chart.

## **Chart formatting**

To change the format of a selected chart:

- 1) Make sure the chart is selected and in edit mode.
- 2) Go to **Format** on the main menu bar and select from the submenu an element that you want to format, or right-click on a chart element and select a format option from the context menu. Selecting an element opens a dialog where you can specify format options for the element.

The formatting options available depend on whether the whole chart is selected or which chart element has been selected. For more information on chart formatting, see the *Calc Guide Chapter 3 Creating Charts and Graphs*.

## Resizing and moving charts

You can resize or move a chart interactively or by using the Position and Size dialog. You can also use a combination of both methods.

#### Resizing

To resize a chart interactively:

- 1) Click on a chart to select it and selection handles appear around the chart.
- 2) To increase or decrease the height of a chart, click and drag on a selection handle at the top or bottom of the chart.
- 3) To increase or decrease the width of a chart, click and drag on a selection handle at the left or right of the chart.
- 4) To increase or decrease both the height and width of a chart at the same time, click and drag on a selection handle in one of the corners of the chart. To maintain the correct aspect ratio between height and width, hold the *Shift* key down while you click and drag.

#### Moving

To move a chart interactively:

- 1) Click on the chart to select it and selection handles appear around the chart.
- 2) Move the cursor anywhere on the chart other than on a selection handle.
- 3) When it changes shape, click and drag the chart to its newlocation.
- 4) Release the mouse button when the chart is in the desired position.

#### Position and Size dialog

To resize or move a chart using the Position and Size dialog box:

- 1) Click on the chart to select it and selection handles appear around the chart.
- 2) Go to **Format > Position and Size** on the menu bar, or right-click on the chart and select **Position and Size** from the context menu, or press *F4* key to open the Position and Size dialog (Figure 150). For more information on the Position and Size dialog and how touse, see *Chapter 6 Formatting Graphic Objects*.

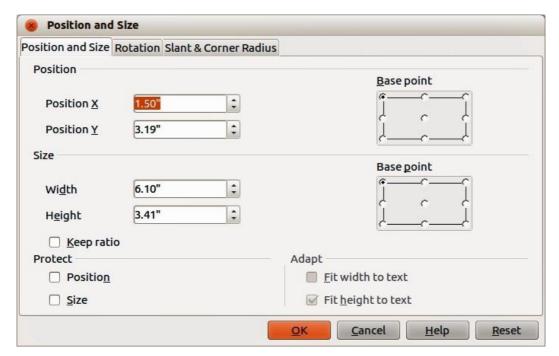


Figure 150: Position and Size dialog

#### Chart elements

You can move or resize individual elements of a chart element independently of other chart elements. For example, you can move the chart legend to a different position. Pie charts allow individual wedges of the pie to be moved as well as "exploding" the entire pie.

- 1) Double-click the chart so that it is in edit mode.
- 2) Click any chart element to select it. Selection handles appear.
- 3) Move the cursor over the selected element and when the cursor changes shape, clickand drag to move the element.
- 4) Release the mouse button when the element is in the desired position.

Note

If your chart is 3D, round selection handles appear; these control the three- dimensional angle of the chart. You cannot resize or reposition the chart while the round selection handles are showing. *Shift + Click* to get back to the square resizing handles. You can now resize and reposition your 3D chart.

## **Changing chart area background**

The chart area is the area surrounding the chart graphic and includes the (optional) main title and key.

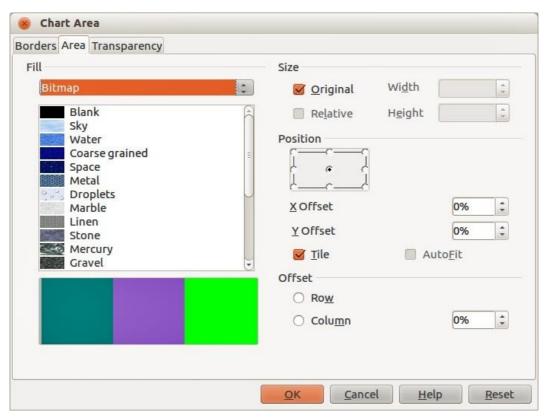


Figure 151: Chart Area dialog

- 1) Double-click the chart so that it is in edit mode.
- 2) Go to **Format > Format Selection** on the main menu bar, or right-click in the chart area and select **Format Chart Area**, or double-click in the chart area to open the **Chart Area** dialog (Figure 151).
- 3) Click on the **Area** tab to open the page containing the area options.

- 4) Select from the **Fill** drop down list the type of background fill you want to use. The available options will change depending on the type of fill selected.
- 5) Click **OK** to close the dialog and save your changes.

## **Changing chart wall background**

The chart wall is the area that contains the chart graphic.

- 1) Double-click the chart so that it is in edit mode.
- 2) Select **Format > Format Selection** on the main menu bar, or right-click in the chart wall and select **Format Wall**, or double-click in the chart wall to open the **Chart Wall**dialog.
- 3) Select the **Area** tab from the dialog that opens. This dialog has the same formatting options as described in "Changing chart area background" above.
- 4) Click **OK** to close the dialog and save your changes.

## Movies and sound

## **Using media files**

To insert a media file into your presentation:

- 1) Click the **Insert Movie** icon on the slide layout (Figure 146) or go to **Insert > Movie and Sound** on the menu bar to open the **Insert Movie and Sound** dialog (Figure 152).
- 2) Select the media file to insert and click **Open** to place the object on the slide.



Figure 152: Insert Movie and Sound dialog

Note

Any media file will start playing as soon as the slide is shown during the presentation.

Tip

To see a list of audio and video file types supported by Impress, open the drop-down list of file types. This list defaults to *All movie and sound files*, enabling you to choose unsupported files such as .MOV.

Impress only links media files and does not embed a media file into a presentation. Therefore if a presentation is moved to a different computer, any links will be broken and the media files will not play. To prevent this from happening:

- 1) Place any media files which are included in a presentation in the same folder where the presentation is stored.
- 2) Insert the media file in the presentation.
- 3) Send both the presentation and any media files to the computer which is to be used for the presentation and place both files in the same folder on that computer.

## **Using the Gallery**

To insert media clips directly from the Gallery:

- 1) If the Gallery is not already open, choose **Tools > Gallery** from the menu bar.
- 2) Browse to a theme containing media files (for example Sounds).
- 3) Click on the movie or sound to be inserted and drag it into the slide area.

## Media playback

The Media Playback toolbar (Figure 153) is automatically opened when a media file is selected. The default position of the toolbar is at the bottom of the screen, just above the Drawing toolbar. However, this toolbar can be undocked from its fixed position and allowed to float on screen. If the toolbar does not open, go to **View > Toolbars > Media Playback** on the main menu bar.



Figure 153: Media playback toolbar

The Media Playback toolbar contains the following tools from left to right:

- Movie and Sound opens the Insert Movie and Sound dialog where you can select a media file to be inserted.
- Play, Pause, Stop controls media playback.
- Repeat if selected, media will continuously repeat playing until this tool isde-selected.
- Playback slider selects the position to start playing from within the media file.
- Timer displays current position of the media clip and length of media file.
- Mute when selected, the sound will be suppressed.
- Volume slider adjusts the volume of the media file.
- Scaling drop-down menu only available for movies and allows scaling of the movieclip.

## Media player

Impress also has a media player so that you can preview any media files that are to be inserted into a presentation. To open it select **Tools > Media Player** on the main menu bar and its tools are the same as that of the Media Playback toolbar (Figure 153).

#### **Formulas**

Go to **Insert > Object > Formula** on the main menu bar to create a formula (Math object) in a slide. A formula can also be inserted as an OLE object; see "OLE objects" on page 170 for more information.

When editing a formula, the Math menu becomes available allowing you to create or edit a formula.

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

For information on how to create formulas, see the *Getting Started Guide Chapter 9 Getting Started with Math* or the *Math Guide*.

Note

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

## Drawings, text files, HTML files and other objects

You can insert into a presentation drawings, text files, HTML files and other objects, but only if these objects are compatible for insertion into an Impress presentation.

Go to **Insert > File** on the main menu bar to open a file selection dialog. Only files compatible with Impress will be available for selection.

Drawings, text files, HTML files and other objects can also be inserted as OLE objects; see "OLE objects" on page 170 for more information.

Note

For computers operating Microsoft Windows there is an additional option of **Further objects**. Clicking on this option opens an Insert Object dialog allowing you to create an OLE object using software that is compatible with OLE standards.

**Source:** - Ref 8. Libre Office Impress Guide Version 4.2

 $\underline{https://documentation.libreoffice.org/assets/Uploads/Documentation/en/IG4.2/IG42ImpressGuide.pdf}$