Chapter 4
Changing Object Attributes
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 more detailed list, see the application Help.

<table>
<thead>
<tr>
<th>Windows or Linux</th>
<th>macOS equivalent</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools &gt; Options menu</td>
<td>LibreOffice &gt; Preferences</td>
<td>Access setup options</td>
</tr>
<tr>
<td>Right-click</td>
<td>Control + click or right-click</td>
<td>Open a context menu</td>
</tr>
<tr>
<td></td>
<td>depending on computer setup</td>
<td></td>
</tr>
<tr>
<td>Ctrl (Control)</td>
<td>Command</td>
<td>Used with other keys</td>
</tr>
<tr>
<td>F5</td>
<td>Shift + Command + F5</td>
<td>Open the Navigator</td>
</tr>
<tr>
<td>F11</td>
<td>Command + T</td>
<td>Open the sidebar Styles deck</td>
</tr>
</tbody>
</table>
Contents

Copyright........................................................................................................................................2
Contributors......................................................................................................................................2
To this edition....................................................................................................................................2
To Previous Editions..........................................................................................................................2
Feedback...........................................................................................................................................2
Publication date and software version..............................................................................................2
Using LibreOffice on macOS............................................................................................................2

Formatting lines..............................................................................................................................5
Line and Filling toolbar.....................................................................................................................5
Sidebar...............................................................................................................................................5
Line dialog........................................................................................................................................6
Line page..........................................................................................................................................6
  Line properties.................................................................................................................................7
  Arrow styles...................................................................................................................................7
  Corner and cap styles......................................................................................................................8
Line shadows.....................................................................................................................................8
Line styles..........................................................................................................................................9
  Creating line styles.........................................................................................................................9
  Deleting line styles.......................................................................................................................10
Arrow styles.....................................................................................................................................10
  Creating arrow styles...................................................................................................................10
  Deleting arrow styles...................................................................................................................11

Formatting fill areas.......................................................................................................................12
Line and Filling toolbar....................................................................................................................12
Sidebar..............................................................................................................................................13
Area dialog.......................................................................................................................................14
Types of area fill...............................................................................................................................14
  Color fill.......................................................................................................................................14
  Gradient fill....................................................................................................................................16
  Bitmap fill......................................................................................................................................16
  Pattern fill......................................................................................................................................16
  Hatch fill........................................................................................................................................17

Working with area fills...................................................................................................................18
Color fills..........................................................................................................................................18
  Creating colors using Area dialog.................................................................................................18
  Creating colors using Pick a Color dialog......................................................................................19
  Deleting custom colors.................................................................................................................19
Gradient fills....................................................................................................................................20
  Creating new gradients...................................................................................................................20
  Modifying gradients.......................................................................................................................21
  Deleting gradients..........................................................................................................................22
  Advanced gradient controls...........................................................................................................22
Bitmap fills.......................................................................................................................................23
  Editing bitmaps...............................................................................................................................23
  Importing bitmaps...........................................................................................................................24
  Deleting bitmaps.............................................................................................................................25
Pattern fills.................................................................................................................. 25
Creating or editing patterns....................................................................................... 25
Deleting patterns......................................................................................................... 26
Hatching fills................................................................................................................ 27
Creating new hatching fills......................................................................................... 27
Modifying hatching fills.............................................................................................. 28
Deleting hatch fills...................................................................................................... 28
Shadows....................................................................................................................... 29
Default shadows......................................................................................................... 29
Formatting shadows.................................................................................................... 29
Transparencies............................................................................................................. 29

Using drawing object styles....................................................................................... 31
Linked styles............................................................................................................... 31
Creating new styles.................................................................................................... 31
Using Styles deck......................................................................................................... 31
New style from selection............................................................................................. 32
Modifying or editing styles......................................................................................... 33
Editing linked styles.................................................................................................. 33
Updating styles........................................................................................................... 34
Applying styles.......................................................................................................... 34
Deleting styles............................................................................................................ 35

Applying special effects............................................................................................. 35
Rotating objects.......................................................................................................... 36
Manual rotation........................................................................................................... 36
Sidebar rotation........................................................................................................... 36
Rotation dialog........................................................................................................... 36
Flipping objects.......................................................................................................... 37
Quick flipping............................................................................................................. 37
Flip tool....................................................................................................................... 38
Mirror copies............................................................................................................... 39
Distorting images....................................................................................................... 39
Distorting.................................................................................................................... 39
Setting in circle (perspective).................................................................................... 39
Setting to circle (slant).............................................................................................. 39
Dynamic gradients.................................................................................................... 41
Formatting lines

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

**Note**

When you hover the mouse cursor over an icon or tool on a toolbar or in the Sidebar, a pop up will indicate the purpose of the icon or tool.

**Line and Filling toolbar**

To format a line using the **Line and Filling** toolbar (Figure 1):

1) Make sure the line is selected in your drawing.
2) On the **Line and Filling** toolbar, select the line style you want to use from the **Line Style** drop-down list.
3) On the **Line and Filling** toolbar, either type the line width in the **Line Width** text box, or use the up and down arrows to change the line width.
4) On the **Line and Filling** toolbar, click on the small triangle to the right of the **Line Color** icon and select a color from the dialog that opens.

**Sidebar**

To format a line using the **Line** section in the **Properties** deck on the Sidebar (Figure 2):

1) Make sure the line is selected in your drawing.
2) Click on the **Properties** icon 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) Select from the 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 arrow head to the beginning of the line. The right drop-down list adds an arrow head to the end of the line.
5) Select from the middle drop down list the type of line from the options available.
6) Select the line width from the options in the **Width** drop down list or enter a width in the text box.
7) Select the line color from the **Line Color** dialog that opens when you click on the small triangle to the right of the **Color** box.
8) Deselect the line to save your changes to the line.
If you want to fully change the appearance of a line, then you need to use the Line dialog.

1) Select the line in your drawing.

2) Go to Format > Line on the main menu bar, or right-click on the line and select Line from the context menu to open the Line dialog (Figure 3). This dialog consists of four pages: Line, Shadow, Line Styles and Arrow Styles and are explained in the following sections.

3) When you have made all your changes to the selected line, click OK to close the dialog and save your changes. The preview box at the bottom of the dialog shows the effect of your changes on a line.

Line page

The Line page in the Line dialog (Figure 3) is where you can set the basic parameters of the line and 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 the drop-down list or create a custom color.
- **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% left to right)](image)

**Arrow styles**

**Arrow Styles** page on the **Line** dialog are only applicable to individual lines and are not used for lines that form the borders of a shape.

- **Start style and End style**– sets the arrow style or arrowhead for the start and end of a line from the drop down list.
- **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.

A quick way to set the arrowheads for a selected line is to click on the **Arrow Style** icon in the **Line and Filling** toolbar to open the **Arrowheads** menu (Figure 6). Here you can select one of the many predefined arrowhead styles for the start and ending of a selected line.

![Figure 5: Default arrow top; centered arrow bottom](image)

**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 (Figure 3 on page 6) 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. In case of 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.

Line shadows

Use the Shadow page (Figure 7) of the Line dialog to add and format a shadow to a selected line. The settings on this page are the same as those for shadows applied to other objects and are described in “Shadows” on page 29.

A quicker way to apply a shadow to a line is using the Shadow icon on the Line and Filling toolbar. The main disadvantage of using the Shadow icon is that the shadow appearance will be constrained by the shadow settings of the default graphics style.
Line styles

Use the Line Styles page (Figure 8) of the Line dialog to change the line style from the options available from the drop menu in Properties or create a new line style. An example of the line style selected or created is displayed at the bottom of the dialog page.

Creating line styles

To create a new line style:

1) Choose Format > Line on the main menu bar, or right-click on the line and select Line from the context menu, or select the Line icon on the Line and Filling toolbar to open the Line dialog.

2) Click on the Line Styles tab to open the Line Styles page (Figure 8).

3) Select from the Line style drop-down menu a style similar to the style you want to create.

4) Click Add and type a name for the new line style in the dialog that opens, then click OK.

5) Now define the new style by selecting the line type for the new style. To alternate two line types (for example, dashes and dots) within a single line, select different types in the two Type boxes.

6) Specify the Number and Length (not available for dot style) of each Type of line selected.

7) Set the Spacing between the various elements

8) If necessary, select Fit to line width so that the new style fits the width of the selected line.

9) The new line style created is available only in the current document. If you want to use the line style in other documents, click the Save Line Styles icon and type a unique filename in the Save as dialog that opens. Saved line styles have the file extension of .sod.

10) To use previously saved line style, click the Load Line Styles icon and select a style from the list of saved styles. Click Open to load the style into your document.

11) If necessary, click on the Modify button to change the name of the style.

12) Click OK to close the dialog and save any changes you have made.
Deleting line styles

To delete a line style:

1) Choose Format > Line on the main menu bar, or right-click on the line and select Line from the context menu, or select the Line icon on the Line and Filling toolbar to open the Line dialog.
2) Click on the Line Styles tab to open the Line Styles page (Figure 8).
3) Select the line style you want to delete from the Line style drop-down list.
4) Click on the Delete button, then confirm the deletion by clicking on the Yes button in the confirmation dialog that opens.
5) Click OK to close the Line dialog and save any changes you have made.

Note

When 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 9) in the Line dialog to create new arrow styles, or modify existing arrow styles, or load previously saved arrow styles.

Creating arrow styles

To create a new arrow style:

1) First draw a curve in the shape you want to use for the arrowhead, or create a shape and convert to a curve. The top of the shape must face upward (as shown in Figure 10) because this becomes the point of the arrow.

Figure 9: Line dialog - Line Styles page
2) Select the shape and, if necessary, right-click and choose **Convert > To Curve** from the context menu to convert the shape to a curve. If the shape is already a curve, **To Curve** will not be available.

3) With the selection handles showing, select **Format > Line** from the main menu bar, or right-click and choose **Line** from the context menu.

4) Go to the **Arrow Styles** page, click the Add button, type a name for the new arrow style, and click OK. The new arrowhead style will be shown in the preview.

5) Now you can select the new style from the **Arrow style** list. The new style is shown at the bottom of the drop down list.

6) The new arrowhead style created is available only in the current document. If you want to use this arrowhead style in other documents, click the **Save Line Styles** icon and type a unique filename in the **Save as** dialog that opens. Saved styles have the file extension of .sod.

7) To use previously saved arrowhead styles, click the **Load Line Styles** icon and select the style from the saved list of styles. Click **Open** to load the style into your document.

8) If necessary, click on the **Modify** button to change the name of the style.

9) Click **OK** to close the dialog and save any changes you have made.

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**Note**

The arrowhead must be a curve, which is something you can draw without lifting a pencil from the paper. For example, a star can be a curve, but a smiley face cannot be a curve because you have to reposition the pencil on the paper to draw eyes and a mouth on the face.

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**Deleting arrow styles**

To delete an arrow style:

1) Choose **Format > Line** on the main menu bar, or right-click on the line and select **Line** from the context menu, or select the **Line** icon on the **Line and Filling** toolbar to open the **Line** dialog.

2) Click on the **Arrow Styles** tab to open the **Arrow Styles** page (Figure 9 on page 10).

3) Select the arrow style you want to delete from the **Arrow style** drop-down list.

4) Click on the **Delete** button, then confirm the deletion by clicking on the **Yes** button in the confirmation dialog that opens.

5) Click **OK** to close the **Line** dialog and save any changes you have made.
Note

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

Formatting fill areas

The term area fill refers to the inside of an object, which can be a uniform color, gradient, hatching, bitmap or pattern as shown in Figure 11. An area fill can be made partly or wholly transparent and can throw a shadow.

Line and Filling toolbar

Tools on the Line and Filling toolbar (Figure 1 on page 5) provide a wide number of default fillings readily available to quickly format graphic objects. If this toolbar is not showing, go to View > Toolbars > Line and Filling on the main 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, from the drop-down list, select the type of fill required (None, Color, Gradient, Hatching, Bitmap, Pattern) (Figure 12).
3) Click on the right Area Style/Filling drop-down list and select one of the available options for the selected type of area. For more information on area fills, see “Area dialog” on Page 14.
   • Color options in Figure 13.
   • Gradient options in Figure 14.
   • Hatching options in Figure 15.
   • Bitmap options in Figure 16.
   • Pattern options, see Fill and Transparency in the Area section on the Sidebar (Figure 17) or the Pattern section in Area page of the Area dialog (Figure 22 on page 17).
4) Deselect the object to save your changes to the object.
Sidebar

To quickly format the area of an object using the Sidebar (Figure 17):

1) Make sure the object is selected in your drawing.

2) Click on the Properties icon on the Sidebar, then click on the down arrowhead ▼ on the left of the Area titlebar to open the Area section.

3) Use the various options in the Fill and Transparency drop-down lists of the Area section to format the fill and transparency of an object. For more information on area fills, see “Area dialog” on Page 14.

4) Deselect the object to save your changes.
Area section in Properties on Sidebar

Area dialog

Use the Area dialog (Figure 18) to change existing area fills with greater control or create your own area fill.

1) Select the object you wish to edit.
2) Next format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar.
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Area tab to open the Area page and to apply an area fill. LibreOffice includes several area fills already defined, but you can create area fills yourself. See “Working with area fills” on page 18 for more information.
4) Select the type of area fill from the drop-down list: None, Color, Bitmap, Gradient, Pattern, or Hatch. The types of area fill are explained below.
5) Select the style of area fill from the options that become available. The number of available options will depend on the type of area fill selected above.
6) Click OK to close the dialog and save your changes. The area fill will then appear in the selected object.

Types of area fill

Color fill

1) Open the Area dialog and click on the Area tab to open the Area page.
2) Click on Color (Figure 18) to open the options available for a color fill.

3) In Palette, select your required palette from the drop down list and your required color from the available colors shown. All color fills available are solid colors.

4) Active shows the present color fill of your selected object. After selecting a new color, a preview of the selected color appears in New in the dialog.

5) Alternatively, enter the RGB or Hex values of a color in the appropriate text box.

6) Alternatively, click on Pick to open the Pick a Color dialog (Figure 19). Here you can pick a color from the color box or enter the RGB, Hex, HSB or CMYK values for your color.

7) If you have used a color before and would like to use it again, then select your color from those available in Recent Colors.

8) Click OK to close the dialog and save your changes. The area fill will then appear in the selected object.
Gradient fill

1) Open the Area dialog and click on the Area tab to open the Area page.
2) Click on Gradient (Figure 20) to open the options available for a gradient fill.
3) In Gradient, select your required gradient from the list of available gradients and it will appear in Preview.
4) To override the default gradient transition in your selection, deselect Automatic in Options and then enter the values for Type, Increment, Angle, Border, From Color and To Color in the available boxes.
5) Click OK to close the dialog and save your changes. The area fill will then appear in the selected object.

Bitmap fill

1) Open the Area dialog and click on the Area tab to open the Area page.
2) Click on Bitmap (Figure 21) to open the options available for a bitmap fill.
3) In Bitmap, select your required bitmap from the list of available bitmaps and it will appear in Preview.
4) To override the settings for the bitmap in your selection, enter the values for Style, Size, Position, Tiling Position, and Tiling Offset in the available boxes under Options.
5) Alternatively, click on Add/Import and select an image from the file selection box that opens to use as a bitmap fill.
6) Click OK to close the dialog and save your changes. The area fill will then appear in the selected object.

Pattern fill

1) Open the Area dialog and click on the Area tab to open the Area page.
2) Click on Pattern (Figure 22) to open the options available for a pattern fill.
3) In Pattern, select your required pattern from the list of available pattern and it will appear in Preview.
Figure 21: Area dialog - Bitmap page

Figure 22: Area dialog - Pattern page

4) To override the settings for the pattern in your selection, enter a new pattern in Pattern Editor, then a new Foreground Color and Background Color in the available boxes under Options.

5) Click OK to close the dialog and save your changes. The area fill will then appear in the selected object.

**Hatch fill**

1) Open the Area dialog and click on the Area tab to open the Area page.

2) Click on Hatch (Figure 23) to open the options available for a hatch fill.

3) In Hatch, select your required hatching from the list of available hatchings and it will appear in Preview.
4) To override the settings for the hatching in your selection, enter a new values for Spacing, Angle, Line color and Background Color in the available text boxes under Options.

5) Click OK to close the dialog and save your changes. The area fill will then appear in the selected object.

Working with area fills

Color fills

Creating colors using Area dialog

Using the Area dialog (Figure 18 on page 15), you can create a new color as a combination of the three primary colors Red, Green, and Blue, (RGB notation) as follows:

1) Select the object you wish to edit.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Colors button to open the Colors page.
4) Specify the red (R), green (G) and blue (B) values on a 0 to 255 scale to create a new color.
5) Click the Add button to open the Name box (Figure 24) and enter a name for the new color.
6) Click OK to close the Name box and add the new color to the Custom palette.
7) Click OK to save your changes and close the Area dialog. The new color will appear as a fill in the selected object.
Creating colors using Pick a Color dialog

You can create a new color using the Pick a Color dialog as follows:

1) Select the object you wish to edit.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Colors button to open the Colors page (Figure 18 on page 15).
4) Click on the Pick button to open the Pick a Color dialog (Figure 19 on page 15).
5) Create a new color using one of the following methods. A preview of the color created is shown in the colored box next to the original color in the bottom left corner of the dialog.
   • Select a color range from the colored bar, then, using the mouse, move the target in the colored box until you are satisfied with the color selected.
   • Enter values for red (R), green (G) and blue (B) in the RGB text boxes.
   • Enter values for cyan (C), magenta (M), yellow (Y), and key (K) (black) in the CMYK text boxes.
   • Enter values for hue (H), saturation (S) and brightness (B) in the HSB text boxes. HSB values do not change the color, but how a color looks.
6) Click OK to close the Pick a Color dialog.
7) Click the Add button to open the Name box (Figure 24) and enter a name for the new color.
8) Click OK to close the Name box and add the new color to the Custom palette.
9) Click OK to save your changes and close the Area dialog. The new color will appear as a fill in the selected object.

Deleting custom colors

1) Select a filled object that uses the color fill you want to delete.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Colors button to open the Colors page (Figure 18 on page 15).
4) Select Custom from the Palette drop-down list.
5) Select the color you want to delete and click on the Delete button (Figure 25). There is no confirmation given when deleting a color.

6) Click OK to save your changes and close the Area dialog.

**Note**

It is recommended to only delete colors that you have created from the custom palette. Deleting colors from the standard palettes that are available in LibreOffice, may cause problems in documents that use one of the standard colors.

**Gradient fills**

To create a new gradient or to modify an existing one, select the Gradients tab from the Area dialog. Several types of gradients are predefined and, in most cases, changing the colors will be sufficient to obtain the desired result.

**Note**

It is recommended, even if you just want to change the two colors, that you create a new gradient rather than modifying the predefined ones. Predefined gradients should only be used as starting points. Also predefined gradients may have been used in other objects in your drawing or in other documents.

**Creating new gradients**

1) Select the filled object you want to edit.

2) Format the area using one of the following methods:
   - Go to Format > Area on the main menu bar.
   - Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   - Right-click on the object and select Area to open the Area dialog.

3) Click on the Gradients tab to open the Gradients page (Figure 20 on page 16).

4) In Options, select the From Color and To Color from the drop-down lists.
5) In Options, select the gradient type from the drop-down list: Linear, Axial, Radial, Ellipsoid, Quadratic or Square. A preview of the gradient type is shown in the dialog.

6) Set all the properties as desired. The properties used to create a gradient are summarized in Table 1. Depending on the type of gradient selected, some properties may be grayed out.

7) Click the Add button to open the Name box (Figure 26). Enter a name for the new gradient, then click OK to close the Name box.

8) Click OK to close the Area dialog and save the changes.

Table 1: Gradient properties.

<table>
<thead>
<tr>
<th>Gradient property</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center X</td>
<td>For Radial, Ellipsoid, Square and Rectangular gradients, modify these values to set the horizontal offset of the gradient center.</td>
</tr>
<tr>
<td>Center Y</td>
<td>For Radial, Ellipsoid, Square and Rectangular gradients, modify these values to set the vertical offset of the gradient center.</td>
</tr>
<tr>
<td>Angle</td>
<td>For all the gradient types, specifies the angle of the gradient axis.</td>
</tr>
<tr>
<td>Border</td>
<td>Increase this value to make the gradient start further away from the border of the shape.</td>
</tr>
<tr>
<td>From Color</td>
<td>The start color for the gradient. In the edit box below enter the intensity of the color: 0% corresponds to black, 100% to the full color.</td>
</tr>
<tr>
<td>To Color</td>
<td>The end color for the gradient. In the edit box below enter the intensity of the color: 0% corresponds to black, 100% to the full color.</td>
</tr>
</tbody>
</table>

Modifying gradients

1) Select an object that contains the gradient as a fill and format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area to open the Area dialog.

2) Click on the Gradients tab to open the Gradients page (Figure 20 on page 16).

3) Select the gradient you have previously created and added to the Gradients displayed in the Area dialog.

4) Enter the new values for the gradient properties that you want to change. See Table 1 for more information on gradient properties. Depending on the type of gradient selected, some properties may be grayed out.

5) Click Modify to save your changes. There is no confirmation given when modifying a gradient.

6) Click OK to close the Area dialog and save the changes.
Deleting gradients

1) Select a filled object that uses the gradient fill you want to delete.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Gradients tab to open the Gradients page (Figure 20 on page 16).
4) Select the gradient you want to delete.
5) Right click on the gradient and select Delete from the pop-up menu. Click on Yes to confirm the deletion.
6) Click OK to save your changes and close the Area dialog.

Note

It is recommended to only delete gradients that you have created. Deleting gradients that are installed with LibreOffice may cause problems in documents that use one of these gradients.

Advanced gradient controls
LibreOffice provides advanced controls for gradients as follows.

1) Select an object that contains the gradient as a fill.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area to open the Area dialog.
3) Click on the Gradients tab to open the Gradients page in the Area dialog (Figure 20 on page 16).
4) Go to View > Toolbars > Transformations on the main menu bar or click on the Transformations icon on the Line and Filling toolbar to open the Transformations toolbar.

Figure 27: Interactive gradient tool on Transformations toolbar
5) Click on the **Interactive gradient tool** icon in the **Transformations** toolbar. This displays a dashed line connecting two colored squares. The colors show the **From Color** and **To Color** that are used for the selected gradient (Figure 27).

6) Select the type of gradient you want to use for the object from the **Type** drop-down list in **Options** on the **Gradients** page in the **Area** dialog. Properties you can adjust will depend on the gradient type you have selected and these are explained below.

- **Linear gradients** – 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 gradients** – 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 gradients** – 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 gradients** – 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.
- **Square and rectangular gradients** – move the **From Color** to modify the border 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.

7) Click **OK** to save your changes and close the **Area** dialog.

---

**Note**

Moving the squares will have 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.

---

**Bitmap fills**

**Editing bitmaps**

1) Select an object that contains a bitmap as a fill or insert a bitmap into a selected object (see “**Pattern fill**” on page 16 for more information).

2) Go to **Format > Area** on the main menu bar, or click on the **Area** icon on the **Line and Filling** toolbar (Figure 1 on page 5), or right-click on the object and select **Area** to open the **Area** dialog.

3) Click on the **Bitmap** tab to open the **Bitmap** page (Figure 21 on page 17).

4) Select a bitmap from **Bitmap** that you want use and edit as a fill. Note that any imported bitmaps will also be available.

5) In **Options**, select the properties for **Style**, **Size**, **Position**, **Tiling Position** and **Tiling Offset**. See Table 2 for more information on bitmap properties. The best way to understand bitmap properties is to use them. Figure 28 shows examples of bitmap fills and the properties used.

6) Click **OK** to save your changes and close the **Area** dialog.
Table 2: Bitmap options.

<table>
<thead>
<tr>
<th>Bitmap option</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Style – Custom position/size</td>
<td>When this option is selected, the position of the bitmap in the object and the size of the bitmap can be determined.</td>
</tr>
<tr>
<td>Style – Tiled</td>
<td>When this option is selected, the bitmap will be tiled to fill the area. The size of the bitmap used for the tiling is determined by the Size settings</td>
</tr>
<tr>
<td>Style – Stretched</td>
<td>When this option is selected, a bitmap will be stretched to fill object area.</td>
</tr>
<tr>
<td>Size – Width</td>
<td>Sets the width of the bitmap. For example, 100% means that the bitmap original width will be resized to occupy the whole fill area width, 50% means that the width of the bitmap will be half that of the fill area.</td>
</tr>
<tr>
<td>Size – Height</td>
<td>Sets the height of the bitmap. For example, 100% means that the bitmap original height will be resized to occupy the whole fill area height, 50% means that the height of the bitmap will be half that of the fill area.</td>
</tr>
<tr>
<td>Size – Scale</td>
<td>When selected, bitmap size is given as a percentage for Width and Height. When deselected, the actual size of the bitmap is given for Width and Height.</td>
</tr>
<tr>
<td>Position</td>
<td>When this option is selected, the anchoring point of the bitmap is determined.</td>
</tr>
<tr>
<td>Tiling Position – X-Offset</td>
<td>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 at the anchor point and start tiling from there.</td>
</tr>
<tr>
<td>Tiling Position – Y-Offset</td>
<td>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 at the anchor point and start tiling from there.</td>
</tr>
<tr>
<td>Tilling Offset</td>
<td>Offsets the columns of tiled bitmaps by the percentage entered in the box so that two subsequent columns of bitmaps are not aligned.</td>
</tr>
</tbody>
</table>

Importing bitmaps
To import a bitmap created in another program:

1) Select an object where you want to import a bitmap into.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area to open the Area dialog.

3) Click on the Bitmap tab to open the Bitmap page (Figure 21 on page 17).
4) Click on Add/Import and a file browser dialog opens.
5) Browse to the directory containing the bitmap file and select it, then click Open.
6) Enter a name for the new bitmap in the Name box (Figure 29), then click OK to close the Name box.
7) Click OK to save your changes and close the Area dialog.

Deleting bitmaps
1) Select a filled object that uses the bitmap fill you want to delete.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar.
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Bitmap tab to open the Bitmap page (Figure 21 on page 17).
4) Right-click on the bitmap and select Delete from the pop-up menu. Click on Yes to confirm the deletion.
5) Click OK to save your changes and close the Area dialog.

Note
It is recommended to only delete bitmaps that you have created or imported. Deleting bitmaps that are installed with LibreOffice may cause problems in documents that use one of these bitmaps.

Pattern fills

Creating or editing patterns
1) Select an object that contains a pattern as a fill or insert a pattern into a selected object (see “Pattern fill” on page 16 for more information).
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area to open the Area dialog.

3) Click on the Pattern tab to open the Pattern page (Figure 22 on page 17).
4) Select a pattern from the options available in Pattern. Note that any imported patterns will also be available.
5) In Options, select the color you want to use from the drop down lists for Foreground Color and Background Color (Figure 30).
6) In Options – Pattern Editor, start creating or editing the pattern by clicking with the left mouse button in the squares (pixels) that you want to fill with Foreground Color. Check the Preview window to see if the desired effect is being achieved.
7) If you have created a new pattern, click the Add button to open the Name box (Figure 31). Enter a name for the new pattern, then click OK to close the Name box.
8) If you have edited a pattern, click Modify to save your changes. There is no confirmation given when saving an edited pattern.
9) Click OK to save your changes and close the Area dialog.

Deleting patterns
1) Select a filled object that uses the pattern fill you want to delete.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
Right-click on the object and select **Area** from the context menu to open the **Area** dialog.

3) Click on the **Pattern** tab to open the **Pattern** page (Figure 22 on page 17).

4) Right-click on the pattern and select **Delete** from the pop-up menu. Click on **Yes** to confirm the deletion.

5) Click **OK** to save your changes and close the **Area** dialog.

**Note**

It is recommended to only delete patterns that you have created. Deleting patterns that are installed with LibreOffice may cause problems in documents that use one of these patterns.

### Hatching fills

To create a new hatching fill or to modify an existing one, select the **Hatch** tab from the **Area** dialog. As with gradients and colors, it is better to create a new hatching fill rather than modify a predefined one. The properties that can be set for a hatching pattern are shown in Table 3.

**Table 3: Hatching options.**

<table>
<thead>
<tr>
<th>Hatching option</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spacing</td>
<td>Determines the spacing between two lines of the hatching fill. As the value is changed the preview window is updated.</td>
</tr>
<tr>
<td>Angle</td>
<td>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, just enter the desired value in the edit box.</td>
</tr>
<tr>
<td>Line type</td>
<td>Set single, double or triple line for the style of the hatching fill.</td>
</tr>
<tr>
<td>Line color</td>
<td>Use the list to select the color of the lines that will form the hatching fill.</td>
</tr>
<tr>
<td>Background color</td>
<td>When selected, adds a color fill behind the lines used for the hatching fill.</td>
</tr>
</tbody>
</table>

**Creating new hatching fills**

1) Select the filled object you want to edit and format the area using one of the following methods:

   • Go to **Format > Area** on the main menu bar.
   • Click on the **Area** icon on the **Line and Filling** toolbar (Figure 1 on page 5).
   • Right-click on the object and select **Area** to open the **Area** dialog.

2) Click on the **Hatch** tab to open the **Hatch** page (Figure 23 on page 18).

3) As a starting point, select a hatching fill similar to the one that you want to create.

4) Modify the options of the lines forming the hatching fill. A preview is displayed in the window below the available patterns. See Table 3 for information on hatching options.

5) Click the **Add** button to open the **Name** box (Figure 32). Enter a name for the new hatching fill, then click **OK** to close the **Name** box. The new hatching appears at the bottom of the hatching fills displayed in **Hatch**.

6) Click **OK** to close the **Area** dialog and save the changes.
Modifying hatching fills

1) Select an object that contains the hatching as a fill.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area to open the Area dialog.
3) Click on the Hatch tab to open the Hatch page (Figure 23 on page 18).
4) Select a hatching you have previously created and added to the Hatch displayed in the Area dialog.
5) Enter the new values for the Options that become available for change. See Table 3 for more information on hatch options.
6) Click Modify to save your changes. There is no confirmation given when modifying a hatching.
7) Click OK to close the Area dialog and save the changes.

Deleting hatch fills

1) Select a filled object that uses the hatching fill you want to delete.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area from the context menu to open the Area dialog.
3) Click on the Hatch tab to open the Hatch page (Figure 23 on page 18).
4) Select the hatching you want to delete.
5) Right-click on the hatching and select Delete from the pop-up menu. Click on Yes to confirm the deletion.
6) Click OK to save your changes and close the Area dialog.

Note

It is recommended to only delete hatchings that you have created. Deleting hatchings that are installed with LibreOffice may cause problems in documents that use one of these hatchings.
Shadows

Default shadows
To quickly apply a shadow to an object, select the object and click on the Shadow icon in the Line and Filling toolbar (Figure 1 on page 5). The shadow applied to an object using this method is set to default settings.

Formatting shadows
For a more control when adding shadows to an object, you have to use the Shadow page on the Area dialog as follows:

1) Select an object where you want to apply a shadow.
2) Format the area using one of the following methods:
   • Go to Format > Area on the main menu bar.
   • Click on the Area icon on the Line and Filling toolbar (Figure 1 on page 5).
   • Right-click on the object and select Area to open the Area dialog.
3) Click on the Shadow tab to open the Shadow page (Figure 33).
4) Select Use shadow in Properties for the shadow options to become active.
5) Select the anchor point for the direction of the shadow cast in relation to the object.
6) In Color, select the color palette and the color you require for the shadow.
7) In Distance, enter a distance in the text box to set spacing between the object and the shadow.
8) In Transparency, enter the percentage in the text box for the shadow transparency.
9) Click OK to close the Area dialog and save the changes.

Transparencies
Transparency can be applied to filled objects as well as shadows and lines.

• To apply transparency to lines, refer to “Formatting lines” on page 5.
• To apply a transparency to shadows, refer to “Formatting shadows” on page 29.

To apply transparency to filled objects using the Transparency page on the Area dialog:

1) Select an object where you want to apply a transparency.
2) Format the area using one of the following methods:
   - Go to **Format > Area** on the main menu bar.
   - Click on the **Area** icon on the **Line and Filling** toolbar (Figure 1 on page 5).
   - Right-click on the object and select **Area** to open the **Area** dialog.

3) Click on the **Transparency** tab to open the **Transparency** page (Figure 34).

4) To create a uniform transparency, select **Transparency** and enter a percentage in the text box.

5) 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**.

6) Set the parameters for the type of the gradient transparency you selected above. Refer to Table 4 for a description of the properties. The available parameters will depend on the type of gradient transparency selected above.

7) Click **OK** to close the **Area** dialog and save the changes.

*Table 4: Transparency parameters.*

<table>
<thead>
<tr>
<th>Transparency parameters</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre X</td>
<td>For <strong>Radial</strong>, <strong>Ellipsoid</strong>, <strong>Quadratic</strong> and <strong>Square</strong> gradients. The values to set the horizontal offset of the gradient center.</td>
</tr>
<tr>
<td>Center Y</td>
<td>For <strong>Radial</strong>, <strong>Ellipsoid</strong>, <strong>Quadratic</strong> and <strong>Square</strong> gradients. The values to set the vertical offset of the gradient center.</td>
</tr>
<tr>
<td>Angle</td>
<td>For <strong>Linear</strong>, <strong>Axial</strong>, <strong>Ellipsoid</strong>, <strong>Quadratic</strong> and <strong>Square</strong> gradients. Specifies the angle of the gradient axis.</td>
</tr>
<tr>
<td>Border</td>
<td>Increase this value to make the gradient start further away from the border of the object.</td>
</tr>
<tr>
<td>Start value</td>
<td>Value for the starting transparency gradient. 0% is fully opaque, 100% means fully transparent.</td>
</tr>
<tr>
<td>End value</td>
<td>Value for the ending transparency gradient. 0% is fully opaque, 100% means fully transparent.</td>
</tr>
</tbody>
</table>
Using drawing object styles

Note

In LibreOffice Draw, only drawing object styles are available in the Graphic Styles dialog and the Styles deck on the Sidebar.

Suppose that you want to apply the same area fill, line thickness, and border to a set of objects. This repetitive process can be greatly simplified by the use of styles. Styles allow you to define a formatting template (a style) and then to apply that style to multiple objects. For more information on styles, see the Chapter 6 Introduction to Styles in the Writer Guide.

Linked styles

Drawing object styles support inheritance. This means that a style can be linked to another (parent) style so that it inherits all the formatting settings of the parent. You can use this property to create families of styles.

For example, if you need multiple boxes that differ in color, but are otherwise identically formatted, it is recommended to create a generic style for the box including borders, area fill, font, and so on. You then create a number of hierarchically dependent styles which differ only in the fill color attribute. If you then need to change the font size or the thickness of the border, it is sufficient to change the parent style and all the other linked styles will change accordingly.

Note

When styles are linked, changing a color will change the color in all linked styles. Sometimes this is exactly what you want; at other times you do not want the changes to apply to all linked styles. It pays to plan ahead.

Creating new styles

After creating a new style, it will be placed in All Styles and Custom Styles in the Styles deck of the Sidebar. When the your new style is applied to an object, the new style will also appear in Applied Styles.

Using Styles deck

1) Click on the Styles icon on the Sidebar to open the Styles deck (Figure 35).
2) Right click on a style and select New from the context menu to open the Graphic Styles dialog (Figure36).
3) Click on the Organizer tab to open the Organizer page in the Graphic Styles dialog.
4) In the Name text box, type a memorable style name.
5) In Inherit from, select a style from the drop down list a style if you want your new style to inherit settings from a LibreOffice style.
6) Use the various pages and available options in the Graphic Styles dialog to format and categorize your new style.
   - **Organizer** – contains a summary of the style and its hierarchical position.
   - **Font, Font Effects, Indents & Spacing, Alignment, and Tabs** – set the properties of the text inserted in a text box or in a graphic object.
   - **Dimensioning** – used to set the style of dimension lines.
   - **Text, Text Animation, Connector, Line, Area, Shadowing, Highlighting and Transparency** – determine the formatting of an object.

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

**New style from selection**

1) Select the object you want to use to create your new style, or create a new object in your drawing.

2) Use the various options in the pages of the Graphic Styles dialog (Figure 36), or the various tools on the Line and Filling toolbar (Figure 1 on page 5) to make your changes to the object.
3) **Go Format > Styles > New Style from Selection** on the main menu bar or click on the **New Style from Selection** icon in the **Styles** deck on the Sidebar.

4) In the **Create Style** dialog (Figure 37) that opens, type a name for the new style. This dialog also shows existing custom styles that are available.

5) Click **OK** to save the new style and close the dialog.

### Modifying or editing styles

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

1) Select an object in your drawing.

2) Open the **Graphic Styles** dialog (Figure 36) using one of the following methods:
   - Go to **Format > Styles > Edit Style** on the main menu bar.
   - Right click on the object and select **Edit Style** from the context menu.
   - Right click on the object style in the **Styles** deck on the Sidebar and select **Modify** from the context menu.

3) Use the various pages and available options in the **Graphic Styles** dialog to modify and edit the object style.
   - **Organizer** – contains a summary of the style and its hierarchical position.
   - **Font, Font Effects, Indents & Spacing, Alignment, and Tabs** – set the properties of the text inserted in a text box or in a graphic object.
   - **Dimensioning** – used to set the style of dimension lines.
   - **Text, Text Animation, Connector, Line, Area, Shadowing, Highlighting and Transparency** – determine the formatting of an object.

4) Click **OK** when finished to save your changes and close the **Graphic Styles** dialog.

### Editing linked styles

If you have an object in your document that uses linked styles then it is possible to edit the linked styles that have been applied to the object. This done using the **Graphic Styles** dialog as follows:

1) Select an object in your drawing that uses linked styles.
2) Go to Format > Styles > Edit Style on the main menu bar or right click on the object and select Edit Style from the context menu to open the Graphic Styles dialog (Figure 36 on page 32).

3) Click on the Organizer tab to open the Organizer page in the Graphic Styles dialog.

4) Check that the style name in the Inherit from text box is the linked style you want to edit.
   a) If the linked style is the one you want to edit, use the various pages in the Graphic Styles dialog to edit the style.
   b) If the linked style is NOT the one you want to edit, click on Edit Style to the right of the Inherit from text box until the name of the linked is displayed. Use the various pages in the Graphic Styles dialog to edit the style.

5) Click OK when finished to save your changes and close the Graphic Styles dialog.

Note

Updating linked styles that are part of the default installation of LibreOffice could cause problems in other documents that use LibreOffice default styles.

Updating styles

To update a style from changes made to an object:

1) Select the object where you want to make changes to the style.

2) Use the various options in the pages of the Graphic Styles dialog (Figure 36 on page 32), or the various tools on the Line and Filling toolbar (Figure 1 on page 5) to make your changes to the object.

3) Use one of the following methods to update the style that has been applied to the object.
   • Click on the Update Style icon in the Styles deck on the Sidebar.
   • Click on Format > Styles > Update Selected Style on the main menu bar

Note

There is no confirmation when you update a style. Make sure that you only update styles that you have created. Updating styles that are part of the default installation of LibreOffice could cause problems in other documents that use LibreOffice default styles.

Applying styles

You can apply a drawing object style using the Styles deck on the Sidebar as follows:

1) Select the object where you want to apply a style.

2) To open a list of available styles, click on the Styles icon on the Line and Filling toolbar (Figure 1 on page 5), or click on the Styles icon on the Sidebar (Figure 35 on page 32).

3) Double click on the style name to apply the style to the selected object.

Tip

At the bottom of the Styles deck on the Sidebar there is a drop-down list. Here you can choose to show all styles or groups of styles such as Applied Styles or Custom Styles.
**Deleting styles**

You cannot delete any of the predefined styles in LibreOffice, even if you are not using them. You can only delete user-defined (custom) styles. However, before you delete a custom style, make sure the style is not in use. To see which styles are in use, choose *Applied Styles* from the drop-down list at the bottom of the *Styles* deck on the Sidebar (Figure 35 on page 32).

Delete a custom style as follows:

1) To open a list of available styles, click on the *Styles* icon on the *Line and Filling* toolbar (Figure 1 on page 5), or click on the *Styles* icon on the Sidebar (Figure 35 on page 32).

2) Select *Applied Styles* or *Custom Styles* from the drop-down list at the bottom of the *Styles* deck on the Sidebar to display the styles in use.

3) Right click on the style name in the styles list and select **Delete** from the context menu.

4) If the style is in use, a warning message will appear. Click **Yes** to delete the style. If the style is not in use, no confirmation message appears.

**Applying 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 (Figure 38). If the *Transformations* toolbar is not showing, select it from *View > Toolbars > Transformations* on the main menu bar.

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

![Figure 38: Transformations toolbar](image)

![Figure 39: Manually rotating an object](image)
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) Click on an object you want to rotate and the selection handles will show.
2) To put the selected object into rotation mode, use one of the following methods. The selection handles will change shape and color when in rotation mode (Figure 39).
   - Click again on the selected object.
   - Click on the down arrow to the right the Transformations icon in the Line and Filling and select the Rotate icon from the context menu.
   - If the Transformations toolbar is displayed (Figure 38) click on the Rotate icon.
3) If necessary, click and drag the rotation pivot point to change the way the object is rotated. The pivot point is a circle and appears, by default, in the middle of the selected object. Normally the center of an object will be just fine, but on some occasions you may wish to rotate around a corner or even around a point outside the object.
4) Move the mouse cursor over one of the corner handles and the cursor changes shape.
5) Click and move the mouse in the direction in which you want to rotate the object. Only the corner selection handles are active for rotation.
6) 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 a right angle, for example from portrait to landscape.
7) When satisfied release the mouse button.

**Sidebar rotation**

To rotate an object using the Position and Size section in the Properties deck on the Sidebar (Figure 40):

1) Click on an object you want to rotate and the selection handles will show.
2) Click on the Properties icon on the Sidebar to open the Properties deck, then click on the down arrowhead (˅) next to the Position and Size section to open this section.
3) Click on and then rotate the rotation indicator in Rotation or enter the rotation angle in the text box or select a predetermined rotation angle from the drop-down list. The object rotates as you move the rotation indicator or enter an angle in the text box.
4) When satisfied with the rotation of the object, click outside the object to fix rotation in place.

**Rotation dialog**

Instead of rotating an object manually or using the Sidebar, you can use the Rotation page in the Position and Size dialog (Figure 41) for a more precise control when rotating an object.

1) Click on an object you want to rotate and the selection handles will show.
2) Press the F4 key, or select Format > Position and Size on the main menu bar, or right-click on the object and select Position and Size from the context menu to open the Position and Size dialog.
3) Click the Rotation tab to open the Rotation page.
4) In the Pivot Point, enter a figure in Position X and/or Position Y text boxes to reposition the pivot point relative to the top left corner of the drawing, or select a position for the pivot point in Default settings. The default position for the pivot point is the center of the object.
5) In the **Rotation Angle**, enter an angle in the **Angle** text box by which to rotate the object, or click and drag the rotation indicator in **Default settings** until you reach the required angle. As you click and drag, the angle is shown in the **Angle** text box.

6) Click **OK** to save your changes, rotate the object and close the **Position and Size** dialog.

**Flipping objects**

**Quick flipping**
The quickest and easiest method to flip an object horizontally or vertically is as follows:

1) Select the object you want to flip and the selection handles will be 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 one of the icons **Flip the selected object vertically** or **Flip the selected object horizontally**.
- Click on the **Vertical** or **Horizontal** icon on the **Line and Filling** toolbar (Figure 1 on page 5).

*Flip tool*

Using the **Flip** tool on the **Transformations** toolbar (Figure 38 on page 35), you can also change the position and angle that the object flips over.

1) Select the object you want to flip and the selection handles will be displayed.
2) Click the **Flip** tool on the **Transformations** toolbar and the axis of symmetry appears as a dashed line through the middle of the object. The object will be flipped about this axis of symmetry (Figure 42).
3) Click and drag one or both ends of the axis of symmetry 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 axis of symmetry until the object appears flipped over. The angle and position of the flip will depend on the angle and position of the axis of symmetry.
6) Release the mouse button and the object is flipped.

*Figure 42: Using Flip tool on Transformations toolbar*
Note

If you press the Shift key while moving the axis of symmetry, it will rotate in 45 degree increments.

Mirror copies

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

1) Select the object you want to make a mirror copy of and copy the object to the clipboard.
2) Select the Flip tool on the Transformations or Line and Filling toolbars.
3) Move the axis of symmetry to the desired location of the mirror axis, then flip the object.
4) Click on an empty area of the page to deselect the object.
5) Paste from the clipboard to put a copy of the object back into its original location and now you have a mirror copy.
6) If necessary, select both objects and realign them by going to Shape > Align on the main menu bar, or right click and select Align from the context menu and then select the type of alignment.

Distorting images

Three tools on the Transformations toolbar let you drag the corners and edges of an object to distort the image.

• Distort distorts an object in perspective.
• Set to Circle (slant) creates a pseudo three-dimensional effect.
• Set in Circle (perspective) creates a pseudo three-dimensional effect.

In all three cases you are initially asked if you want to transform the object to a curve. This is a necessary first step, so click Yes. Then you can move the object handles to produce the desired effect. Examples of using these tools are shown in the following figures.

Distorting

Select an object and click on the Distort icon on the Transformations toolbar (Figure 38 on page 35). After converting to a curve as requested, move the handles to stretch the object. The corner handles distort the corners, the vertical midpoint handles distort the figure horizontally and the horizontal ones distort it vertically (Figure 43).

Setting in circle (perspective)

Select an object and click on the Set in Circle (perspective) icon in the Transformations toolbar (Figure 38 on page 35). After converting to a curve as requested, click and move one of the selection handles to give a pseudo three dimensional perspective) (Figure 44).

Setting to circle (slant)

Select an object and click on the Set to Circle (slant) icon in the Transformations toolbar (Figure 38 on page 35). After converting to a curve as requested, click and move one of the selection handles to give a pseudo three dimensional slant perspective (Figure 45).
Figure 43: Distorting an object

Figure 44: Setting an object to a circle with perspective

Figure 45: Setting an object to a circle with slant
Note
Transforming an object into a curve is a safe operation, but it cannot be reversed other than by clicking Format > Undo on the main menu bar.

Dynamic gradients
You can control transparency gradients 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.

Two icons are present on the Transformations toolbar (Figure 38 on page 35) to dynamically control transparency and color gradients. Even if you have not assigned transparency to an object with a color fill, you can control the transparency by clicking on the Interactive transparency tool icon. This defines a transparency gradient and a dashed line connecting two squares appears on the object. Move the two squares to modify the gradient. You can 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 fill from the Gradients page of the Area dialog (Figure 20 on page 16). The Interactive gradient tool icon is now active on the Transformations toolbar. When you click on the 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 46 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 will have 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.