



Draw Guide

Chapter 4, Changing Object Attributes

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Contributors

To this edition.

Peter Schofield

Elzett Kotze

Jean Hollis Weber

To previous editions.

Martin Fox

Jean Hollis Weber

John A Smith

Hazel Russman

John Cleland

Peter Schofield

Claire Wood

Feedback

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

Note

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

Publication date and software version

Published July 2021. Based on LibreOffice 7.1 Community. Other versions of LibreOffice may differ in appearance and functionality.

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.

<i>Windows or Linux</i>	<i>macOS equivalent</i>	<i>Effect</i>
Tools > Options menu selection	LibreOffice > Preferences	Access setup options
Right-click	<i>Control</i> +click and/or right-click depending on computer setup	Open a context menu
<i>Ctrl</i> (Control)	⌘ (Command)	Used with other keys
<i>F11</i>	⌘+T	Open the Styles deck in the Sidebar

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Formatting lines

In LibreOffice the term *Line* indicates a freestanding segment (line), the outer edge of a shape (border), or an arrow. In most cases, the properties of the line that can be modified are its style (solid, dashed, invisible, and so on), its width, its color and the type of arrowhead.

Tip

Hovering the cursor over a tool icon on a toolbar or in the Sidebar, a pop up displays the name of the tool.

Note

For more information on using color when formatting lines, line styles, arrows, and arrow styles, see “Working with area fills” on page 18.

Line and Filling toolbar

Format a line using the Line and Filling toolbar (Figure 1) as follows:

- 1) Make sure the line is selected in a drawing.
- 2) Select the line style required from the **Line Style** drop-down list.
- 3) Either type the line width in the **Line Width** text box, or use the up and down arrows to change the line width.
- 4) Click on the small triangle ▼ to the right of **Line Color** and select a color from one of the available color palettes.
- 5) Click on the small triangle ▼ to the right of **Line Style** and select a line style from one of the options in the drop-down list.

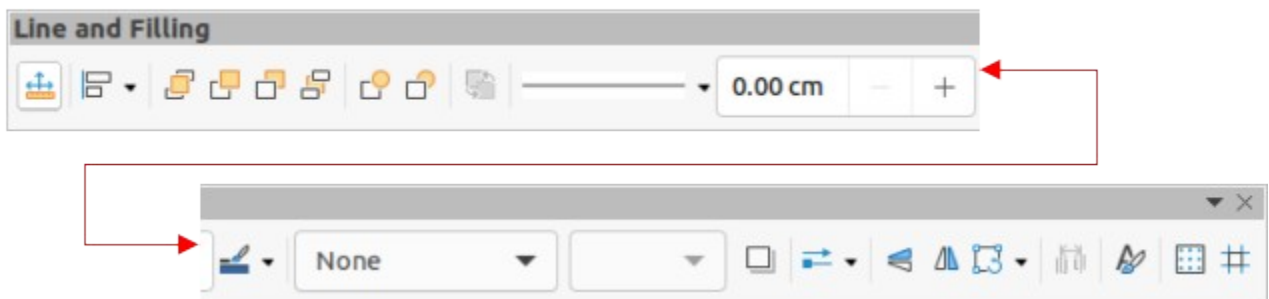


Figure 1: Line and Filling toolbar

Sidebar

Format a line using the *Line* section in the Properties deck on the Sidebar (Figure 2) as follows:

- 1) Make sure the line is selected in a drawing.
- 2) Click on **Properties** on the Sidebar to open the Properties deck.
- 3) Click on the down arrowhead ▼ on the left of the *Line* title bar to open the *Line* section.
- 4) In *Line*, select from the **Arrow Style** drop-down lists the type of arrowhead for each end of the line and change the line into an arrow. The left drop-down list adds an arrowhead to the beginning of the line. The right drop-down list adds an arrowhead to the end of the line.

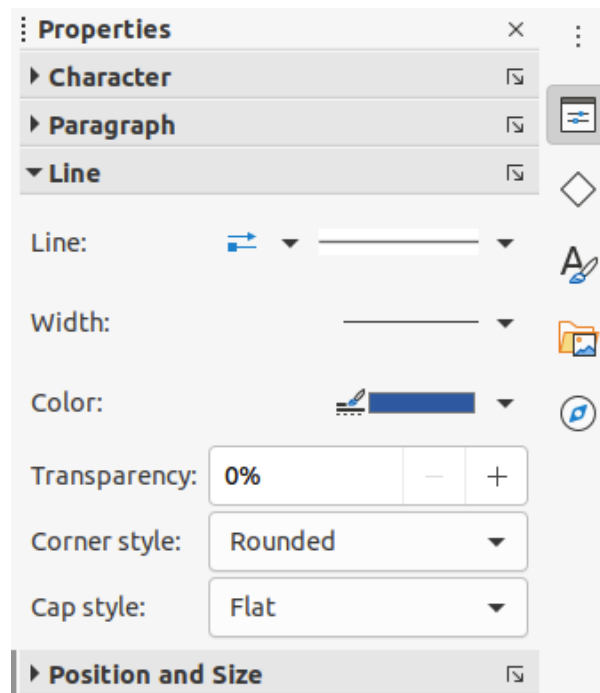


Figure 2: Line section in Properties deck on Sidebar

- 5) In *Line*, select the type of line required from the **Line Style** drop-down list.
- 6) In *Width*, select the line width from the **Width** drop-down list or enter a width in the **Custom Line Width** text box.
- 7) In *Color*, click on the small triangle ▼ to the right of **Line Color** and select a color from one of the available color palettes.
- 8) In *Transparency*, enter a percentage for the amount of transparency for the line.
- 9) In *Corner style*, select a corner style from the drop-down list.
- 10) In *Cap style*, select a cap style from the drop-down list.

Line dialog

To fully change the appearance of a line, use the Line dialog.

- 1) Select the line in a drawing and open the Line dialog (Figure 3) using one of the following methods:
 - Go to **Format > Line** on the Menu bar.
 - Right-click on the line and select **Line** from the context menu.
 - Click on **More Options** on the right of the *Line* section title on the Sidebar.
- 2) Use the options available in the pages of the Line dialog to format the line. The pages are **Line**, **Shadow**, **Line Styles** and **Arrow Styles**. The options are explained in the following sections. The preview box at the bottom of the dialog shows the effect of the changes on a line.
- 3) Click **OK** to save the changes and close the dialog.

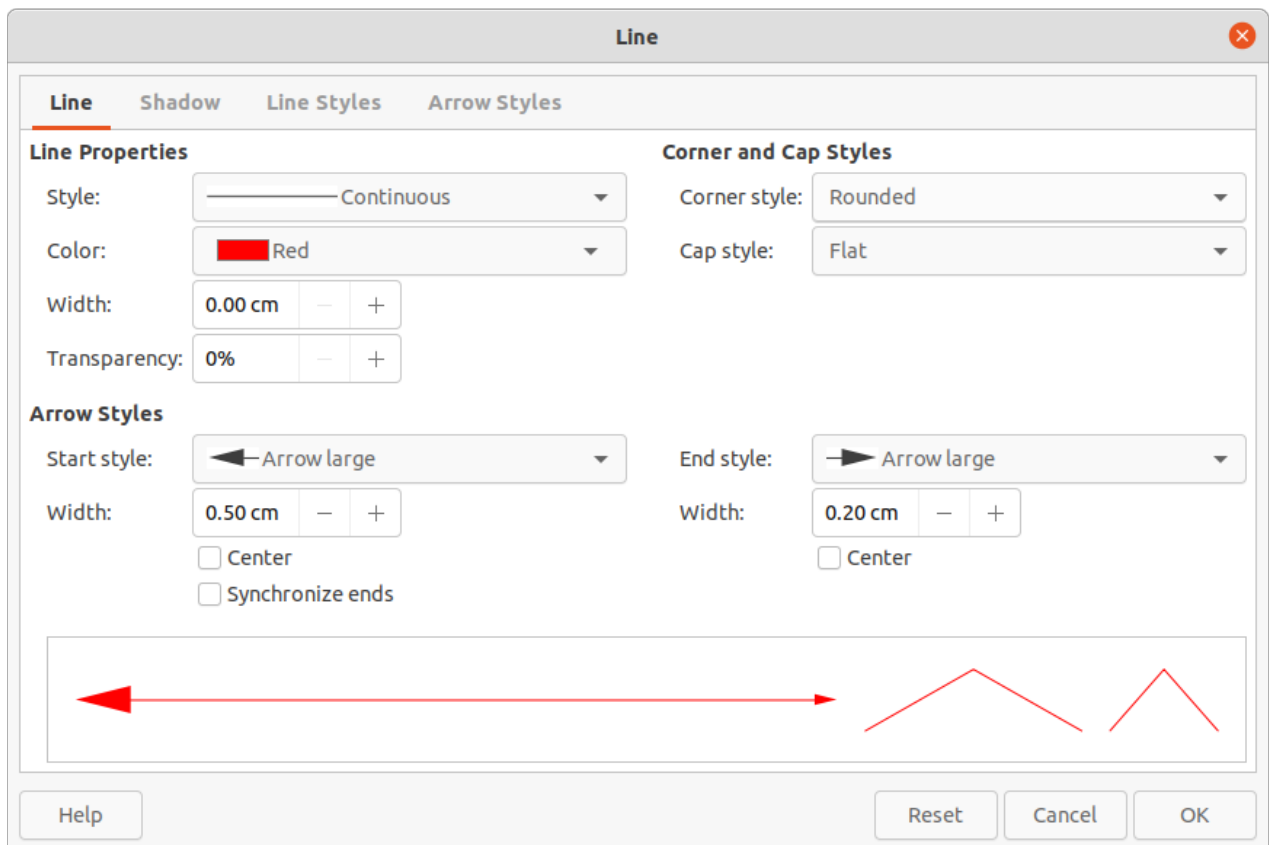


Figure 3: Line dialog - Line page

Line page

The **Line** page in the Line dialog is where the basic parameters of the line are set. It is divided into three sections as follows.

Line properties

Use **Line Properties** to set the following parameters:

- *Style* – select a line style from the drop-down list.
- *Color* – select a predefined color from one of the available color palettes.
- *Width* – specifies the thickness of the line.
- *Transparency* – sets the transparency of a line. Figure 4 shows the effects of different percentages in transparency levels to lines when placed over an object.

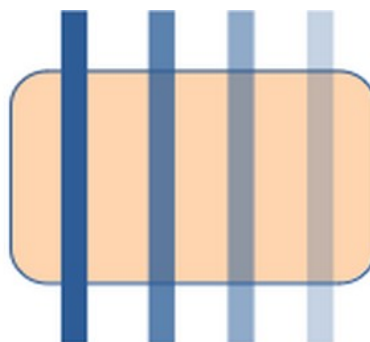


Figure 4: Line transparency (0%, 25%, 50%, 75%)

Arrow styles

Use **Arrow Styles** to set the following parameters when creating arrows in a drawing.

- *Start style* and *End style* – select from the drop-down list an arrow style or arrowhead for the start and end of a line.
- *Width* – specifies the thickness of the arrow endings
- *Center* – moves the center of the arrow endings to the end point of the line. Figure 5 shows the effects of selecting this option.
- *Synchronize ends* – makes the two line ends identical.



Figure 5: Default arrow top; centered arrow bottom

✓ Note

Arrowheads are only applicable to lines. They have no effect on the border of an object.

Corner and cap styles

Corner and Cap Styles determine how the connection between two segments looks. To appreciate the difference between these styles, choose a thick line style and observe how the preview changes.

- *Corner style* – select the shape to be used at the corners of the line. For a small angle between lines, a mitered shape is replaced with a beveled shape.
- *Cap style* – select the style of the line end caps. The caps are added to inner dashes as well.

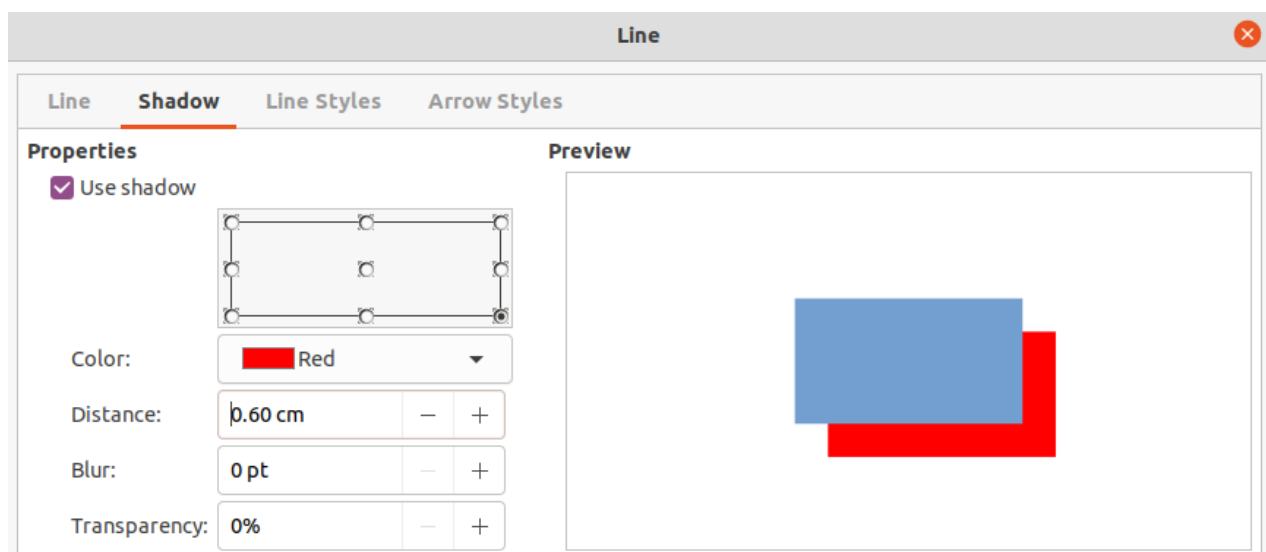


Figure 6: Line dialog - Shadow page

Shadow page

The **Shadow** page (Figure 6) of the Line dialog provides the options to add and format a shadow to a selected line. The settings on this dialog page are the same as those for shadows applied to other objects, described in “Shadows” on page 32.

A quick way to apply a shadow to a line is using the **Shadow** tool on the Line and Filling toolbar. The disadvantage of using the **Shadow** tool is that the shadow created uses the shadow settings for the default graphics style.

Line styles

Line styles are useful in a drawing when adding several lines of similar types. This reduces the need to format individual lines. LibreOffice provides standard line styles that can be used in a drawing. Also, line styles can be created, saved, and deleted.

Creating line styles

- 1) Create a line in a drawing.
- 2) Open the Line dialog and click on the **Line Styles** tab to open the **Line Styles** page (Figure 7).
- 3) In the *Line style* drop-down list, select a line style similar to the style to be created. An example of the line style selected is displayed at the bottom of the dialog page. This example changes as changes are made to the line style.
- 4) Click on **Add** and type a name for the new line style in the dialog that opens, then click **OK**. The name of the new style appears in the *Line style* box.

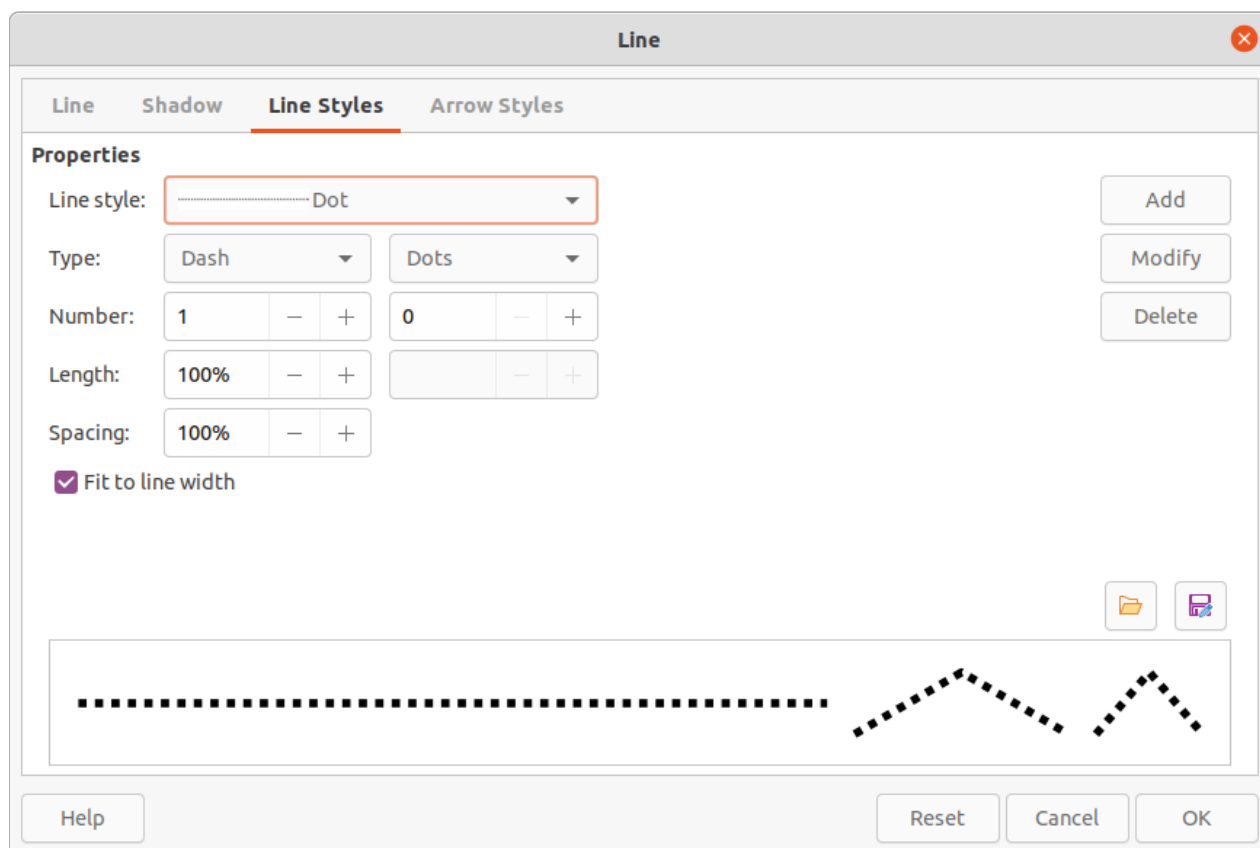


Figure 7: Line dialog - Line Styles page

- 5) In the *Type* drop-down menus, select either **Dots** or **Dash**. To use only one type for the line, select the same type in both *Type* boxes. To alternate the two line types within a single line, select different types in the two *Type* boxes.
- 6) In the *Number* boxes, specify the number of each line type selected in *Type*.
- 7) In the *Length* boxes, specify the **Dash** length as a percentage of the line. The *Length* option is not available for **Dots**.
- 8) In the *Spacing* box, specify the spacing between the dashes and dots as a percentage of the line. The *Spacing* option is not available when the option *Fit to line width* is selected.
- 9) If necessary, select *Fit to line width* so that the new style fits the line width when that line is created in a drawing.
- 10) To create a new line style for the current drawing only:
 - a) Click on **Add** to open the Name dialog and enter a unique name for the new line style.
 - b) Click on **OK** to save the new line style and close the Name dialog.
- 11) To modify an existing line style and create a new line style for the current drawing only:
 - a) Click on **Modify** to open the Name dialog and enter a unique name for the new line style.
 - b) Click on **OK** to save the new line style and close the Name dialog.
- 12) Click on **OK** to close the Line dialog and the new line style is ready for use in the current drawing only.

Note

When creating a line style, it is recommended to use a unique name for the line style. This prevents one of the standard line styles in LibreOffice from being overwritten and causing formatting problems in other drawings or documents that use the standard line styles.

Note

To use the new line style in other drawings, the line style must be saved using **Save Line Styles** option. See "Saving line styles" below for more information.

Saving line styles

Saving a line style allows for a newly created line style to be used in other LibreOffice drawings.

- 1) Create a new line style, described in "Creating line styles" above, but do not close the Line dialog.
- 2) Click on the **Save Line Styles** icon at the bottom right of the **Line Styles** page to open a file browser window at the correct location for line styles.
- 3) Enter a unique filename using the extension `.sod` for the line style in the *Name* box.
- 4) Click on **Save** to save the line style and close the file browser window. The new line style is now available for use in new drawings and documents.

Loading line styles

LibreOffice provides standard line styles when installed on a computer. However, compatible line styles can be loaded and used in LibreOffice. Any line styles loaded into LibreOffice must use the file extension `.sod`.

- 1) Create a line in a drawing.
- 2) Open the Line dialog and click on the **Line Styles** tab to open the **Line Styles** page (Figure 7).
- 3) Click on the **Load Line Styles** icon at the bottom right of the **Line Styles** page to open a file browser window at the correct location for line styles.
- 4) Select a style from the list of saved styles in the file browser window. The file extension for line styles is `.sod`.
- 5) Click **Open** to load the line style into LibreOffice. The line style becomes available for other LibreOffice drawings and documents.
- 6) Click **OK** to close the Line dialog and save any changes made.

Deleting line styles

- 1) Create a line in a drawing.
- 2) Open the Line dialog and click on the **Line Styles** tab to open the **Line Styles** page (Figure 7).
- 3) Select the line style for deletion from the *Line style* drop-down list.
- 4) Click on **Delete** and confirm the deletion by clicking on **Yes** in the confirmation dialog that opens.
- 5) Click **OK** to close the Line dialog and save any changes made.

Note

Before deleting line styles, make sure that the line style is not used in another drawing or document.

Arrow styles

Use the Arrow Styles page (Figure 8) in the Line dialog to create new arrow styles, modify existing arrow styles, or load previously saved arrow styles.

Note

The part of the shape required for the point of the arrowhead must be at the top of the shape created. If necessary, rotate the shape until the point is at the top of the shape. If the shape is already a curve, then the conversion option **To Curve** will not be available.

Creating arrow styles

- 1) Draw a shape to use for an arrowhead, or create a shape using one of the basic shapes that are available in Draw.
- 2) Select the shape and convert to a curve using one of the following methods:
 - Right-click on the shape and select **Convert > To Curve** from the context menu.
 - Go to **Shape > Convert > To Curve** on the Menu bar.

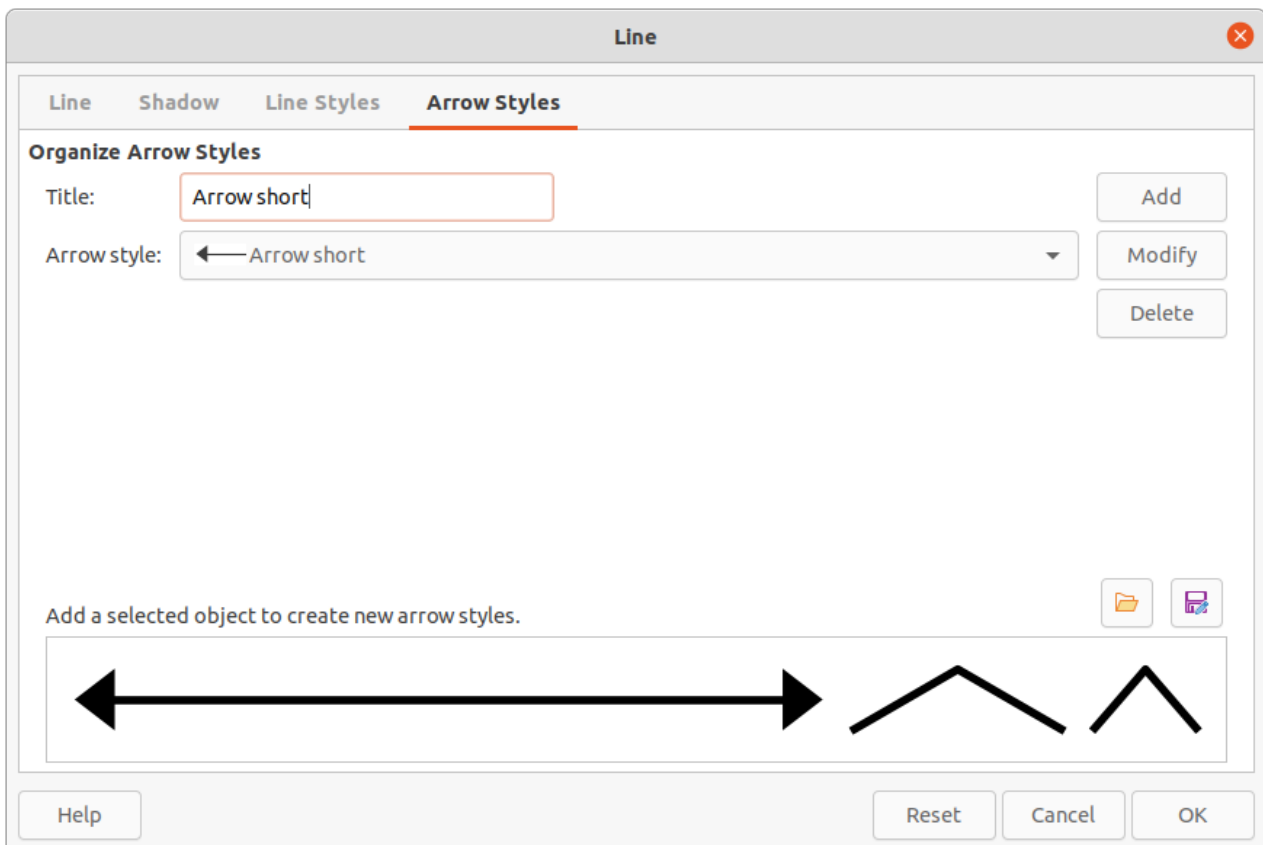


Figure 8: Line dialog - Arrow Styles page

- 3) With the shape selected, open the **Arrow Styles** page in the Line dialog.
- 4) Click on **Add** and type a unique name for the new arrow style in the Name dialog that opens.
- 5) Click **OK** and the new arrowhead style is displayed in the preview box of the Line dialog.
- 6) Click **OK** to save the changes and close the Line dialog. The new arrow style appears at the bottom of the *Arrow style* drop-down list on the **Arrow Styles** page in the Line dialog.

✓ Note

Some shapes cannot be used as an arrowhead. This is indicated by rectangular blocks appearing at each end of the line in the preview box on the **Line Styles** page in the Line dialog.

✓ Note

When creating an arrow style, it is recommended to use a unique name for the arrow style. This prevents one of the standard arrow styles in LibreOffice from being overwritten and causing formatting problems in other drawings that use the standard arrow styles.

✓ Note

The new arrow style created is available only for use in the current drawing. To use the new arrow style in other drawings, the arrow style must be saved using the **Save Arrow Styles** option.

Saving arrow styles

Saving an arrow style allows for the newly created style to be used in other LibreOffice documents.

- 1) Create a new arrow style as described in “Creating arrow styles” above, but do not close the Line dialog.
- 2) Click on the **Save arrow styles** icon at the bottom right of the **Arrow Styles** page to open a file browser window at the correct location for arrow styles.
- 3) Enter a unique filename using the extension `.soe` for the arrow style.
- 4) Click on **Save** to save the arrow style and close the file browser window. The new arrow style is now available for use in new documents.

Loading arrow styles

LibreOffice provides standard arrow styles when installed on a computer. However, compatible arrow styles can be loaded and used in LibreOffice. Any arrow styles loaded into LibreOffice must use the file extension `.soe`.

- 1) Create an arrow or line in a drawing.
- 2) Open the Line dialog and click on the **Arrow Styles** tab to open the **Arrow Styles** page (Figure 8).
- 3) Click on the **Load arrow styles** icon at the bottom right of the **Arrow Styles** page to open a file browser window at the correct location for arrow styles.
- 4) Select an arrow style from the list of saved styles in the file browser window
- 5) Click **Open** to load the arrow style into the drawing. The arrow style also becomes available for other LibreOffice documents.
- 6) Click **OK** to close the Line dialog and save any changes made.

Deleting arrow styles

- 1) Create an arrow or line in a drawing.
- 2) Open the Line dialog and click on the **Arrow Styles** tab to open the **Arrow Styles** page (Figure 8).
- 3) Select the arrow style for deletion from the *Arrow style* drop-down list.
- 4) Click on **Delete** and confirm the deletion by clicking on **Yes** in the confirmation dialog that opens.
- 5) Click **OK** to close the Line dialog and save any changes made.



Note

Before deleting arrow styles, make sure that the arrow style is not used in another drawing or document.

Formatting area fills

The term area fill refers to the inside of an object. An area fill can be none, a uniform color, gradient, hatching, bitmap or pattern, as shown in Figure 9. Also, an area fill can be partly or wholly transparent and can throw a shadow.

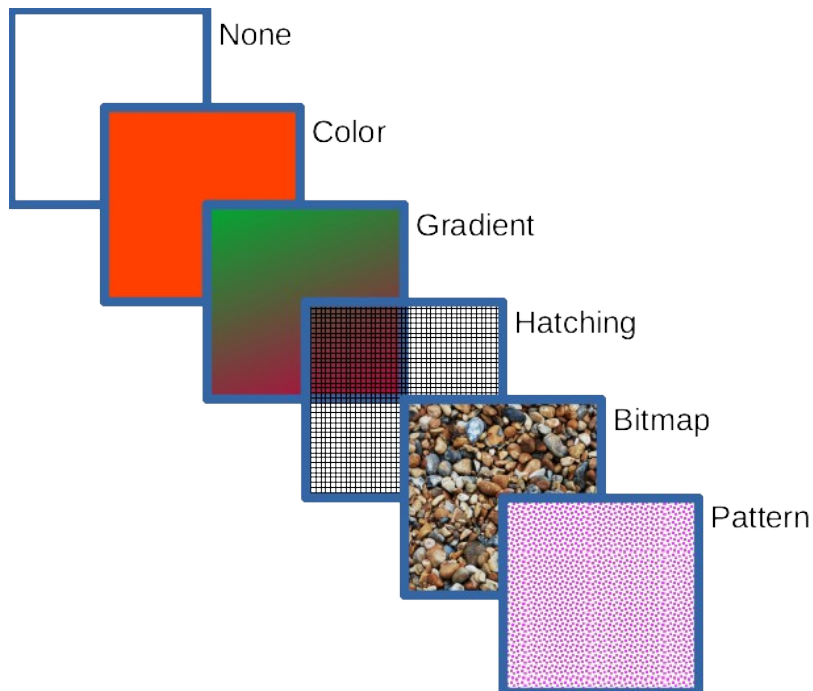


Figure 9: Examples of area fill types

Line and Filling toolbar

Tools on the Line and Filling toolbar (Figure 1 on page 5) provide a range of default fills readily available to quickly format graphic objects. If this toolbar is not showing, go to **View > Toolbars > Line and Filling** on the Menu bar. To format the area of an object:

- 1) Select an object so that the selection handles are displayed.
- 2) Click on **Area Style/Filling** on the Line and Filling toolbar and select the type of fill required from the drop-down list (*None, Color, Gradient, Hatching, Bitmap, Pattern*) (Figure 10).
- 3) Select one of the available options for the required type of area fill.
 - **Color** (Figure 11) – select a color palette from the available options in the drop-down list, then select a color by clicking on the color. For more information on color fills, see “Color fills” on Page 18.
 - **Gradient** (Figure 12) – select the required gradient from the drop-down list. For more information on gradient fills, see “Gradient fills” on Page 20.
 - **Hatching** (Figure 13) – select the required hatching from the drop-down list. For more information on hatching fills, see “Hatching fills” on Page 29.
 - **Bitmap** (Figure 14) – select the required bitmap from the drop-down list. For more information on bitmap fills, see “Bitmap fills” on Page 24.
 - **Pattern** (Figure 15) – select the required pattern from the drop-down list in the *Area* section in the Properties deck on the Sidebar. For more information on pattern fills, see “Pattern fills” on Page 27.
- 4) Deselect the object to save the changes to the object.

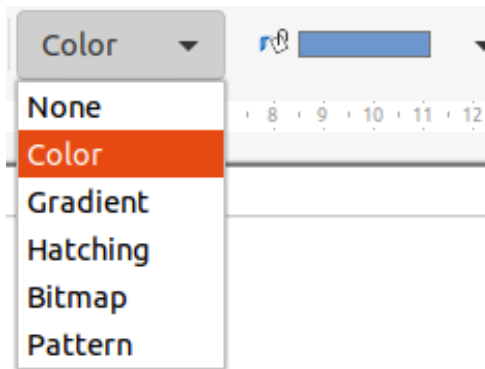


Figure 10: Area fill types

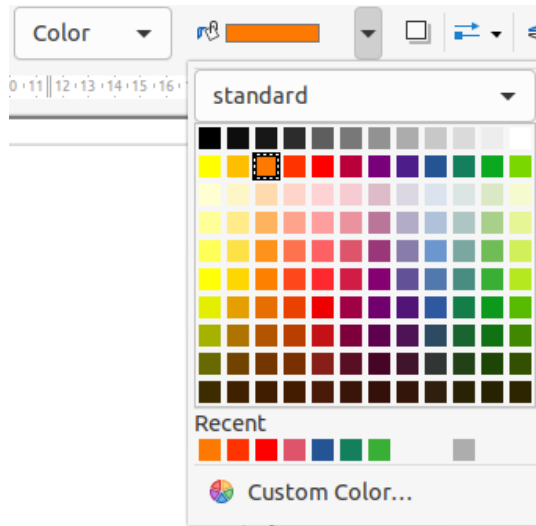


Figure 11: Color area fills

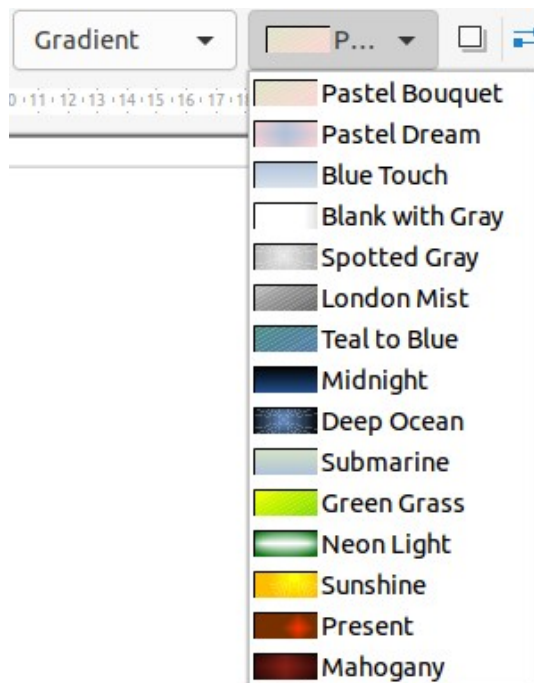


Figure 12: Gradient area fills

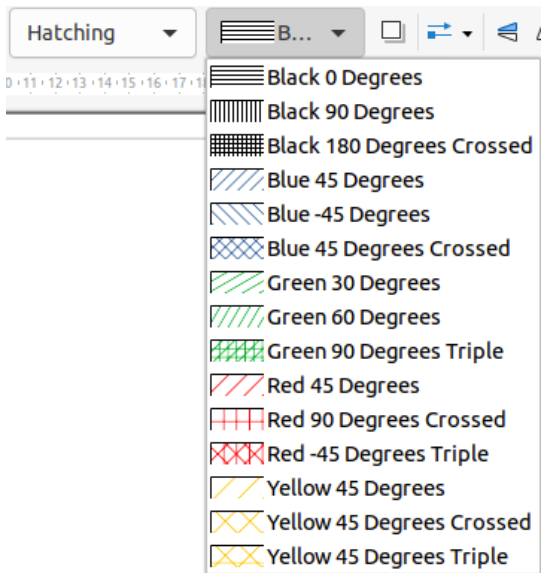


Figure 13: Hatching area fills

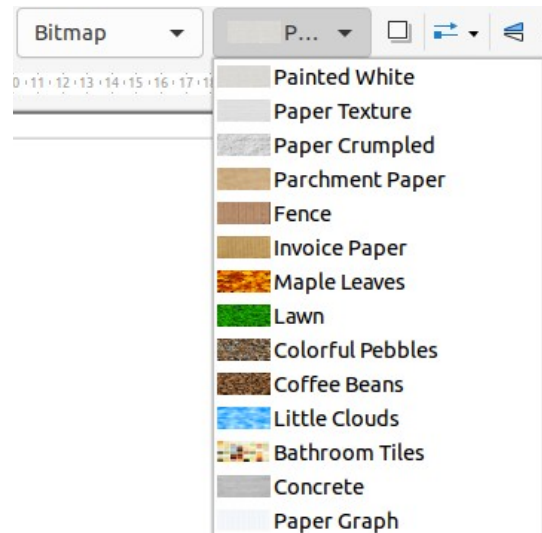


Figure 14: Bitmap area fills

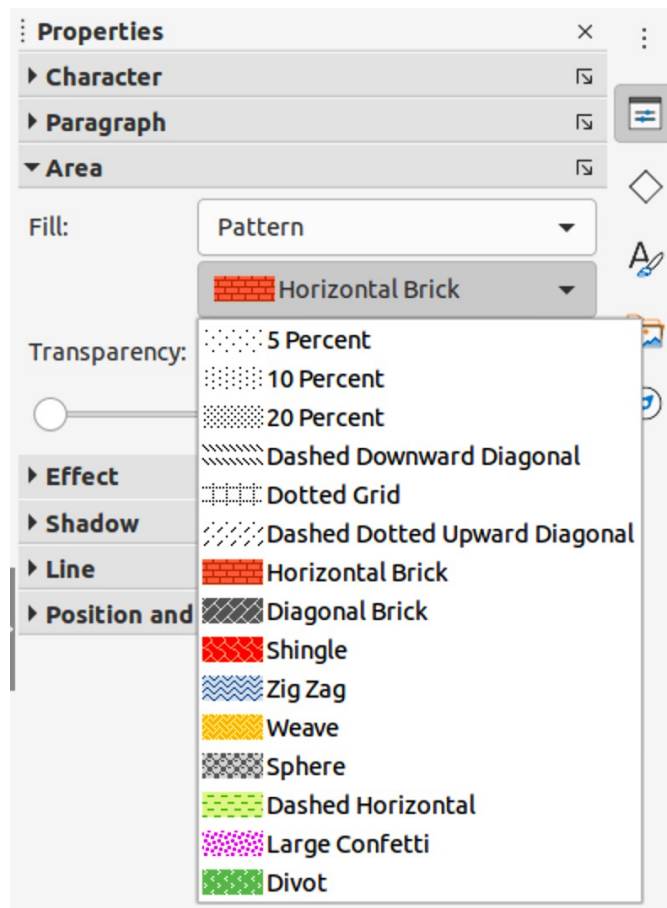


Figure 15: Pattern area fills in Area section in Properties deck on Sidebar

Sidebar

Format the area of an object using the Sidebar (Figure 15) as follows:

- 1) Make sure the object is selected in a drawing.

- 2) Click on **Properties** on the Sidebar, then click on the down arrowhead v on the left of the *Area* titlebar to open the *Area* section.
- 3) Use the options in the *Fill* and *Transparency* drop-down lists to format the area of an object. For more information, see “Working with area fills” on page 18.
- 4) Deselect the object to save the changes.

Area dialog

Format area fills with greater control using the Area dialog (Figure 17) as follows:

- 1) Make sure the object is selected in a drawing.
- 2) Open the Area dialog using one of the following methods:
 - Go to **Format > Area** on the Menu bar.
 - Click on **Area** in the Line and Filling toolbar.
 - Right-click on the selected object and select **Area** from the context menu.
 - Click on **More Options** on the right of the Area section title on the Sidebar.
- 3) Click on the **Area** tab to open the Area page. For more information, see “Working with area fills” on page 18.
- 4) Select the type of area fill from the options.
- 5) Select the style of area fill from the options that become available for the type of area fill selected.
- 6) Click **OK** to close the Area dialog and save the changes.

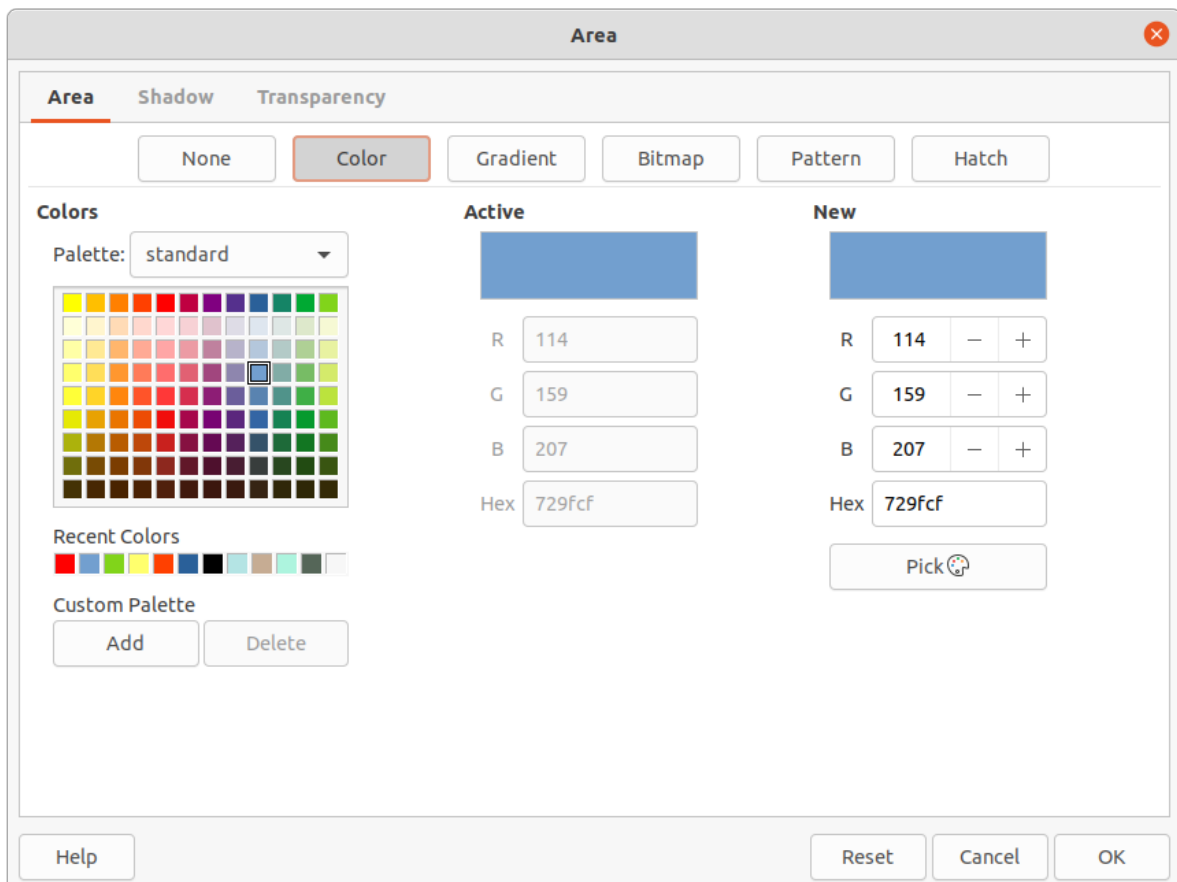


Figure 16: Area dialog - Color page

Working with area fills

Color fills

Selecting color fill

The following procedure to select a color for an area fill uses the Area dialog. Using the tools on the Line and Filling Toolbar, and the Area section in the Properties deck on the Sidebar is a similar procedure, but the available options are reduced. All color fills are solid colors.

- 1) Make sure the object is selected in a drawing.
- 2) Open the Area page on the Area dialog, then click on **Color** (Figure 16) to open the options available for a color fill.
- 3) In **Colors**, select the required palette from the available options in the *Palette* drop-down list.
- 4) Click on the color required. The present color fill of a selected object is displayed In the **Active** preview box.. After selecting a new color, a preview of the selected color appears in the **New** preview box.
- 5) Alternatively, enter the *RGB* values or the *Hex* value of a color in the **New** text boxes.

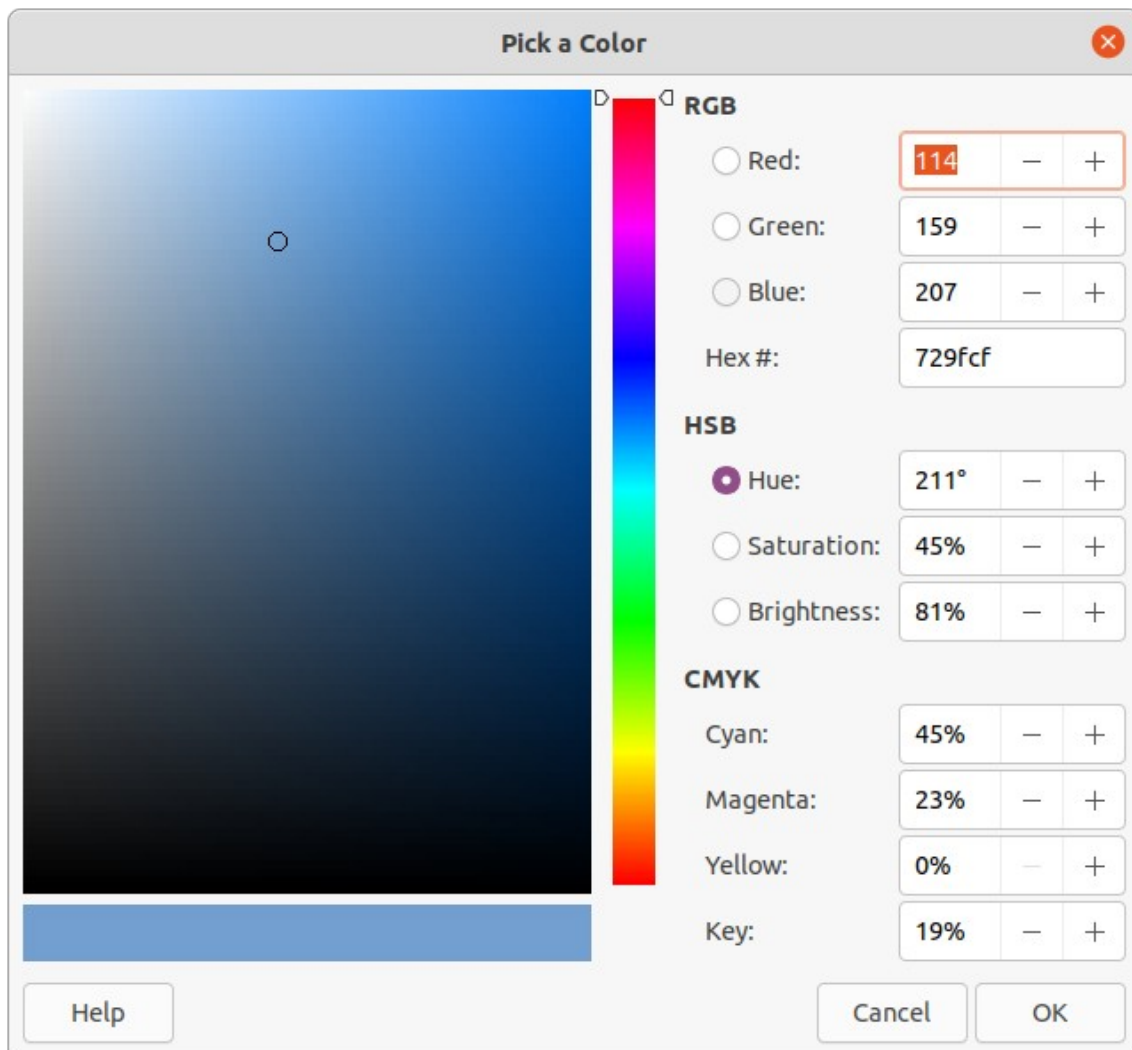


Figure 17: Pick A Color dialog

- 6) Alternatively, click on *Pick* to open the Pick a Color dialog (Figure 17). Select a color using one of the following methods:
 - Enter the RGB, Hex, HSB or CMYK values for the color, then click **OK** to close the Pick a Color dialog and place the color in the **New** preview box.
 - Click on the color range in the vertical color bar, then click and drag the small circle in the color box to select the color. Click **OK** to close the Pick a Color dialog and place the color in the **New** preview box.
- 7) If necessary and to revert back to the original color, click on **Reset** and any changes made are removed.
- 8) Click **OK** to close the Area dialog and save the changes. The color is then changed in the selected object.

Tip

If a color has been used before, it appears in *Recent Colors*. It can be selected and used again from those colors available in *Recent Colors*.

Creating custom colors using Area dialog

To create a custom color so that the color is available for other drawings or documents, then the **Colors** page in the Area dialog must be used.

- 1) Select a filled object to create a color.
- 2) Open the Area page on the Area dialog, then click on **Color** to open the available options.
- 3) Specify the *RGB* values or the *Hex* value of the custom color in the **New** text boxes.
- 4) Alternatively, click on **Pick** to open the Pick a Color dialog. Select a color using one of the following methods:
 - Enter values for the custom color in the boxes for RGB, Hex, HSB or CMYK values, then click **OK** to close the Pick a Color dialog and place the color in the **New** preview box.
 - Click on the color range in the vertical color bar, then click and drag the small circle in the color box to select the color. Click **OK** to close the Pick a Color dialog and place the color in the **New** preview box.
- 5) On the Area Color page of the Area dialog, under *Custom Palette*, click on **Add** and a Name dialog opens.
- 6) Enter a unique name in the text box and click **OK**. The new custom color then appears in the Custom palette.
- 7) Click **OK** to close the Area dialog and save the changes. The new custom color appears as a fill in the selected object and is available for use in other drawings or documents.

Creating custom colors using Pick a Color dialog

If a custom color for a drawing is only going to be used in that drawing, then use the Pick a Color dialog to create a custom color. A custom color using the following method is not available for other drawings or documents.

- 1) Select a filled object to create a color.
- 2) Open the Pick a Color dialog (Figure 17) using one of the following methods:
 - Click on **Pick** on the Colors page of the Area dialog.
 - Click on the triangle ▼ next to **Fill Color** on the Line and Filling toolbar.

- Click on the triangle ▼ next to **Fill Color** in the *Area* section of the Properties deck on the Sidebar.
- 3) Create a custom color using one of the following methods.
 - Enter the values for the custom color in the boxes for RGB, Hex, HSB or CMYK values.
 - Click on the color range in the vertical color bar, then click and drag the small circle in the color box to select the color.
 - 4) Click **OK** to close the Pick a Color dialog and save the changes. The new custom color appears as a fill in the selected object and is only available for use in the drawing being created.

Deleting custom colors

Only custom colors that are available in the custom palette can be deleted using the Area dialog. Colors that are available in the color palettes provided by LibreOffice cannot be deleted.

- 1) Select a filled object that uses the color fill for deletion.
- 2) Open the Area dialog using one of the following methods:
 - Go to **Format > Area** on the Menu bar.
 - Right-click on the object and select **Area** from the context menu.
 - Click on **More Options** on the right of the Area section title on the Sidebar.
- 3) Click on **Area**, then click on **Colors** to open the Colors page.
- 4) In **Colors**, select **Custom** from the *Palette* drop-down list.
- 5) Select the color for deletion and click on the Delete button. There is no confirmation given when deleting a color.
- 6) Click **OK** to save the changes and close the Area dialog.

Gradient fills

Several predefined gradients are included when LibreOffice is installed. It is recommended to create custom gradients that match the requirements rather than permanently modifying the installed predefined gradients. Predefined gradients may have been used in other objects in a drawing or other documents.

Custom gradients should be saved with a unique name allowing the custom gradient to be used in other drawings or documents. Custom gradients are placed at the end of the gradients displayed in the *Gradient* box on the **Gradient** page of the Area dialog (Figure 18).

Selecting and modifying gradient fills

The following procedure to select a gradient for an area fill uses the Area dialog. Using the tools on the Line and Filling Toolbar, and the *Area* section in the Properties deck on the Sidebar is a similar procedure, but the available options are reduced.

- 1) Make sure the object to be filled is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Gradient** .
- 3) Select the required gradient from the *Gradient* box. The selected gradient appears in *Preview*.

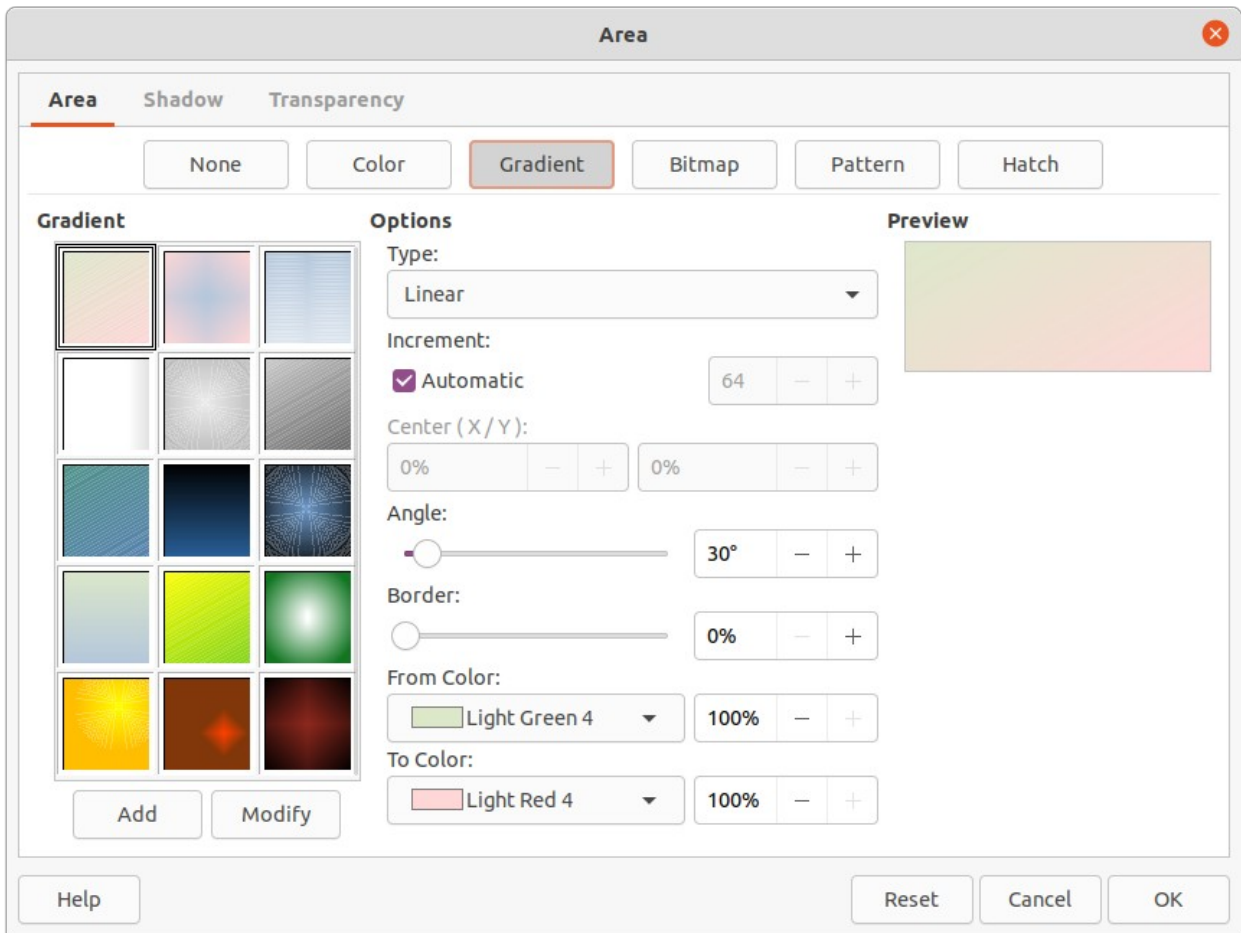


Figure 18: Area dialog - Gradient page

- 4) If necessary, change the values in the option boxes for *Type*, *Increment*, *Center*, *Angle*, *Border*, *From Color* and *To Color* to modify the gradient to the requirements. As changes are made, the gradient displayed in the Preview box also changes to indicate how it will look. For more information on gradient options, see “Table 1: Gradient options” below.
- 5) If necessary, when making changes to the *Increment* value of a selected gradient, deselect *Automatic* and enter an increment value in the text box.
- 6) If necessary and to revert back to the original gradient, click on **Reset** and any changes made are removed.
- 7) Click **OK** to close the Area dialog and save the changes. The gradient fill then appears in the selected object.

Note

Selecting and modifying a gradient using the above method only allows the gradient to be used in the drawing being created. If a modified gradient is to be used in other drawings or documents, then create a custom gradient and save it with a unique name. See “Creating and saving custom gradients” below.

Table 1: Gradient options

Gradient property	Meaning
Linear gradient	The color transitions from the starting color to the end color in a straight line.
Axial gradient	The color transitions from the starting color to the end color from the object center to the object edges in two opposite directions.

Gradient property	Meaning
Radial gradient	The color transitions from the starting color to the end color in a circular pattern.
Ellipsoid gradient	The color transitions from the starting color to the end color in an elliptical pattern.
Quadratic gradient	The color transitions from the starting color to the end color from the object edges to the object center in four directions.
Square gradient	The color transitions from the starting color to the end color from the object edges to the object center in a square pattern.
Increment	Enter the number of steps for blending the two colors of the gradient. By default this is set to Automatic.
Center X	For Radial, Ellipsoid, Square and Rectangular gradients, modify these values to set the horizontal offset of the gradient center.
Center Y	For Radial, Ellipsoid, Square and Rectangular gradients, modify these values to set the vertical offset of the gradient center.
Angle	For all gradient types, modifies the angle of the gradient axis.
Border	Increase this value to make the gradient start further away from the border of the shape.
From Color	The start color for the gradient. In the edit box enter the intensity of the color: 0% corresponds to black, 100% to the full color.
To Color	The end color for the gradient. In the edit box enter the intensity of the color: 0% corresponds to black, 100% to the full color.

Creating and saving custom gradients

To use a modified gradient in other drawings or documents, a custom gradient has to be saved with a unique name.

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Gradient** to open the options available for a gradient fill.
- 3) Select a gradient and modify it using the options given in “Table 1: Gradient options” above. As changes are made, the gradient displayed in the *Preview* box also changes to give an indication of how the custom gradient will look.
- 4) Click on **Add** to open a Name dialog.
- 5) Enter a unique name for the new gradient, then click **OK** to close the Name dialog. The custom gradient is placed at the end of the gradient displayed in the *Gradient* preview box and becomes available for use in other drawings and documents.
- 6) Click **OK** to close the Area dialog and save the changes.

Modifying custom gradients

Using the **Modify** option on the **Gradient** page in the Area dialog permanently changes a gradient and cannot be undone. It is recommended to only modify custom gradients and not the predefined gradients that were installed with LibreOffice.

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Gradient** .
- 3) Select a custom gradient from the *Gradient* box. Custom gradients appear below the 15 predefined gradients in the *Gradient* box.

- 4) Make the necessary changes to the options given in “Table 1: Gradient options” above. As changes are made, the gradient displayed in the *Preview* box also changes to give an indication of how the custom gradient will look.
- 5) If necessary and to revert back to the original gradient, click on **Reset** and any changes made are removed.
- 6) Click on **Modify** to permanently change the selected custom gradient. There is no confirmation given when modifying a custom gradient.
- 7) Click **OK** to close the Area dialog and save the changes.

Deleting custom gradients

- 1) Select an object that uses a gradient fill.
- 2) Open the Area page on the Area dialog, then click on **Gradient**.
- 3) In the *Gradient* box, select the custom gradient for deletion.
- 4) Right click on the gradient and select **Delete** from the context menu. Click on **Yes** to confirm the deletion.
- 5) Click **OK** to save the changes and close the Area dialog.

Note

It is recommended to only delete or rename custom gradients that have been created. Deleting or renaming one of the predefined gradients that are installed with LibreOffice may cause problems in drawings and documents that use one of the gradients.

Advanced gradient controls

LibreOffice provides advanced controls for gradients on the Transformations toolbar (Figure 19).

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Gradient**.
- 3) Go to **View > Toolbars > Transformations** on the Menu bar or click on the **Transformations** tool on the Line and Filling toolbar to open the Transformations toolbar.

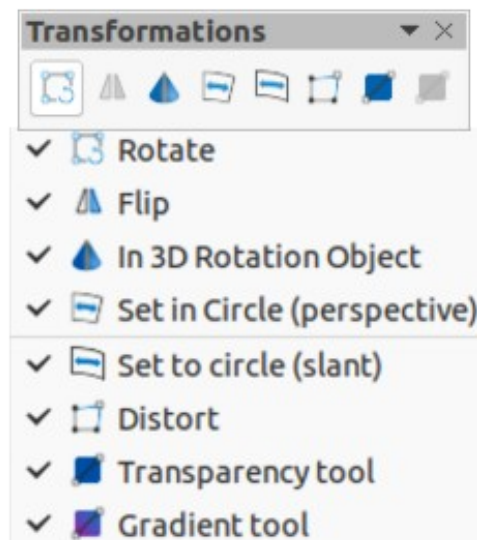


Figure 19: Transformations toolbar

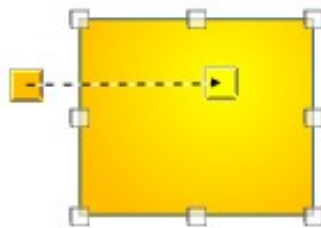


Figure 20: Interactive gradient tool selected

- 4) Click on **Interactive gradient tool** in the Transformations toolbar. This displays a dashed line connecting two colored squares (Figure 20). The colors show the *From Color* and *To Color* that are used for the selected gradient.
- 5) Select the type of gradient required for the object from the options in the *Type* drop-down list. Properties available for adjustment depend on the gradient type selected, as explained below. Moving the squares will have different effects depending on the type of gradient.
 - **Linear** – move the square corresponding to the *From Color* to change where the gradient starts (border value). Move the square corresponding to the *To Color* to change the orientation (angle value).
 - **Axial** – move the *To Color* to change both the angle and border properties of the gradient. Only the square corresponding to the *To Color* can be moved.
 - **Radial** – move the *From Color* to modify the border property to set the width of the gradient circle. Move the *To Color* to change the point where the gradient ends (*Center X* and *Center Y* values).
 - **Ellipsoid** – move the *From Color* to modify the border property to set the size of the gradient ellipsoid. Move the *To Color* to change the angle of the ellipsoid axis and the axis itself.
 - **Quadratic and Square** – move the *From Color* to modify the border property to set the size of the gradient square or rectangle and the angle of the gradient shape. Move the *To Color* to change the center of the gradient.
- 6) Click **OK** to save the changes and close the Area dialog.

Bitmap fills

Several predefined bitmaps are included when LibreOffice is installed on a computer. The content of the supplied bitmaps cannot be edited, but the display settings can be changed and other bitmaps can be imported from other sources. A GIF is an example of a graphics image file that has a bitmap.

Selecting bitmaps

The following procedure to select a bitmap for an area fill uses the Area dialog. Using the tools on the Line and Filling Toolbar, and the Area section in the Properties deck on the Sidebar is a similar procedure, but the available options are reduced.

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Bitmap** to open the options available for a bitmap fill (Figure 21).
- 3) Select the required bitmap from the *Bitmap* box. The selected bitmap appears in *Preview*.

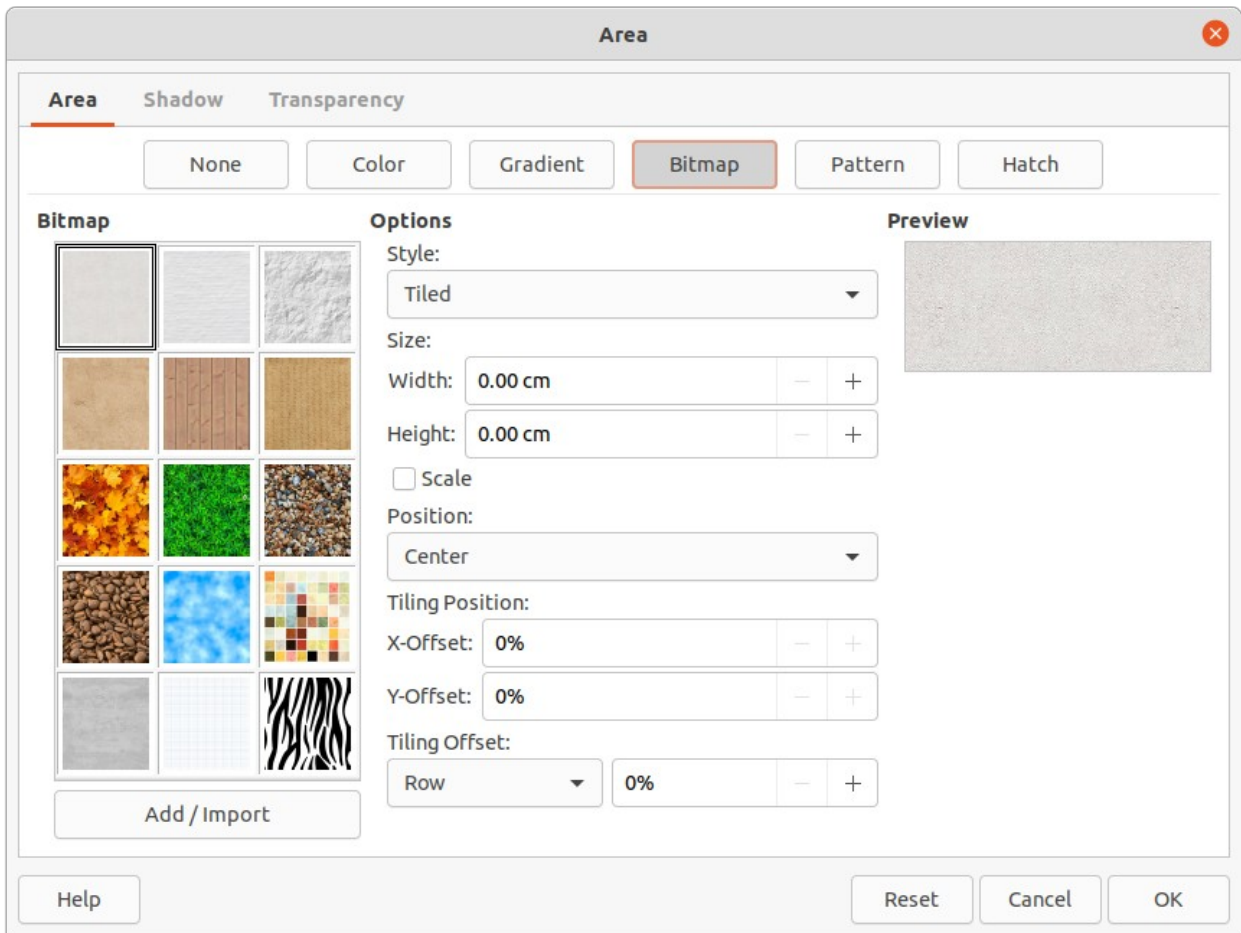


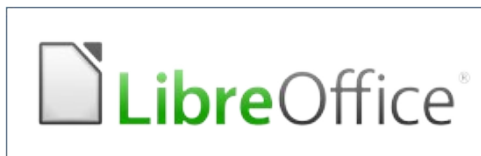
Figure 21: Area dialog - Bitmap page

- 4) If necessary, change the values in the option boxes for *Style*, *Size*, *Position*, *Tiling Position*, and *Tiling Offset* to modify the bitmap to the requirements. For more information on bitmap options, see “Table 2” below.
- 5) If necessary and to revert back to the original bitmap, click on **Reset** and any changes made are removed.
- 6) Click **OK** to close the Area dialog and save the changes. The bitmap fill then appears in the selected object.

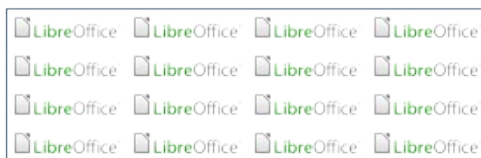
Table 2: Bitmap options

Bitmap option	Meaning
Style – Custom position/size	When this option is selected, the position of the bitmap in the object and the size of the bitmap can be specified.
Style – Tiled	When this option is selected, the bitmap is tiled to fill the area. The size of the bitmap used for the tiling is determined by the <i>Size</i> settings
Style – Stretched	When this option is selected, a bitmap is stretched to fill the object area.
Size – Width	Sets the width of the bitmap. For example, 100% means that the bitmap is resized to occupy the whole fill area width, 50% means that the width of the bitmap is half that of the fill area.
Size – Height	Sets the height of the bitmap. For example, 100% means that the bitmap is resized to occupy the whole fill area height, 50% means that the height of the bitmap is half that of the fill area.

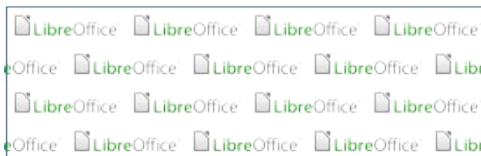
Bitmap option	Meaning
Size – Scale	When selected, bitmap size is given as a percentage for <i>Width</i> and <i>Height</i> . When deselected, the actual size of the bitmap is given for <i>Width</i> and <i>Height</i> .
Position	Specifies the anchoring point of the bitmap.
Tiling Position – X-Offset	Sets the offset for the width of the bitmap in percentage values. 50% offset means that Draw will place the middle part of the bitmap width at the anchor point and start tiling from there.
Tiling Position – Y-Offset	Sets the offset for the height of the bitmap in percentage values. 50% offset means that Draw will place the middle part of the bitmap height at the anchor point and start tiling from there.
Tiling Offset	Offsets the columns of tiled bitmaps by the percentage entered in the box so that two subsequent columns of bitmaps are not aligned.



Original bitmap



Width and height 25% scaled
Anchor to top left corner
No offset



Width and height 25% scaled
Anchor to top right
Row offset 50%

Figure 22: Examples of bitmap fills

Editing bitmaps

- 1) Make sure the object containing a bitmap fill is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Bitmap**.
- 3) Select a bitmap from the *Bitmap* box. The selected bitmap appears in *Preview*.
- 4) Change the values in the option boxes for *Style*, *Size*, *Position*, *Tiling Position*, and *Tiling Offset* to the requirements. For more information on bitmap options, see “Table 2” above. Examples of bitmap fills and the properties used are shown in Figure 22.
- 5) If necessary and to revert back to the original bitmap, click on **Reset** and any changes made are removed.
- 6) Click **OK** to save the changes and close the Area dialog.



Note

Supplied bitmaps cannot be edited, but the display settings for placement and tiling can be changed.

Adding or importing bitmaps

- 1) Make sure the object is selected in a drawing.

- 2) Open the **Area** page on the Area dialog, then click on **Bitmap**.
- 3) Click on **Add/Import** and a file browser window opens.
- 4) Navigate to the directory containing the bitmap file, then select the file and click **Open**.
- 5) Enter a unique name for the new bitmap in the Name dialog.
- 6) Click **OK** to close the Name dialog. The imported bitmap is added at the end of the bitmaps in the *Bitmap* box.
- 7) Click **OK** to save the changes and close the Area dialog. The imported bitmap fill appears in the selected object.

Note

Bitmap images can be imported and used as area fills.

Deleting bitmaps

- 1) Make sure the object containing a bitmap fill is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Bitmap**.
- 3) Right click on the bitmap being deleted and select Delete from the context menu. Click on **Yes** to confirm the deletion.
- 4) Click **OK** to save the changes and close the Area dialog.

Note

It is recommended to only delete or rename bitmaps that have been added or imported. Deleting or renaming one of the bitmaps installed with LibreOffice may cause problems in drawings and documents that use one of the bitmaps.

Pattern fills

Several predefined pattern fills are included when LibreOffice is installed on a computer. Custom patterns can also be created and modified in LibreOffice.

Selecting pattern fills

The following procedure to select a pattern for an area fill uses the Area dialog. Using the tools on the Line and Filling Toolbar, and the *Area* section in the Properties deck on the Sidebar is a similar procedure, but the available options are reduced.

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Pattern** to open the options available for a pattern fill (Figure 23).
- 3) Select the required pattern from the *Pattern* box and the selected pattern appears in *Preview*.
- 4) If necessary, change the foreground and background colors, or the pattern itself, as described in “Creating custom and saving patterns” below. As changes are made, the pattern displayed in the *Preview* box also changes to indicate how it will look. Any changes will affect only the object being filled.
- 5) If necessary and to revert back to the original pattern, click on **Reset** and any changes made are removed.
- 6) Click **OK** to close the Area dialog and save the changes. The pattern fill then appears in the selected object.

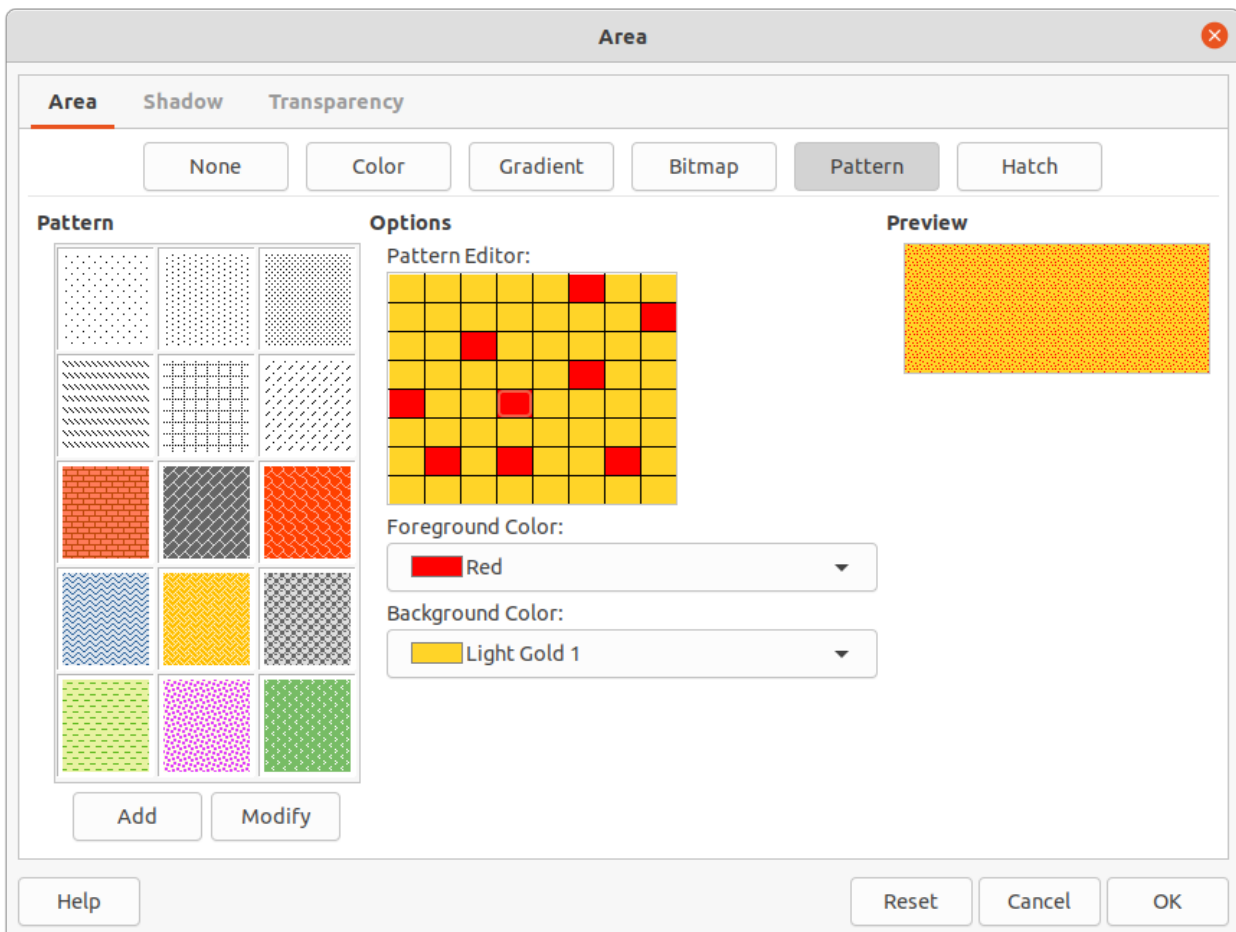


Figure 23: Area dialog - Pattern page

Creating custom and saving patterns

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Pattern**.
- 3) Select the required pattern in *Pattern* to use as a starting point and the selected pattern appears in *Preview*.
- 4) Optionally, select different colors for *Foreground Color* and *Background Color*. The pattern remains the same, but the colors change.
- 5) Optionally, in *Pattern Editor*, click on individual squares to change the color from *Foreground Color* to *Background Color*, or from *Background Color* to *Foreground Color* to create a new pattern.
- 6) Click on **Add** to open a Name dialog.
- 7) Enter a unique name for the new pattern, then click **OK** to close the Name dialog. The custom pattern is placed at the end of the patterns displayed in the *Pattern* box and becomes available for use in other drawings and documents.
- 8) If necessary and to revert back to the original pattern, click on **Reset** and any changes made are removed.
- 9) Click **OK** to close the Area dialog and save the changes.

✓ Note

To use a modified pattern in other drawings or documents, the custom pattern has to be saved with a unique name.

Modifying custom patterns

Using the **Modify** option on the **Pattern** page in the Area dialog permanently changes a pattern and cannot be undone. It is recommended to only modify custom patterns and not the predefined patterns that were installed with LibreOffice.

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Pattern**.
- 3) Select a custom pattern from the *Pattern* box and the selected pattern appears in *Preview*. Custom patterns are located below the predefined patterns in the *Pattern* box.
- 4) In *Pattern Editor*, click on each square to change the color from *Foreground Color* to *Background Color*, or from *Background Color* to *Foreground Color* to modify the selected pattern.
- 5) If necessary and to revert back to the original pattern, click on **Reset** and any changes made are removed.
- 6) Click on **Modify** to permanently change the selected custom pattern. There is no confirmation given when modifying a custom pattern.
- 7) Click **OK** to close the Area dialog and save the changes.

Deleting custom patterns

- 1) Select an object that uses a custom pattern as an area fill.
- 2) Open the Area page on the Area dialog, then click on **Pattern**.
- 3) In the *Pattern* box, select the custom pattern for deletion.
- 4) Right click on the pattern and select **Delete** from the context menu. Click on **Yes** to confirm the deletion.
- 5) Click **OK** to save the changes and close the Area dialog.

✓ Note

It is recommended to only delete or rename custom patterns that have been created. Deleting or renaming one of the predefined patterns that are installed with LibreOffice may cause problems in drawings and documents that use one of the gradients.

Hatching fills

Hatching fills are similar to pattern fills, but use lines instead of squares. Several predefined hatching fills are included when LibreOffice is installed on a computer. Custom hatching fills can also be created and modified.

Selecting hatching fills

The following procedure to select a hatching for an area fill uses the Area dialog. Using the tools on the Line and Filling Toolbar, and the Area section in the Properties deck on the Sidebar is a similar procedure, but the available options are reduced.

- 1) Make sure the object is selected in a drawing.

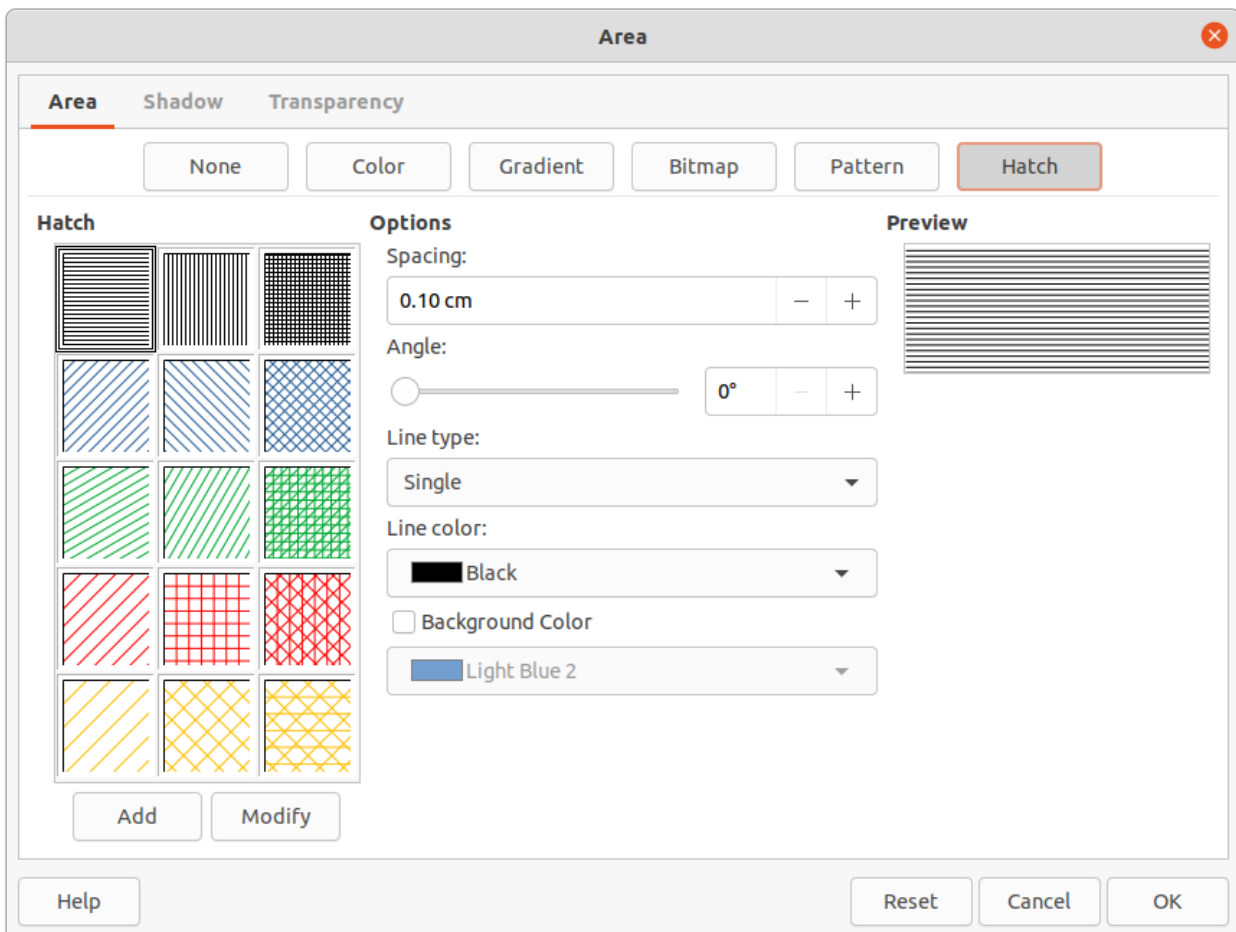


Figure 24: Area dialog - Hatch page

- 2) Open the **Area** page on the Area dialog, then click on **Hatch** to open the options available for a hatching fill (Figure 24).
- 3) Select the required hatching from the *Hatch* box and the selected hatching appears in *Preview*.
- 4) If necessary, change the colors or other options, as described in “Creating and saving custom hatching” below. As changes are made, the hatching displayed in the *Preview* box also changes.
- 5) If necessary and to revert back to the original hatching, click on **Reset** and any changes made are removed.
- 6) Click **OK** to close the Area dialog and save the changes. The hatching fill then appears in the selected object.

Creating and saving custom hatching

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Hatch**.
- 3) Select the required hatching in *Hatch* as a starting point and the selected hatching appears in *Preview*.
- 4) Change the values in the option boxes for *Spacing*, *Angle*, *Line type*, *Line color*, and *Background color* to edit the hatching to the requirements. For more information on hatching options, see “Table 3” below.
- 5) Click on **Add** to open a Name dialog.

- 6) Enter a unique name for the new hatching, then click **OK** to close the Name dialog. The custom hatching is placed at the end of the hatchings displayed in the *Hatch* box and becomes available for use in other drawings and documents.
- 7) Click **OK** to close the Area dialog and save the changes.

Table 3: Hatching options

Hatching option	Meaning
Spacing	Determines the spacing between two lines of the hatching fill. As the value is changed, the preview window is updated.
Angle	Use the mini map below the numerical value to quickly set the angle formed by the line to multiples of 45 degrees. If the required angle is not a multiple of 45 degrees, enter the desired value in the edit box.
Line type	Set single, double, or triple line for the style of the hatching.
Line color	Use the list to select the color of the lines that will form the hatching.
Background color	When selected, adds a color fill behind the lines used for the hatching.

Modifying custom hatchings

Using the **Modify** option on the **Hatch** page in the Area dialog permanently changes a hatching and cannot be undone. It is recommended to only modify custom hatchings and not the predefined hatchings that were installed with LibreOffice.

- 1) Make sure the object is selected in a drawing.
- 2) Open the **Area** page on the Area dialog, then click on **Hatch**.
- 3) Select a custom hatching from the *Hatch* box and the selected hatching appears in *Preview*. Custom hatchings are located below the predefined hatchings in the *Hatch* box.
- 4) Change the values in the option boxes for *Spacing*, *Angle*, *Line type*, *Line color*, and *Background color* to edit the hatching. For more information on hatching options, see “Table 3” above.
- 5) If necessary and to revert back to the original hatching, click on **Reset** and any changes made are removed.
- 6) Click on **Modify** to permanently change the selected custom hatching. There is no confirmation given when modifying a custom hatching.
- 7) Click **OK** to close the Area dialog and save the changes.

Deleting custom hatching

- 1) Select an object that uses the hatching fill for deletion.
- 2) Open the **Area** page on the Area dialog, then click on **Hatch**.
- 3) In the *Hatch* box, select the custom hatching for deletion.
- 4) Right-click on the hatching and select **Delete** from the context menu. Click on **Yes** to confirm the deletion.
- 5) Click **OK** to save the changes and close the Area dialog.

Note

It is recommended to only delete or rename custom hatchings that have been created. Deleting or renaming one of the predefined hatchings that are installed with LibreOffice may cause problems in drawings and documents that use one of the gradients.

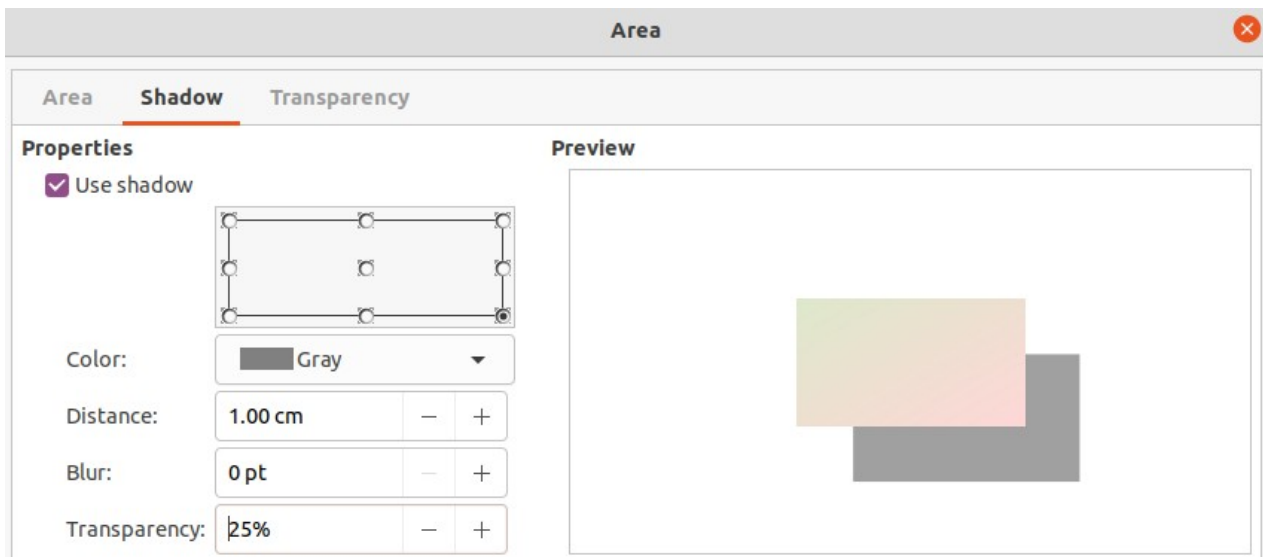


Figure 25: Area dialog - Shadow page

Shadows

Default shadows

To quickly apply a shadow to an object, select the object and click on **Shadow** in the Line and Filling toolbar. The shadow applied to an object using this method is set to the default settings in LibreOffice.

Note

To have more control when applying shadows to an object, use the **Shadow** page in Area or Line dialogs. The following describes the use of the **Shadow** page in the Area dialog (Figure 25), but can also be applied to the **Shadow** page in the Line dialog.

Formatting shadows

For a more control when adding shadows to an object, use the **Shadow** page on the Area dialog (Figure 25) as follows:

- 1) Make sure the object is selected in a drawing.
- 2) Open the Area dialog, then click on **Shadow** to the open the Shadow page.
- 3) Select *Use shadow* for the shadow options to become active.
- 4) Select an anchor point for the direction of the shadow cast in relation to the object.
- 5) In *Color*, select the color palette and the color required for the shadow.
- 6) In *Distance*, enter a distance to set spacing between the object and the shadow.
- 7) In *Blur*, enter a value to soften the edges of the shadow.
- 8) In *Transparency*, enter a percentage for the shadow transparency.
- 9) Click **OK** to close the Area dialog and save the changes.

Transparencies

Transparencies can be applied to area fills as well as shadows and lines.

- To use transparencies on lines, refer to “Formatting lines” on page 5 for more information.
- To use transparencies on shadows, refer to “Shadows” above for more information.

To apply a transparency to an object area fill using the Area dialog (Figure 26) is as follows:

- 1) Make sure the object is selected in a drawing.
- 2) Open the Area dialog, then click on **Transparency** to open the Transparency page and access the available options.
- 3) To create a uniform transparency, select *Transparency* and enter a percentage in the text box.
- 4) To create a gradient transparency so that the area becomes gradually transparent, select *Gradient* and select the type of gradient transparency from the drop-down list: *Linear*, *Axial*, *Radial*, *Ellipsoid*, *Quadratic* or *Square*. See “Table 1” on page 21 for more information on gradient types.
- 5) Set the parameters for the type of the gradient transparency selected above. Refer to “Table 4” below for a description of the properties. The parameters available depends on the type of gradient transparency selected above.
- 6) Click **OK** to close the Area dialog and save the changes.

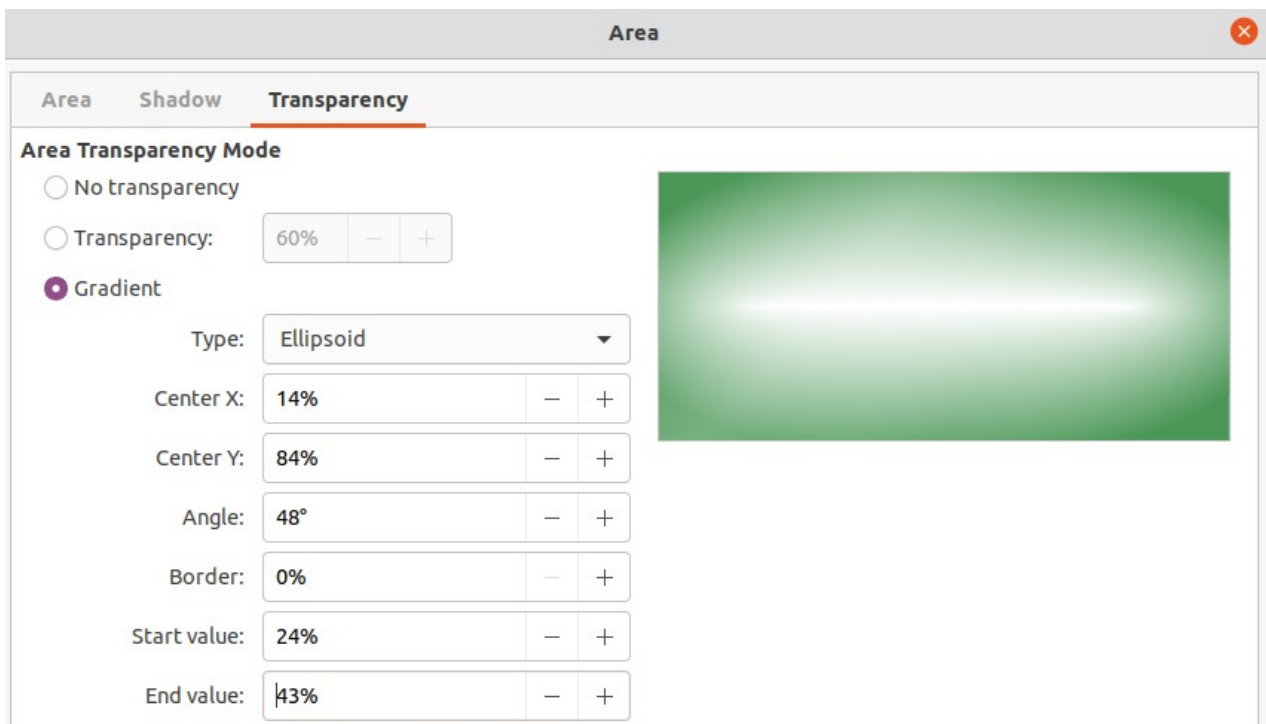


Figure 26: Area dialog - Transparency page

Table 4: Transparency parameters

Transparency parameters	Meaning
Centre X	For <i>Radial</i> , <i>Ellipsoid</i> , <i>Quadratic</i> and <i>Square</i> gradients. The values to set the horizontal offset of the gradient center.
Center Y	For <i>Radial</i> , <i>Ellipsoid</i> , <i>Quadratic</i> and <i>Square</i> gradients. The values to set the vertical offset of the gradient center.

Transparency parameters	Meaning
Angle	For <i>Linear</i> , <i>Axial</i> , <i>Ellipsoid</i> , <i>Quadratic</i> and <i>Square</i> gradients. Specifies the angle of the gradient axis.
Border	Increase this value to make the gradient start further away from the border of the object.
Start value	Value for the starting transparency gradient. 0% is fully opaque, 100% means fully transparent.
End value	Value for the ending transparency gradient. 0% is fully opaque, 100% means fully transparent.

Drawing styles

Suppose that the same area fill, line thickness, and border is to be applied to a set of objects. This repetitive process can be greatly simplified by the use of styles. Styles allow a format to be defined and then applied to multiple objects. For more information on styles, see the *Writer Guide*.

Note

The drawing styles included with LibreOffice Draw cannot be deleted or renamed. However, all drawing styles can be modified to the drawing requirements. Also, drawing styles can be hidden when not required, except for any drawing styles that have been used in a drawing.

Style categories

- **All Styles** – displays all the drawing styles available for use in Draw.
- **Applied Styles** – displays the drawing styles that have been used in the selected drawing.
- **Hierarchical Styles** – displays the drawing styles in a hierarchical list (also known as a linked or parent/child styles). To view the styles in a sub-level, click on the triangle ► next to the style name to list the styles available in the sub-level, as shown in Figure 27.
- **Custom Styles** – displays all the user created drawing styles that are available for use in Draw.
- **Hidden Styles** – displays all the drawing styles that a user has hidden when not required for use in Draw.

Note

Hierarchical styles are used with multiple objects differ, for example, in color, but are otherwise identically formatted. Create a parent style for the objects including borders, area fill, font, and so on. Then create a hierarchical or child styles, which differ only in the fill color attribute. If the font size or the thickness of a border needs to be changed, it is sufficient to change the parent style and all the child styles are changed accordingly.

Tip

At the bottom of the Styles deck on the Sidebar there is a drop-down list allowing selection of the style category. The style categories available are *Hierarchical*, *All Styles*, *Hidden Styles*, *Applied Styles*, and *Custom Styles*.

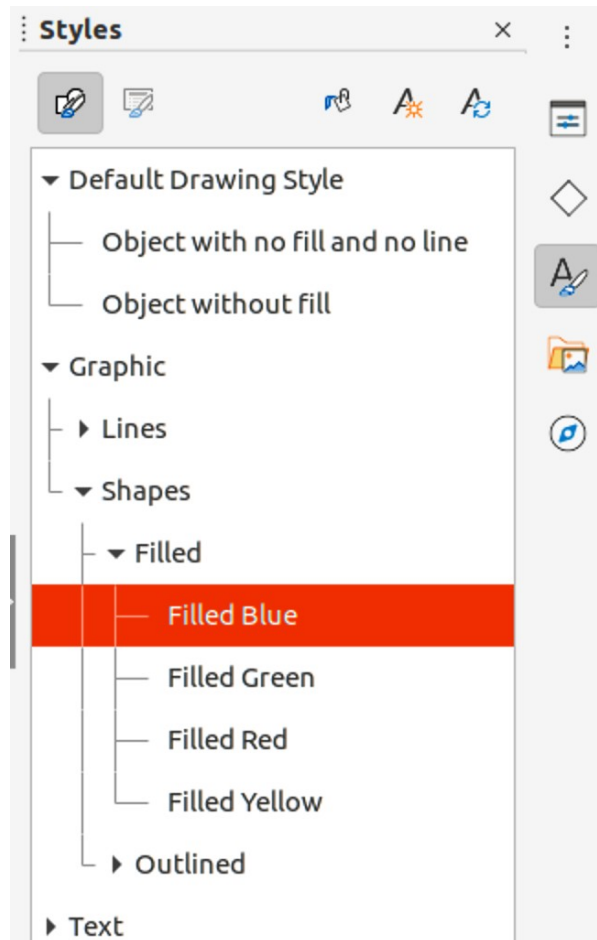


Figure 27: Styles deck in Sidebar

Selecting styles

Styles can only be selected and applied to objects using the Styles deck on the Sidebar (Figure 27).

- 1) Select the object for style application.

Note

When an object is placed into a drawing, the **Default Drawing Style** is automatically applied.

- 2) Open the Styles deck on the Sidebar using one of the following methods:
 - Go to **View > Sidebar** on the Menu bar, then click on **Styles** at the right side of the Sidebar.
 - Click on the **Show the Styles Sidebar** icon on the Line and Filling toolbar.
 - Go to **View > Styles** on the Menu bar.
 - Use the keyboard shortcut *F11*.

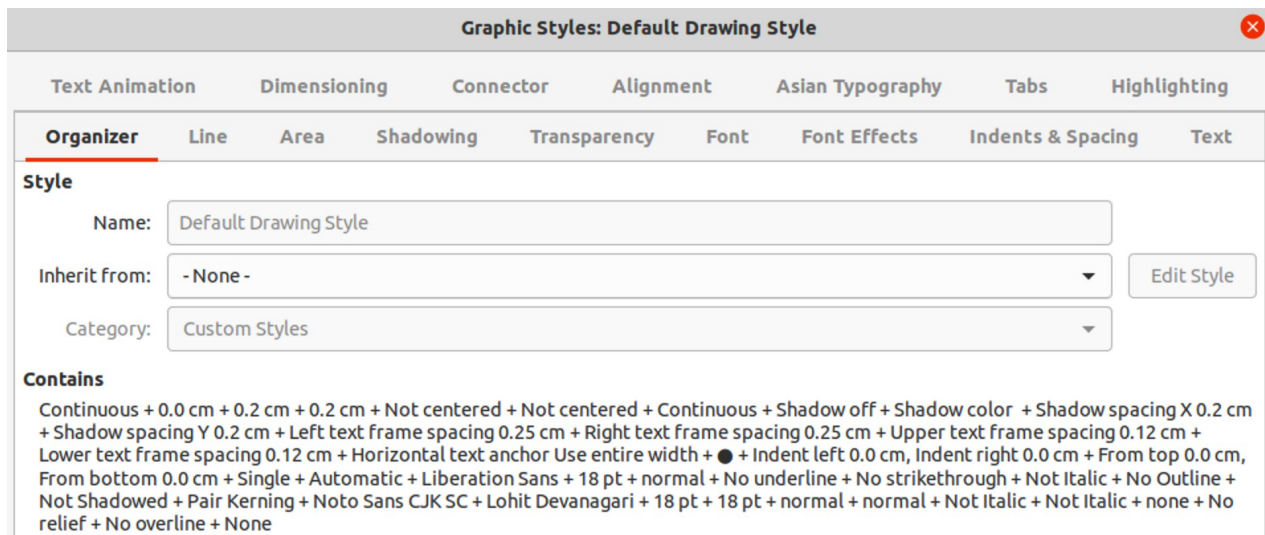


Figure 28: Graphic Styles dialog - Organizer page

- 3) Select a style category from the drop-down list at the bottom of the Styles deck.
- 4) In the Styles deck, double-click on the style required for the selected object.
- 5) If necessary, create a new (custom) style or modify the selected style to the requirements, as described below.

✓ Note

It is recommended to create new (custom) styles rather than modify the drawing styles installed with LibreOffice. Modifying drawing styles installed with LibreOffice may cause problems if the style has been used in other drawings.

Creating new or custom styles

After creating a new or custom style, it is placed in **All Styles** and **Custom Styles** categories in the Styles deck of the Sidebar. When the custom style is applied to an object, the custom style also appears in **Applied Styles**.

Using Styles deck

- 1) Open the Styles deck on the Sidebar.
- 2) Right click on the style required as a starting point to create a custom style and select **New** from the context menu to open the Graphic Styles dialog (Figure 28).
- 3) Click on the **Organizer** tab to open the **Organizer** page in the Graphic Styles dialog.
- 4) In the *Name* text box, enter a unique style name.
- 5) If the new style is to inherit settings from an existing style, select a style from the *Inherit from*: drop-down list.
- 6) Use the options on the various pages of the Graphic Styles dialog to format and categorize a new style.
 - **Organizer** – contains a summary of the style and its hierarchical position.
 - **Font, Font Effects, Indents & Spacing, Alignment, and Tabs** – sets the attributes of the text inserted into a text box or graphic object.
 - **Dimensioning** – sets the style of dimension lines when used on an object.
 - **Text, Text Animation, Connector, Line, Area, Shadowing, Highlighting and Transparency** – sets the attributes for the object format..

- 7) Click **OK** when finished to save the new style and close the Graphic Styles dialog.

Using New Style from Selection

Using **New Style from Selection** allows all formatting to be made to an object first and then create a drawing style from that object.

- 1) Select the object to create a new style from, or create a new object in a drawing.
- 2) Format the object using the tools and options from the following dialogs and toolbars:
 - Graphic Styles dialog.
 - Area dialog.
 - Line dialog
 - Properties deck on the Sidebar.
 - Line and Filling toolbar.
- 3) Create the new style using one of the following methods:
 - Open the Styles deck on the Sidebar and click on **New Style from Selection** at the top right of the deck.
 - Go to **Format > Styles > New Style from Selection** on the Menu bar.
- 4) In the Create Style dialog that opens, type a unique name for the new style. This dialog also shows existing custom styles.
- 5) Click **OK** to save the new style and close the Create Style dialog.

Modifying styles

It is recommended to only modify styles that have been created. Modifying styles that are installed with LibreOffice may cause problems in other documents that use one of these styles.

- 1) Select an object in a drawing.
- 2) Open the Graphic Styles dialog using one of the following methods:
 - Go to **Format > Styles > Edit Style** on the Menu bar.
 - Right-click on the object and select **Edit Style** from the context menu.
 - Right-click on the object style that is highlighted in the Styles deck on the Sidebar and select **Modify** from the context menu.
- 3) Use the options on the pages of the Graphic Styles dialog to modify the object style.
- 4) Click **OK** to save the changes and close the Graphic Styles dialog.

Editing hierarchical or parent styles

If an object in a drawing uses a style that is linked to a hierarchical or parent style, then it is possible to edit the hierarchical or parent style.

- 1) Select an object in a drawing that uses a linked style.
- 2) Open the Graphic Styles dialog and click on **Organizer** to open the **Organizer** page in the Graphic Styles dialog.
- 3) Check that the style name in the *Inherit from* text box is the hierarchical or parent style for editing, use the various options on the pages in the Graphic Styles dialog to edit the style.
- 4) If the hierarchical or parent style is NOT the one required:
 - a) Click on **Edit Style** to the right of the *Inherit from* text box until the name of the style is displayed.

- b) Use the various options on the pages in the Graphic Styles dialog to edit the style.
- 5) Click **OK** to save the changes and close the Graphic Styles dialog.

Note

It is recommended to create custom hierarchical styles rather than modify the existing hierarchical styles available in LibreOffice. Modifying hierarchical styles installed with LibreOffice may cause problems if the style has been used in other drawings.

Updating styles

Using **Update Style** allows all the formatting to an object to be made first and then update the drawing style used by the object.

- 1) Select the object to modify the drawing style the object uses.
- 2) Format the object using the various tools and options from the following dialogs and toolbars:
 - Graphic Styles dialog.
 - Area dialog.
 - Line dialog
 - Properties deck on the Sidebar.
 - Line and Filling toolbar.
- 3) Update the drawing style using one of the following methods. There is no confirmation when updating a drawing style.
 - Open the Styles deck on the Sidebar and click on **Update Style** at the top right.
 - Go to **Format > Styles > Update Selected Style** on the Menu bar

Note

Make sure to only update custom styles that have been created. Updating styles that are part of the default installation of LibreOffice could cause problems in other documents that use LibreOffice drawing styles.

Applying styles

Drawing styles are applied to an object using the Styles deck on the Sidebar as follows:

- 1) Select the object to apply a drawing style.
- 2) Click on **Styles** on the Line and Filling toolbar, or click on **Styles** on the Sidebar.
- 3) Double click on the style name to apply the drawing style to the selected object.

Deleting styles

Predefined styles in LibreOffice cannot be deleted, even if they are not being used. Only user-defined (custom) styles can be deleted. However, before deleting a custom style, it is recommended to make sure the drawing style is not in use by checking the list of drawing styles in the *Applied Styles* category.

- 1) To open a list of styles, use one of the following methods:
 - Click on **Styles** on the Line and Filling toolbar.

- Click on **Styles** on the Sidebar.
- 2) Select *Applied Styles* from the drop-down list at the bottom of the Styles deck on the Sidebar.
- 3) Right click on the style name in the styles list and select **Delete** from the context menu.
- 4) If the style is used on an object, a warning message will appear stating that the selected object will revert back to the default drawing style. Select **Yes** to confirm deletion of the style.
- 5) If the style is not in use, select **Yes** to confirm deletion of the style and there is no confirmation message.

Special effects

As well as the basic actions of moving and resizing an object, a number of special effects can also be applied to objects in Draw. Several of these effects are readily available in the Transformations toolbar. If the Transformations toolbar (Figure 19 on page 23) is not showing, select it from **View > Toolbars > Transformations** on the Menu bar.

The tools on the Transformations toolbar are described in the following sections with the exception of the **In 3-D Rotation Object** tool, which is described in Chapter 7, Working with 3D Objects.

Rotating objects

Rotation of an object can be carried out manually or using a dedicated dialog. This is similar to changing the position or size of an object.

Manual rotation

- 1) Select the object for rotation so that the selection handles are displayed.
- 2) Use one of the following methods to switch the selected object into rotation mode,. The selection handles change shape and color when in rotation mode (Figure 29).
 - Click again on the selected object.
 - Click on the triangle ▼ to the right of **Transformations** on the Line and Filling and select **Rotate** from the context menu.
 - If the Transformations toolbar is displayed, click on **Rotate**.
- 3) Move the cursor over one of the corner handles and the cursor changes shape.

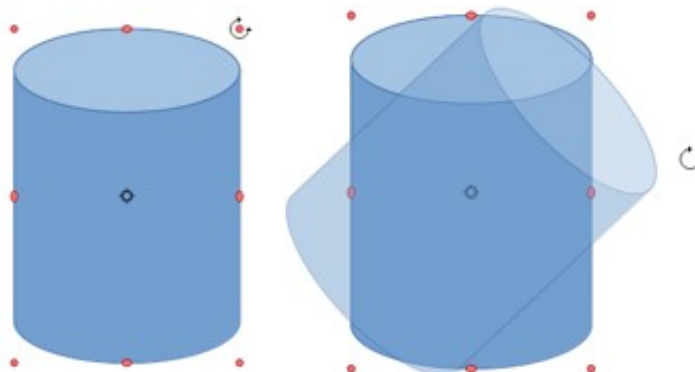


Figure 29: Manually rotating objects

- 4) Click and drag the object in the rotation direction. Only the corner selection handles are active for rotation.

- 5) To restrict the rotation angles to multiples of 15 degrees, press and hold the *Shift* key while rotating the object. This is very handy for rotating objects through 90 deg, for example from portrait to landscape.
- 6) When satisfied with the rotation, release the mouse button.
- 7) By default, the rotation pivot point is a small circle in the center of the selected object. To change the center of object rotation, click and drag the rotation pivot point to a new position. This position for the rotation pivot point can be outside of the selected object.

Sidebar rotation

- 1) Select the object for rotation so that the selection handles are displayed.
- 2) Open the **Position and Size** section in the Properties deck on the Sidebar (Figure 30).
- 3) Rotate the object using one of the following options:
 - Click on and drag the rotation indicator in *Rotation*.
 - Enter a rotation angle in the *Rotation* text box.
- 4) When satisfied, click outside the object to deselect the object and deselect rotation mode.

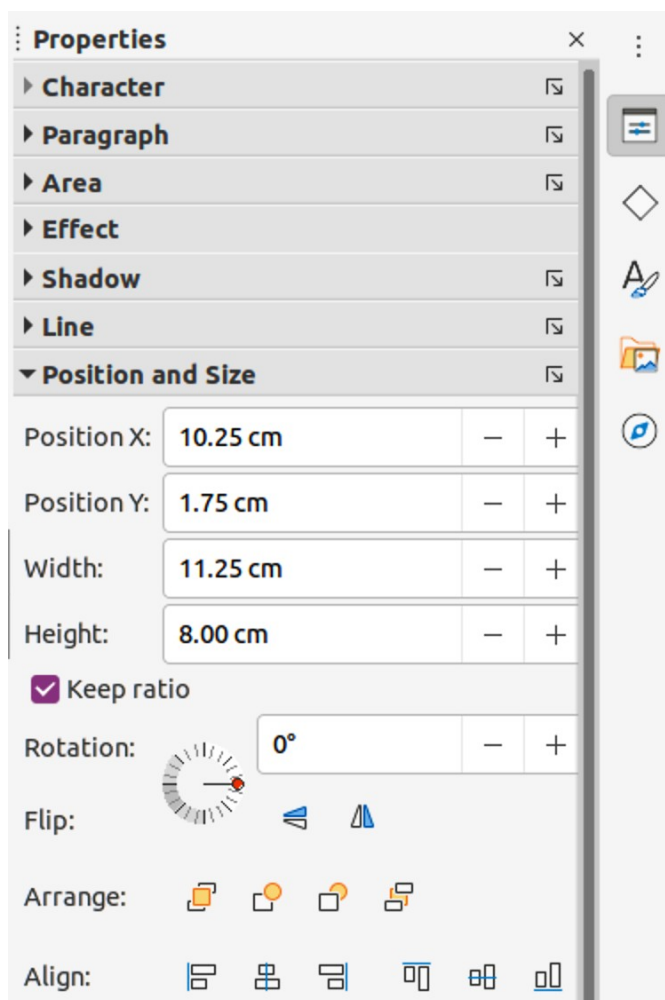


Figure 30: Position and Size section in Properties deck on Sidebar

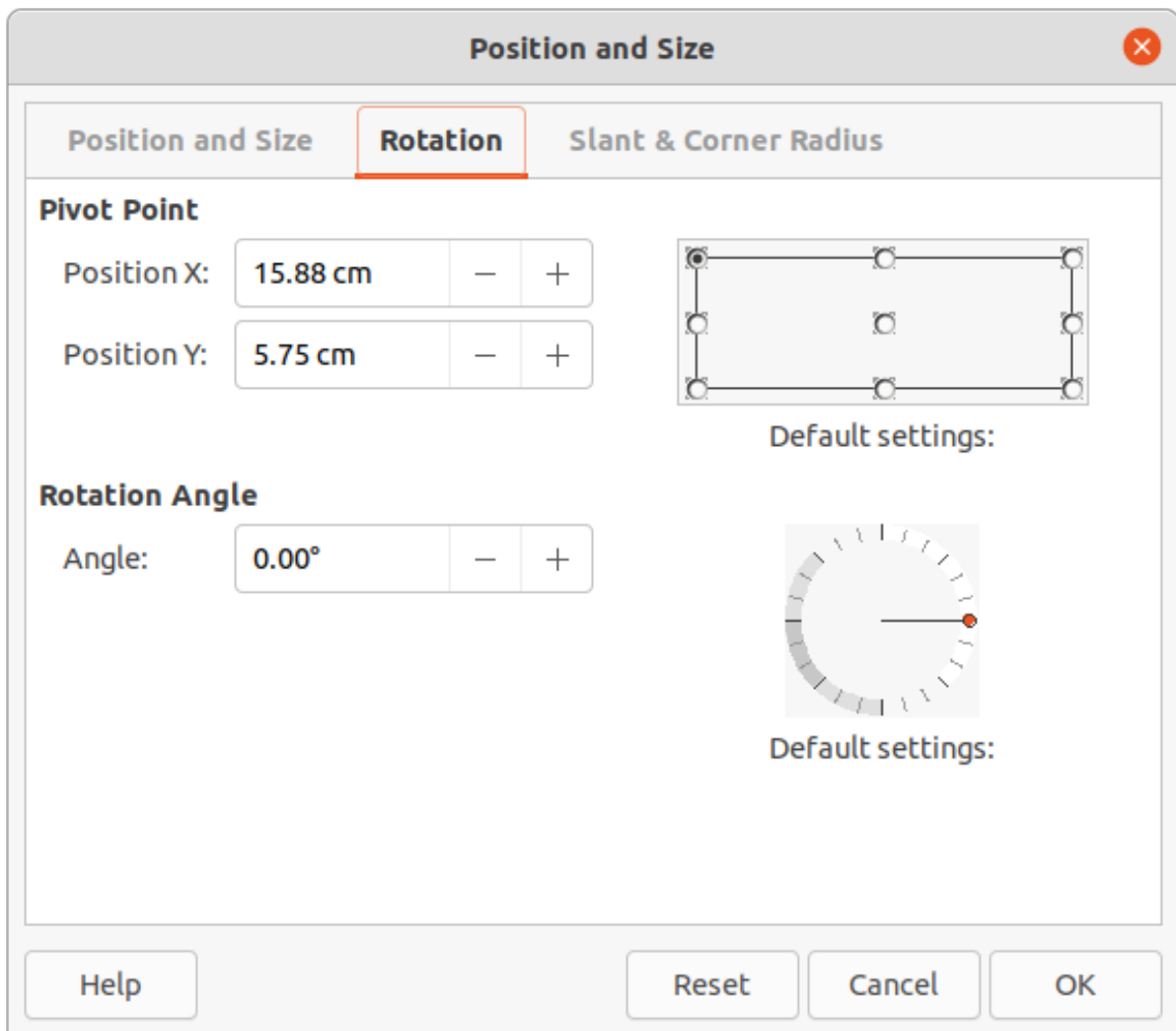


Figure 31: Position and Size dialog - Rotation page

Position and Size dialog

- 1) Select the object for rotation so that the selection handles are displayed.
- 2) Open the Position and Size dialog (Figure 31) using one of the following methods:
 - Use the keyboard shortcut *F4*.
 - Select **Format > Position and Size** on the Menu bar.
 - Right-click on the object and select **Position and Size** from the context menu.
- 3) Click **Rotation** to open the **Rotation** page.
- 4) Rotate the object using one of the following methods:
 - In the *Angle* text box, enter the degrees of rotation required.
 - Click on and drag the rotation indicator in *Default settings*.
- 5) Click **OK** to save the changes and close the Position and Size dialog.

Flipping objects

Quick flipping

- 1) Select the object for flipping so that the selection handles are displayed.
- 2) Use one of the following methods to flip the object vertically or horizontally:

- Right click on the object and select **Flip > Horizontally** or **Flip > Vertically** from the context menu.
- In the *Position and Size* section of the Properties deck on the Sidebar, click on **Flip Vertically** or **Flip Horizontally**.
- In the Line and Filling toolbar, click on **Vertically** or **Horizontally**.
- Go to **Shape > Flip > Vertically** or **Horizontally** on the Menu bar.

Flip tool

Using the Flip tool on the Transformations toolbar, the position and angle that the object flips over can be changed, as shown in Figure 32.

- 1) Select the object for flipping so that the selection handles are displayed.
- 2) Click on the Flip tool on the Transformations toolbar and the symmetry axis appears as a dashed line through the middle of the object. The object will be flipped about this symmetry axis.
- 3) Click and drag one or both ends of the symmetry axis to set the orientation of the axis.
- 4) Place the cursor over one of the object selection handles until it changes shape.
- 5) Click and drag the object across to the other side of the symmetry axis until the object appears flipped over. The angle and position of the flip depends on the angle and position of the symmetry axis.
- 6) Release the mouse button and the object is flipped.

✓ Note

Pressing and holding the *Shift* key while moving the symmetry axis allows rotation in 45 degree increments.

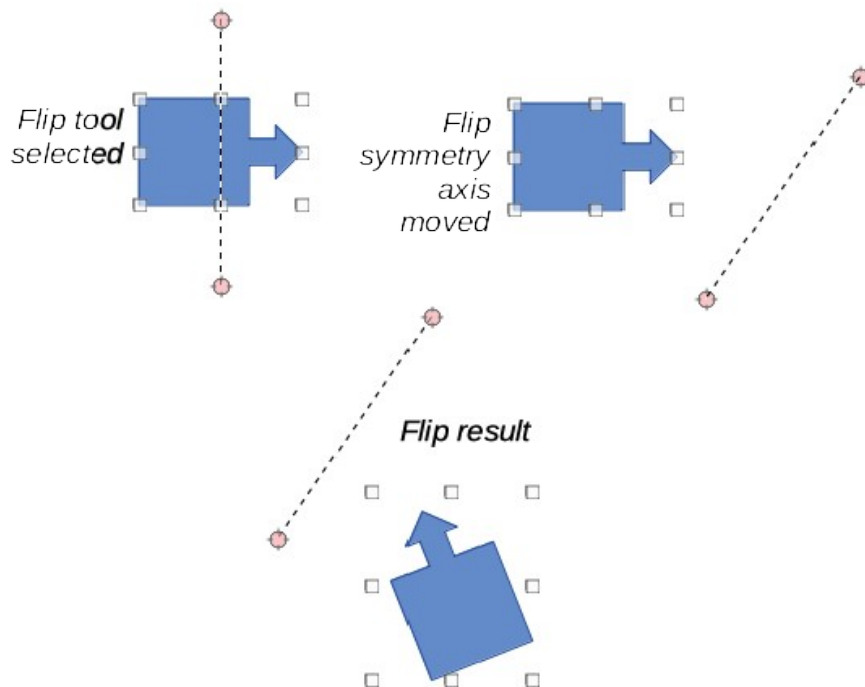


Figure 32: Example of using Flip tool

Mirror copies

At the moment there is no mirror command existing in Draw. However, mirroring an object can be emulated by copying and flipping the object as follows:

- 1) Select the object to make a mirror copy of and copy the object to the clipboard.
- 2) Flip the object using the procedures in “Flipping objects” above.
- 3) Click in an empty area on the drawing to deselect the object.
- 4) Paste the copy of the original object back into its original location, creating a mirror copy.
- 5) If necessary, select both objects and align them using one of the following methods:
 - Go to **Shape > Align** on the Menu bar and use one of the alignment options.
 - Right-click the selected objects and select **Align** from the context menu, then select one of the alignment options.

Distorting images

Three tools on the Transformations toolbar allow dragging on the corners and edges of an object to distort the image.

Before distorting an object, the object must be converted to a circle. Clicking on and dragging one of the object handles produces the desired effect. Examples of distortion are shown in the following figures.

✓ Note

Transforming an object into a curve is a safe operation, but cannot be reversed other than by clicking **Format > Undo** on the Menu bar.

Set in circle (perspective)

Select an object and click on **Set in Circle (perspective)** in the Transformations toolbar. After converting to a curve, click and drag one of the selection handles (Figure 33).

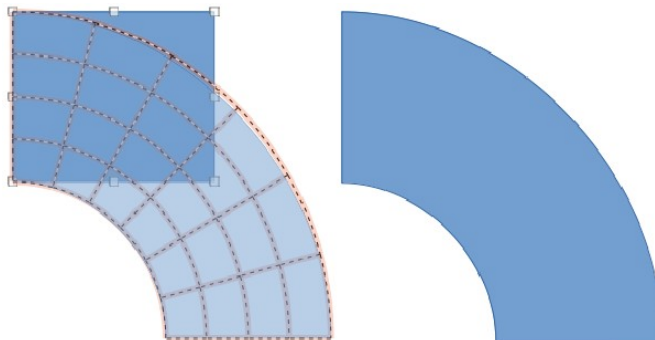


Figure 33: Example of using Set in Circle (perspective) tool

Set to circle (slant)

Select an object and click on **Set to Circle (slant)** in the Transformations toolbar. After converting to a curve, click and drag one of the selection handles (Figure 34).

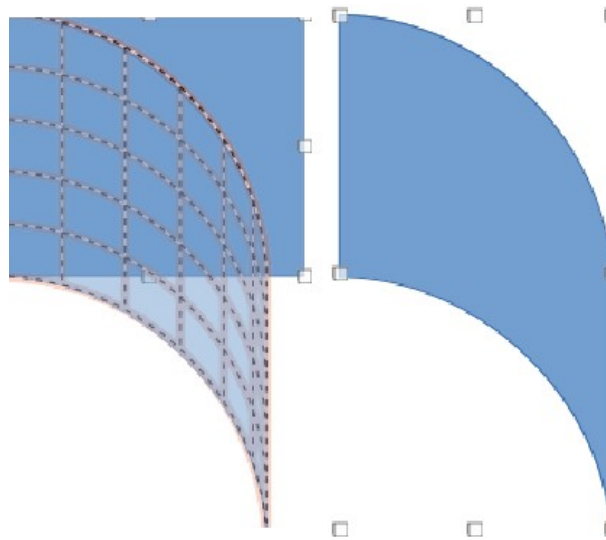


Figure 34: Example of using Set in Circle (slant) tool

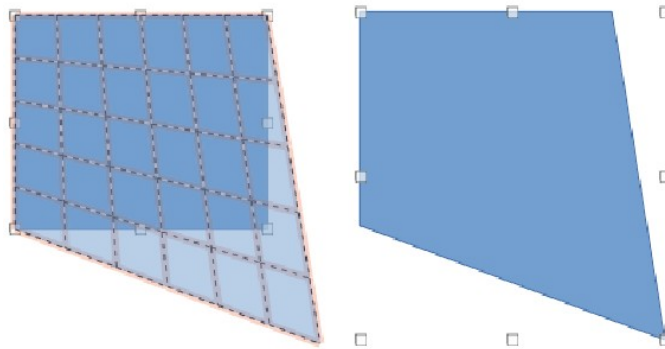


Figure 35: Example of distortion using corner selection handle

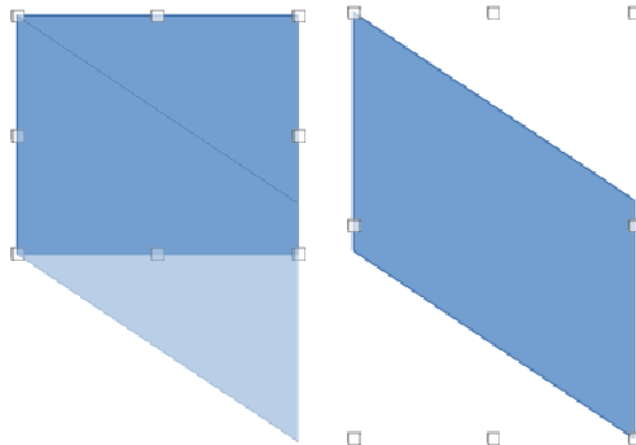


Figure 36: Example of distortion using vertical selection handle

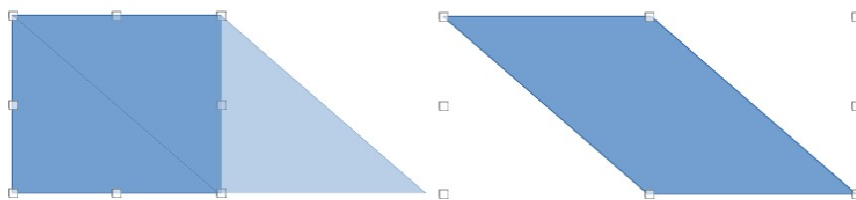


Figure 37: Example of distortion using horizontal selection handle

Distort

Select an object and click on **Distort** on the Transformations toolbar. After converting to a curve, click and drag a selection handle to stretch the object. The corner handles distort the corners of the object (Figure 35), the vertical midpoint handles distort the object horizontally (Figure 36) and the horizontal midpoint handles distort the object vertically (Figure 37).

Dynamic gradients

Transparency gradients are controlled in the same manner as color gradients and both types of gradient can be used together. With a transparency gradient, the direction and degree of object fill color changes from opaque to transparent. In a color gradient, the fill changes from one color to another, but the degree of transparency remains the same.

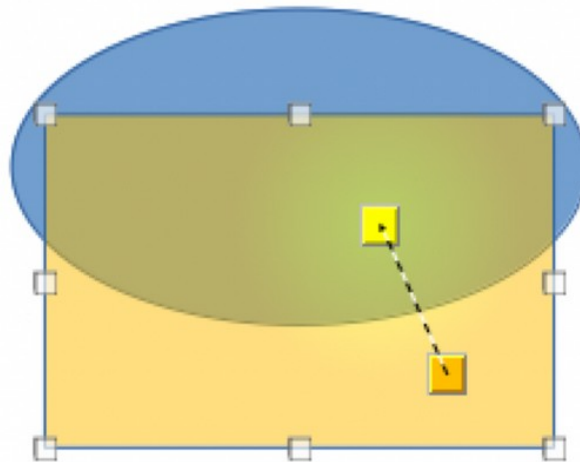


Figure 38: Example of dynamic gradient

Two icons on the Transformations toolbar dynamically control transparency and color gradients. Even if an object with a color fill is not assigned transparency, the transparency can be controlled by clicking on **Interactive transparency tool**. This defines a transparency gradient and a dashed line connecting two squares appears on the object. Move the two squares to modify the gradient. Define the direction of the gradient (vertical, horizontal, or at any angle) and the spot at which the transparency begins.

A regular color gradient is defined in the same manner. Select an object, then select a gradient area fill (see “Gradient fills” on page 20 for more information). The **Interactive gradient tool** is now active on the Transformations toolbar. When clicking on **Interactive gradient tool**, a dashed line connecting two squares appears on the object, just as it does for a transparency gradient.

In both transparency gradient and gradient fill, click outside the object to set the gradient.

In the example shown in Figure 38 there is a single color object and a transparency gradient, covering part of the underlying object. This gradient transparency can be dynamically adjusted. Direction of transparency is changed by moving the white square and the distance over which it is applied by moving the green square.

✓ Note

Moving the squares has different effects, depending on the type of gradient. For example, for a linear gradient, the start and end squares of the gradient will always be situated to either side of the center point of the object.