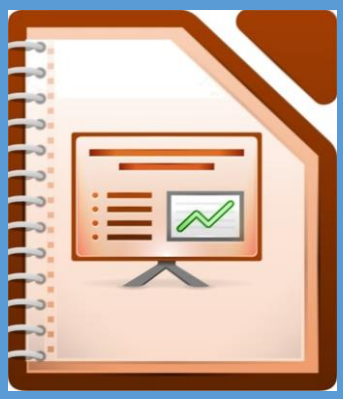
CREATING, FORMATTING AND MANAGING GRAPHIC OBJECTS

Impress



LibreOffice

Learning Content

- Drawing toolbar
- Working with lines and objects
- Grouping, positioning and resizing objects
- Arranging objects
- Creating, Modifying and Formatting Font Work

Introduction

This chapter describes how to manage graphic objects and in particular how to rotate, distort, arrange, and position them on the slide. Though this chapter focuses on the shapes that can be created with the available tools in Impress, some of the techniques described in this chapter are also applicable to images imported into slides.

Drawing toolbar

Default drawing tools

The Drawing toolbar (Figure 82) contains the majority of the tools normally used to create graphic objects. If this toolbar is not visible, select **View > Toolbars > Drawing** from the main menu bar. Table 3 describes the default set of tools that are available on the Drawing toolbar.

To draw a shape, select the desired tool from the toolbar (or from the submenu opened by clicking the triangle to the right of the tool), then place your cursor on the slide and drag the mouse to define an enclosing rectangle. Keep the *Shift* key pressed to obtain a shape where the height and width are equal. Press the *Alt* key to draw a shape from its center.

Figure 82: Drawing toolbar

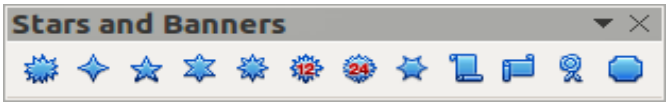
Note

Your Drawing toolbar may differ from the one shown in Figure 82 as this depends on how many drawing tools have been placed on the toolbar. Right-click on an empty area of the Drawing toolbar, then select **Visible Buttons** from the context menu to display the available tools. From this dialog you can install and remove tools to and from the toolbar. Installed tools are indicated by a border around the icon.

Table 3: Default set of drawing tools on the Drawing toolbar

Tool	Name	Purpose
	Select	Selects objects. To select a group of objects, click above the top left object and drag the mouse below the bottom right object of the intended selection while keeping the mouse button pressed. A “marching ants” rectangle identifying the selection area is displayed. You can also select several objects by pressing and holding the *Shift* key while selecting the individual objects.
	Line	Draws a straight line from the point where you click the mouse to the point where you drag the mouse pointer and release the mouse button. Press the *Shift* key to restrict the angle of the line to multiples of 45°. Press the *Alt* key to draw a line from its center. Press the *Ctrl* key to detach the end point of the line from the grid (see “Snapping objects to grid or snap guides” on page 124).
	Line Ends with Arrow	Draws a straight line ending with an arrowhead. The arrowhead is placed at the end of the line where you release the mouse button. The *Shift*, *Alt* and *Ctrl* keys have the same effect as for the *Line* tool.

Tool	Name	Purpose
	Rectangle	Draws a rectangle when you drag the mouse from the top left to the bottom right corner. Press the *Shift* key to draw a square. Press the *Alt* key to draw a rectangle or square from its center.
	Ellipse	Draws an ellipse. Press the *Shift* key to draw a circle. Press the *Alt* key to draw an ellipse or circle from its center.
	Text	Creates a text box with text aligned horizontally.
	Vertical Text	Creates a text box with text aligned vertically. This tool is available only when Asian language support has been enabled in **Tools > Options > Language Settings > Languages**.
	Curve	Draws a shape depending on the option that has been selected. Click the triangle to the right of the tool icon to show the available options. Actual icon shown will depend on the option that has been selected. Note that the title of this submenu when undocked from the Drawing toolbar is *Lines*. 
	Connector	Draws a connector line between two figures. Click the triangle to the right of the tool icon to show the available options. Actual icon shown will depend on the option that has been selected. Each option is described in “Working with connectors” on page 127. 
	Lines and Arrows	Draws a line ending in an arrow. Click the triangle to the right of the tool icon to show the available options. Actual icon shown will depend on the option that has been selected. Note that the title of this submenu when undocked from the Drawing toolbar is *Arrows*. 
	Basic Shapes	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. 

Tool	Name	Purpose
	Symbol Shapes	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. 
	Block Arrows	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. 
	Flowcharts	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. 
	Callouts	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. 
	Stars	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. 
	Points	Edits the individual points that form the shape or line. Select this tool and then select a shape or a line. You can also press the *F8* key to select this tool.
	Glue Points	Edits the glue points of a graphic object. Glue points are the positions where connector lines terminate or start. See “Managing glue points” on page 128 for instructions.
	Fontwork Gallery	Opens the Fontwork gallery. See “Using Fontwork” on page 132 for further information.
	From File	Equivalent to **Insert > Picture > From file** on the main menu bar. See *Chapter 4 Adding and Formatting Pictures* for details.

Tool	Name	Purpose
	Gallery	Opens the gallery. Equivalent to **Tools > Gallery** on the main menu bar. See *Chapter 4 Adding and Formatting Pictures* for details.
	Extrusion On/Off	Switches 3D effects on or off for the selected object. Clicking this button also opens the 3D settings toolbar. See "Working with 3D objects" on page 129 for details.

Additional drawing tools

In addition to the default set of drawing tools available on the Drawing toolbar (Figure 82), you can install additional tools. These additional tools are described in Table 4.

To install additional tools onto the Drawing toolbar:

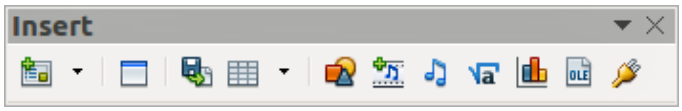
1) Right-click on an empty area on the Drawing toolbar.
2) Select **Visible Buttons** from the context menu to display a list of the available tools.
3) To install a tool, click on it and the tool will appear in the Drawing toolbar. The list of available tools will close automatically. Installed tools are indicated by a border around the icon.

To remove any additional tools from the Drawing toolbar:

1) Right-click on an empty area on the Drawing toolbar.
2) Select **Visible Buttons** from the context menu to display a list of the available tools.
3) To remove a tool, click on it and the tool is removed from the Drawing toolbar. Uninstalling a tool removes the border around the tool icon. The list of available tools will close automatically.

Table 4: Additional drawing tools

Tool	Name	Purpose
	3D Objects	Click the triangle to the right of the tool icon to open a toolbar showing the available options. Actual icon shown will depend on the option that has been selected. Select the desired 3D shape, then draw it by placing your cursor on the slide and dragging your mouse to define an enclosing rectangle. Keep the *Shift* key pressed to obtain a 3D shape where the height and width are equal. Press the *Alt* key to draw a 3D shape from its center. 
	To Curve	Converts the selected object to a Bézier curve.
	To Polygon	Converts the selected object to a polygon (a closed object bounded by straight lines). The appearance of the object does not change. If you want, you can right-click and choose *Edit Points* to view the changes.
	To 3D	Converts the selected 2D object to a 3D object.
	To 3D Rotation Object	Converts the selected 2D object to a 3D rotation object.

Tool	Name	Purpose
	Insert	Inserts a slide, table, from file, movie and sound, formula, or chart into your presentation. Click the triangle to the right of the tool icon to open the **Insert** toolbar showing the available options. Actual icon shown depends on the option that has been selected. 
	Controls	Inserts various form controls into your presentation. Click the triangle to the right of the tool icon to open the **Form Controls** toolbar showing the available options. 
	Animated Image	Adds animation to a selected object on a slide. Opens the **Animation** dialog.

Creating lines and shapes

Creating shapes and lines is basically the same procedure for all lines and shapes:

1) Click on the triangle to the right of the tool you want to use on the Drawing toolbar and select the desired tool from the available selection. Note that the tools on the Drawing toolbar show the last tool shape selected.
2) Position your cursor on the slide, then click and drag to create the line or shape.
3) Release the mouse button when you have drawn your line or shape. You can then modify and reposition your line or shape using the procedures described later in this chapter.

Regular shapes

When creating shapes that are included in Impress, one or more dots may be displayed in a different color to the selection handles. These dots perform a different function according to the shape they are applied to, as listed below.

Basic Shapes

- *Rounded rectangle* and *rounded square* – use the dot to change the radius of the curve that replaces the angled corners of a rectangle or square.
- *Circle pie* – use the dots to change the size of the filled sector.
- *Isosceles triangle* – use the dot to modify the shape and type of the triangle.
- *Trapezoid*, *parallelogram*, *hexagon*, or *octagon* – use the dot to change the internal angles between the sides.
- *Cross* – use the dot to change the thickness of the four arms of the cross.
- *Ring* – use the dot to change the internal diameter of the ring.
- *Block arc* – use the dot to change both internal diameter and size of the filled area.
- *Cylinder* and *cube* – use the dot to change the perspective.
- *Folded corner* – use the dot to change the size of the folded corner.
- *Frame* – use the dot to change the thickness of the frame.

Symbol Shapes

- *Smiley face* – use the dot to change the smile on the face.
- *Sun*, *moon* and *heart* – use the dot to change the shape of the symbol.
- *Prohibited symbol* – use the dot to change the thickness of the ring and the diagonal bar.
- *Double bracket*, *left bracket*, *right bracket* and *double brace* – use the dot to change the curvature of the bracket.
- *Left brace* and *right brace* – use the dots to change the curvature of the brace and the position of the point.
- *Square bevel*, *octagon bevel* and *diamond bevel* – use the dot to change the thickness of the bevel.

Block Arrows

- *Left arrow*, *right arrow*, *up arrow*, *down arrow*, *left and right arrow, up and down arrow, striped right arrow* and *notched right arrow* – use the dot to change the shape and thickness of the arrows.
- *Up and right arrow*, *up, right and down arrow* and *4-way arrow* – use the dots to change the shape and thickness of the arrows.
- *Pentagon* and *chevron* – use the dot to change the angle between the sides and the shape.
- *Right arrow callout*, *left arrow callout*, *up arrow callout, down arrow callout*, *left and right arrow callout*, *up and down arrow callout, up and right arrow callout* and *4-way arrow callout* – use the dots to change the shape and thickness of the callouts.
- *Circular arrow* – use the dots to change the thickness and area of the arrow.

Callouts

- For all callouts use the dots to change the length, position and angle of the pointer.

Stars

- *4-point star*, *8-point star* and *24-point star* – use the dot to change the thickness and shape of the star points.
- *Vertical scroll* and *horizontal scroll* – use the dot to change the width and shape of the scroll.
- *Doorplate* – use the dot to change the inward curvature of the corners.

Curves, polygons and freeform lines

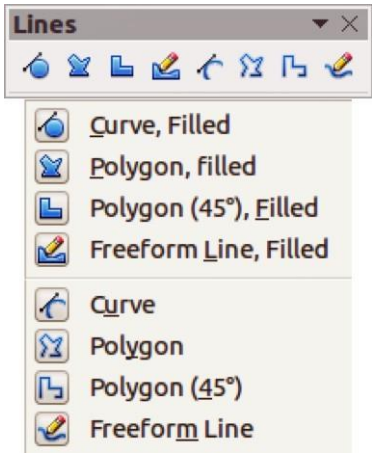


Figure 83: Lines (curves) toolbar

To draw a curve, polygon, or freeform line, click the **Curve** icon  on the Drawing toolbar. The default action of this tool is to show the last selected tool and, by default, the last selected tool will be used. To use a different tool, click on the triangle to the right of the icon to open the tools that are available (Figure 83). Note that the title of this tool submenu when undocked from the Drawing toolbar is *Lines*.

If a filled curve, polygon, or freeform line was selected, Impress draws the line connecting the last point to the start point and fills the inside area with the default color.

Curves

1) Select either **Curve filled** or **Curve**.
2) Click and hold the left mouse button to create the starting point of your curve.
3) While holding down the left mouse button, drag from the starting point to draw a line.
4) Release the left mouse button and continue to drag the cursor to bend the line into a curve.
5) Click to set the end point of the curve and fix the line on the page.
6) To continue with the line, drag the mouse cursor to draw a straight line. Each mouse click sets a corner point and allows you to continue drawing another straight line from the corner point.
7) Double-click to end the drawing of your line.

Note	Holding down the *Shift* key when drawing lines with the Curve or Polygon tools will also restrict the angles between the lines to 45 or 90 degrees.

Polygons

1) Select either **Polygon filled** or **Polygon**.
2) Click and draw the first line from the start point with the left mouse button held down. As soon as you release the mouse button, a line between the first and second points is drawn.
3) Move the cursor to draw the next line. Each mouse click sets a corner point and allows you to draw another line.
4) Double-click to end the drawing of your polygon.

Polygons 45°

Select either **Polygon (45°) filled** or **Polygon (45°)** and these polygons are drawn in the same way as polygons above. However, the angles between line segments are restricted to 45 or 90 degrees as you draw your polygon.

Freeform lines

Using the Freeform Line tools is similar to drawing with a pencil on paper.

1) Select either **Freeform line filled** or **Freeform line**.
2) Press and hold the left mouse button and drag the cursor to the line shape you require.
3) When you finished drawing your freeform line, release the mouse button and the drawing is completed.

Grouping objects together

It is often convenient to group objects together so that they are treated as a single object by Impress. A group of objects can be formatted as if it was a single object, moved, rotated, deleted, and so on.

This section gives only a brief introduction to grouping of objects. For more information on working with grouped objects, see the *Draw Guide Chapter 5 Combining Multiple Objects*.

Grouping

To group objects together:

1) Select the objects to be grouped using the selection tool on the Drawing toolbar and draw a rectangle around the objects to be grouped, or hold down the *Shift* key and click on each object. To select all the objects, go to **Edit > Select All** on the main menu bar or use the keyboard combination *Ctrl+A*.
2) When the selection handles are displayed, go to **Format > Group > Group** on the main menu bar or use the keyboard combination *Ctrl+Shift+G* or right-click on an object within the selected group and select **Group** from the context menu.

Editing or formatting groups

To edit or format a group of objects:

1) Click on any one of the objects in the group to select the group. Any editing or formatting is then carried out on all the objects within the group.
2) To edit an individual object within a group:
   a) After selecting the group, press the *F3* key or go to **Format > Group > Enter Group** on the main menu bar or right-click and select **Enter Group** from the context menu.
   b) Select individual objects within the group for editing or formatting.
   c) When you have finished editing or formatting, use the keyboard combination *Ctrl+F3* or go to **Format > Group > Exit group** on the main menu bar or right-click and select **Exit Group** from the context menu. The whole group then becomes selected.

Ungrouping

To ungroup objects:

1) Click on any one of the objects in the group to select the group.
2) When the selection handles are displayed, go to **Format > Group > Ungroup** on the menu bar or use the keyboard combination *Ctrl+Alt+Shift+G* or right-click on the group and select **Ungroup** from the context menu.

Tip	If you use the group and ungroup commands often, why not add them to one of the toolbars shown by default so that the commands are readily available? To do so, you will need to customize the selected toolbar. See *Chapter 11 Setting Up and Customizing Impress*.

Positioning graphic objects

Using a mouse

To position a graphic object using a mouse:

1) Click on a graphic object or a group of objects to display the selection handles.
2) Move the cursor over a selected graphic object until the cursor changes shape. For example, on most operating systems, the cursor associated with moving objects is a clenched hand or a four-headed arrow.
3) Click and drag the graphic object to the desired position. You can also use the arrow keys to move the selected object or group to a new position.
4) Release the mouse button.

Tip

By default Impress makes the objects snap to the grid. If you need to position the object between two points of the grid, hold down the *Ctrl key*, then click on the object and move it to the desired position. Alternatively, you can turn off this snap function or modify the grid resolution by going to **Tools > Options > LibreOffice Impress > Grid**.

Using the Position and Size dialog

For a more accurate placement of the graphic object, use the Position and Size dialog (Figure 84):

1) With the object selected and the selection handles displayed, press *F4* or go to **Format > Position and Size** on the main menu bar, or right-click on the selected object and select **Position and Size** from the context menu.
2) Click on the **Position and Size** tab.

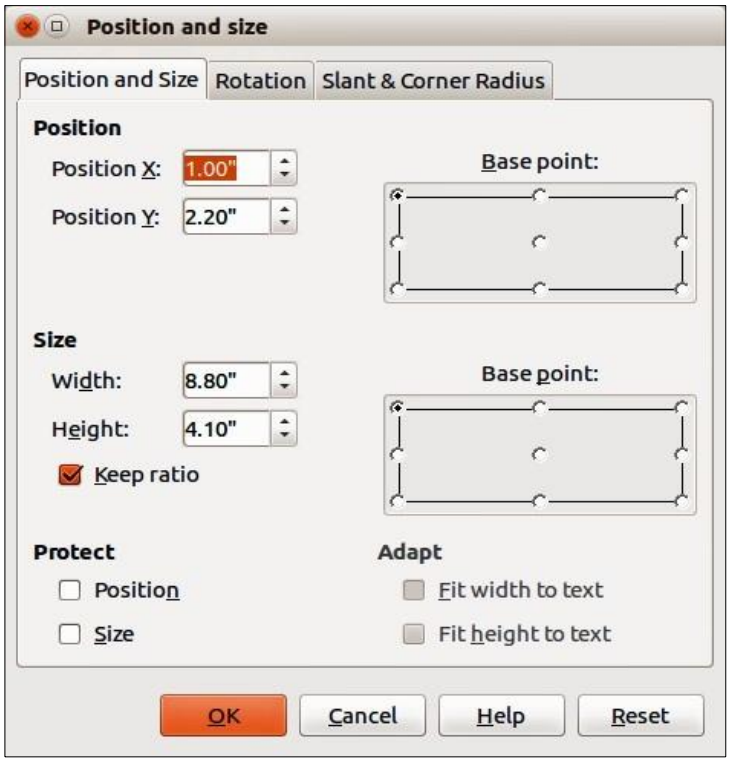


Figure 84: Position and Size dialog

3) Use the *Position* section of the dialog to specify the X (horizontal) and Y (vertical) position of the graphic object. The values represent the distance of the base point selected on the right hand side of the dialog. The default selection for base point is relative to the top left corner of the slide.

4) To prevent accidental modification of the position of the graphic object, select the *Position* option in the **Protect** section of the dialog.

5) Click **OK** when satisfied and to close the dialog.

Note

The units of measurement for this dialog and other dialogs in Impress are set in **Tools > Options > LibreOffice Impress > General**.

Using the Sidebar

You can use the *Position and Size* subsection on the Sidebar to position a graphic object. After selecting the graphic object, click on the **Properties** icon on the Sidebar and then click on the plus (+) sign next to the title to open the *Position and Size* subsection (Figure 85).

Use the **Horizontal** and **Vertical** text boxes and enter the values you want to use for the X (horizontal) and Y (vertical) position of the graphic object. The values represent the distance of the selected base point and the default position is the top left corner of the slide.

Note

Clicking on the **More Options** icon on the *Sidebar Position and Size* subsection will open the Position and Size dialog.

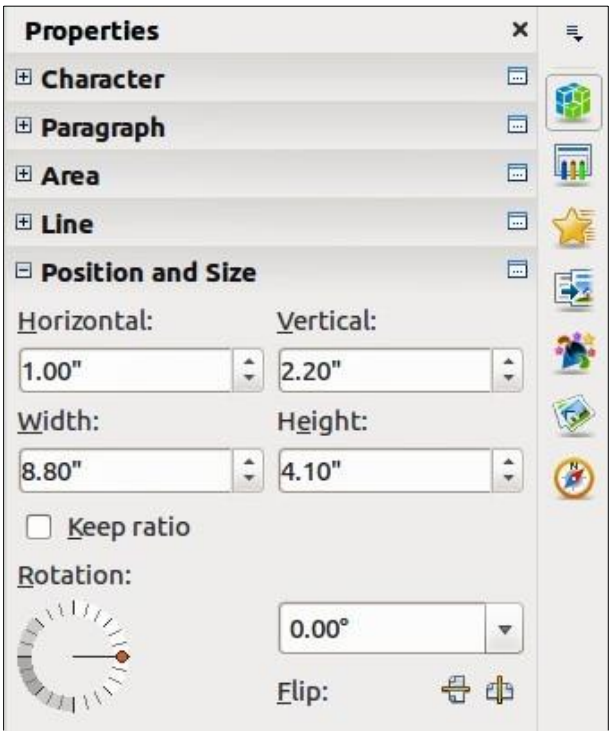


Figure 85: Sidebar – Position and Size subsection

Resizing graphic objects

Using a mouse

To resize a graphic object using a mouse:

1) Click on a graphic object or a group of objects to display the selection handles.
2) Position the pointer over one of the selection handles. The pointer changes shape giving a graphical representation of the direction of the resizing. The corner handles resize both the width and the height of the graphic object simultaneously, while the other four handles resize only one dimension at a time.
3) Click and drag to resize the graphic object.
4) Release the mouse button to complete resizing.

Tip

To retain the original proportions of the graphic, *Shift+*click one of the corner handles, then drag. Release the mouse button **before** releasing the *Shift* key.

Using the Position and Size dialog

For more accurate resizing of the graphic object, use the Position and Size dialog (Figure 84):

1) With the object selected and the selection handles displayed, press *F4* or go to **Format> Position and Size** on the main menu bar, or right-click on the selected object and select **Position and Size** from the context menu.
2) Click on the **Position and Size** tab.
3) Select as the base point the part of the graphic object that you would like to anchor to the page. The default selection of top left corner means, that when resizing, the position of the top left corner of the object will not change.
4) Now modify either the *Width* value or the *Height* value of the object in the **Size** section.
5) To maintain the proportions between width and height, select the **Keep ratio** option before modifying any value. When **Keep ratio** is selected, changes to one dimension results in an automatic change to the other with the ratio between width and height maintained.
6) To prevent accidental modifications of the size, select the *Size* option in the **Protect** section of the dialog.
7) Click **OK** when satisfied and to close the dialog.

Using the Sidebar

You can use the *Position and Size* subsection on the Sidebar to resize a graphic object. After selecting your graphic object, click on the **Properties** icon  on the Sidebar and then click on then click on the plus (+) sign next to the title to open the *Position andSize* subsection (Figure 85).

Use the **Width** and **Height** text boxes and enter the values for the width and height of the graphic object. To maintain the ratio between width and height of a graphic object, select the **Keep ratio** option.

Note

Clicking on the **More Options** icon on the *Sidebar Position and Size* subsection will open the Position and Size dialog.

Arranging objects

Arranging objects

Impress organizes objects in a stack so that the objects on the top level of the stack cover the objects on lower levels if any overlapping occurs. The stack level of each object can be changed by arranging shapes on a slide or page.

To change the stack level of an object, select an object or objects and then click the small triangle on the side of the **Arrange** icon on the Line and Filling toolbar to open the **Position** toolbar (Figure 95). The **Arrange** icon shown on the Line and Filling toolbar will depend on the arrange option that had been previously selected.

Alternatively, right-click on your selected objects and select **Arrange**, then select an arrange option from the context menu.

The first four tools determine the stack level of a selected object:

- **Bring to front**: – the selected object is moved in front of all other objects.
- **Bring forward** – the selected object is moved one level up in the stack.
- **Send backwards** – the selected object is moved one level down in the stack.
- **Send to back** – the selected object is moved behind all other objects.The other three tools determine the relative positions of the selected objects:
- **In front of object** – moves the first selected object in front of the second selected object.
- **Behind object** – moves the first selected object behind the second selected object.
- **Reverse** – swaps the stacking order of two selected objects.

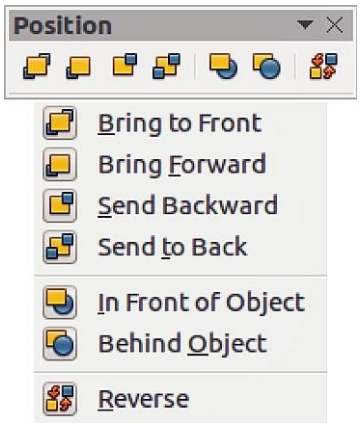


Figure 95: Position toolbar

To use the **In front of object** and **Behind object** tools:

1) Select the first object by clicking on it.
2) Select **In front of object** or **Behind object** from the context menu and the mouse cursor changes to a pointing hand.
3) Click on the second object and the objects swap positions.

Creating, Modifying and Formatting Font Work

Using Fontwork

Use Fontwork to obtain special text effects. For more about this topic, see the *Getting Started Guide Chapter 11 Graphics, the Gallery, and Fontwork*.

To start using Fontwork:

1) Click on the **Fontwork Gallery** icon on the Drawing toolbar or on the Fontwork toolbar to open the Fontwork Gallery dialog (Figure 102).

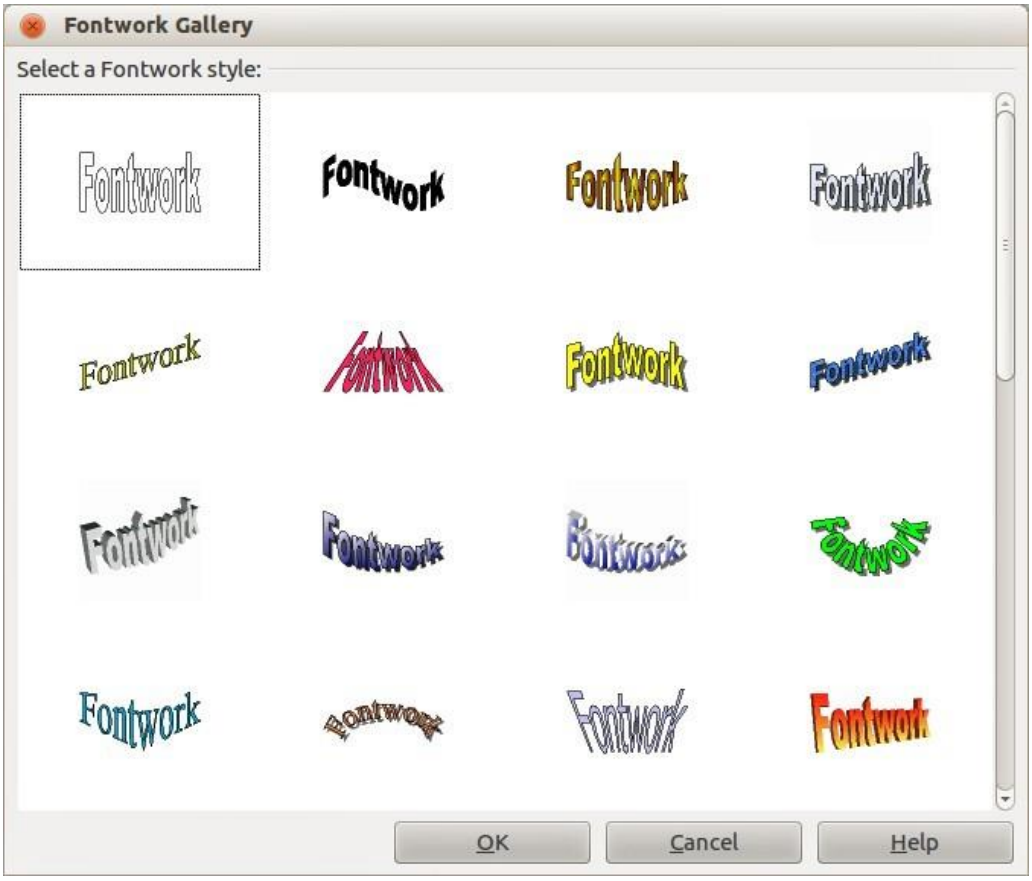


Figure 102: Fontwork Gallery

2) Select the preferred style from the Fontwork Gallery dialog and click **OK**. The text *Fontwork* in the selected style appears on the slide. You can modify its shape and properties after it has been placed on the slide.
3) Double-click the object to edit the Fontwork text. Type your own text to replace the word *Fontwork* that appears over the object.
4) Press the *Esc* key or click outside the area with the selection handles to exit.

Using the Fontwork toolbar

Make sure that the Fontwork toolbar (Figure 103) is visible on the workspace. If not, select **View > Toolbars > Fontwork** from the main menu bar.

Figure 103: Fontwork toolbar

In addition to the Fontwork Gallery icon, this toolbar contains the following tools:

- **Fontwork Shape** – changes the shape of the selected object. Shapes are selected from the options that become available when you click on the icon.
- **Fontwork Same Letter Heights** – changes the height of characters in the selected object. Toggles between normal height where characters have different heights to where all characters are the same height.
- **Fontwork Alignment:** – specifies the text alignment within the frame from the options available.
- **Fontwork Character Spacing** – selects the desired spacing between characters and whether kerning pairs should be used. For custom spacing, input a percentage value: 100% is normal spacing; less than 100% is tight spacing; more than 100% is expanded spacing.

Modifying Fontwork as an object

It is possible to treat Fontwork text as an object and therefore to apply to it all the formatting that has been described in this chapter. Assign line properties only to Fontwork which does not have a 3D effect, otherwise the changes will not be visible.

You can modify some of the Fontwork shapes just as you modify the angles of trapezoid and parallelogram basic shapes by moving the dot that is displayed along with the selection handles.

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