



## Module 4: Using StarOffice™ 6.0 Draw

Module 4 presents an overview of the StarOffice™ 6.0 Draw application. This feature of StarOffice™ enables users to create images that transcend the barriers of language, enabling self-expression or visual representation of ideas.

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## Learning Outcomes

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Upon completion of this module, you should be able to:

- Distinguish between bitmapped and vector graphics
- Navigate through the StarOffice™ Draw interface
- Insert a graphic into a StarOffice™ Draw document
- Create shapes, lines, and segments
- Apply colors and textures
- Change the alignment and arrangement of objects
- Work with layers
- Insert a StarOffice™ Draw object into another StarOffice™ document

**StarOffice™ 6.0 Draw  
enables users to  
create images that  
transcend the barriers  
of language, enabling  
self-expression or  
visual representation  
of ideas.**



### **PRACTICE**

- **Practice exercises are included at the end of key sections to reinforce the concepts and to provide hands-on practice.**
- **Practice exercises require no more than 2-4 minutes.**

## Overview of StarOffice™ 6.0 Draw

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The StarOffice™ 6.0 Draw program can be used to create graphics of varying complexity, such as buttons, icons, and even 3-D images. You can add color and texture and textual labels. These features can be used to design technical schematics and organizational charts, or simply create graphics to spice up your document.

### Graphic Types

There are two types of graphics that can be created and edited using StarOffice™ Draw:

- Vector
- Bitmapped

#### Graphic Types:

- **Vector**
- **Bitmapped**

#### Vector

Vector images, also known as object-oriented images, are essentially “draw images”. Vector images are named for the vectors, or mathematical objects that define lines and curves, that compose them. You can easily resize vector images within a drawing program like StarOffice™ Draw without sacrificing image quality. Vector images can be generated in StarOffice™ Draw using geometry tools like the Square and Ellipse tool.

#### Bitmapped

Bitmapped images, or raster images, are made of small boxes called “pixels” that when joined together like a mosaic of colors that form the final images. A scanned photograph is a bitmapped image. StarOffice™ Draw allows you to import bitmapped images and edit them.

### Creating a New Drawing

1. If StarOffice™ is not launched, select **StarOffice > Drawing** from your Solaris CDE Front Panel or your Windows Start Menu.

OR

2. To open a new StarOffice™ Calc Draw document from within any StarOffice™ document, from the Menu bar choose **File > New > Drawing**.

You will start your Draw exploration by first learning how to manipulate a bitmapped graphic and then how to create a vector graphic object or group of objects.

## Working with Bitmapped Graphics

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### Inserting

1. From the Menu bar, choose **Insert > Graphics**.

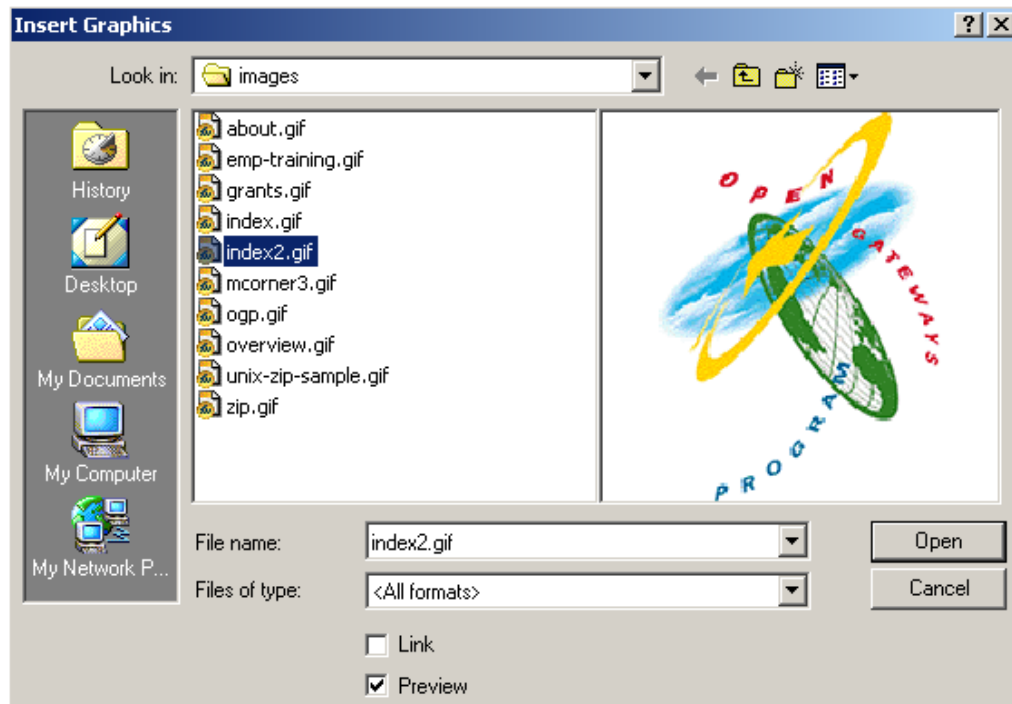


Figure 4.1

2. A dialog box will appear (Figure 4.1) to allow you to search your hierarchy (file directory) for images.
3. Click on the **Preview** box to view the images.
4. Click on the image you want to insert, and click **Open**.
5. Your image will be inserted into the Draw document, highlighted with green squares. Use your mouse to position the image to the desired location.

## Editing

There are a number of basic things you can do to edit a bitmapped image once it is in a document.

1. To edit, you must first select the image. Click once on the image to highlight it. (Again, the little green selection handles appear around the image border.)

## Scale

1. To change image size (scale), move your mouse over one of the green selection handles, then click and drag until the desired size is reached.
2. To scale proportionately, hold the **Shift** key down as you drag the mouse.



### TIP

Increasing the size of a bitmapped image will lower image quality. You will see the little color pixels that form the mosaic that make up the image, often an undesirable result. This is called “**pixelization.**”

## Rotate

1. Click on the **Effects** icon in the Main toolbar, which runs down the left side of your screen. It should default to the **Rotate** tool as shown in Figure 4.2 . If it doesn't, long-click (click and hold for a moment) to view the **Effects** menu, then choose the icon that reads **Rotate** as you move your mouse over it.
2. The selected image should be highlighted with red circles. Click on one of the red circles, and drag to rotate the image.



Figure 4.2

## Flip

1. To flip an image, highlight it (click once) and right click.
2. In the context menu that pops up, move your mouse over **Flip**.
3. Choose to invert the image either horizontally or vertically.

## Saving

Draw documents may be saved as StarOffice™ 6.0 or earlier versions.

1. To save a new Drawing document, choose: **File > Save As**. The **Save As** window and file hierarchy will vary with your operating system. (Refer to Module 1: Lesson for a refresher on saving files, if necessary.)
2. Click in the **File Name** field to give it a name.
3. Click on the arrow next to the **Save as Type** field to see a list similar to the one in Figure 4.3. This allows you to save your file in formats that are compatible with earlier versions of StarOffice™ Draw. Do not accept another file type at this point.
4. By default, StarOffice™ will give it the file **.sxd** file extension, indicating it is a StarOffice™ 6.0 Drawing document. Click **Save** to accept the default.
5. Now you can save changes to your document by pressing **Ctrl+S** on your keyboard or choosing **File > Save** from the Menu bar.

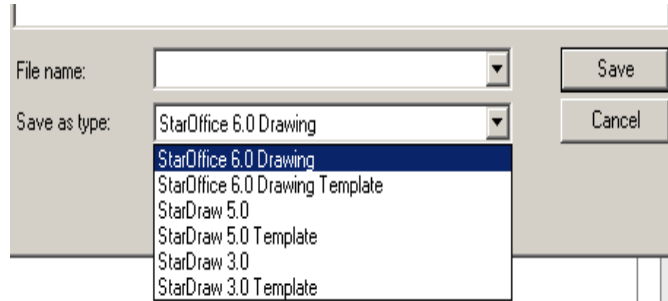


Figure 4.3

## Exporting

### ! ATTENTION

Take special note of the exporting process! StarOffice™ Drawing files must be exported to a universal format prior to being imported into other programs and HTML files.

1. To export a StarOffice™ Draw file to a different kind of graphic file, such as a Web-ready **.jpg** or **.gif** file, highlight (click once on) the image object you want to export.
2. Choose **File > Export** from the Menu bar. A dialog box will appear that will allow you to choose the target directory to save your exported file.
3. Enter the name of the file you wish to export in the **File Name** field. Check the **Automatic file name extension** box and the **Selection** box.
4. Pull down the **Save as Type** dropdown box, and choose the type of graphic file for exporting.
5. Click the **Save** button to create your new graphic file.



## PRACTICE

- **Open a bitmapped graphic from the Gallery and practice scaling and rotating.**
- **Export the graphic as a JPG to your work directory.**

## Creating Vector Graphics and Objects

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### Constructing Shapes

StarOffice™ Draw allows you to create a variety of shapes easily and efficiently, using a simple click-and-drag interface.

1. On the Main toolbar, locate the two icons that represent a **Rectangle** and an **Ellipse**. Their locations are marked shown in Figure 4.4.
2. Choose one of the shape icons and long-click. A menu will appear that shows the different options available for that shape.



### TIP

The default option for these icons are filled shapes. Each shape has an icon for an empty, outlined shape. You can also choose to draw a square or rounded rectangle instead of a rectangle or a circle instead of an ellipse.



Figure 4.4

3. Select (single click) a version of a shape. Your cursor should now have the shape floating to the lower right of it.
4. Click on the main canvas of your document, and drag your mouse to size your shape. When you release your mouse button, your shape will appear on the canvas.
5. Try this a few times to experiment.

## Drawing Sectors & Segments

As mentioned above, long-clicking on the shape icons will allow you to see a menu of variations for that shape. Long-clicking on the **Ellipse** icon will see a variety of partial shapes. These icons will allow you to draw sectors and segments, which are useful in creating chart and graph visuals.

1. Long-click on the **Ellipse** icon; choose **Ellipse Pie > Unfilled**, as shown in Figure 4.5.
2. Click on the main canvas of your document while holding the mouse button down, and drag the shape of the ellipse, off the segment from which the ellipse will be based.
3. When you release the mouse, note that a radius now appears that follows the movement of the mouse. Position the radius of the mouse where you would like one boundary of the segment to be placed, and click once.
4. As you move the mouse, a second boundary will follow and divide the ellipse into a segment. Move your mouse until you create the desired shape, and click once to create the sector. (This can be tricky.)
5. The rest of these tools operate in a similar fashion, allowing you to create circle segments, filled sectors, and more. Briefly explore the options.

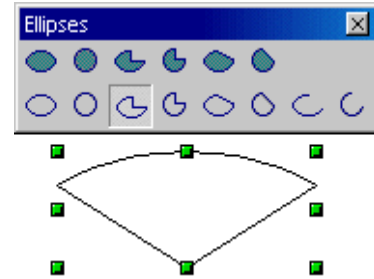


Figure 4.5



### PRACTICE

- Explore the types of vector objects you can create by drawing a variety onto your Draw canvas.

## Editing Colors and Textures

### Colors

Once you have created a few shapes and placed them on your canvas, the next step is to choose their colors.

1. You should see a bar at the bottom of your screen, which contains your color palette (Figure 4.6). If you don't, choose **View > Toolbars > Color Bar** from the Menu bar.



Figure 4.6

2. Select a shape on your canvas (single click).
3. Select a color on the color bar, to change the shape to the selected color. This is known as the “**fill**” color.
4. To change the color of the **outline**, highlight the object; select the desired color from the first color dropdown menu in the Object toolbar at the top of your canvas as shown in Figure 4.7.

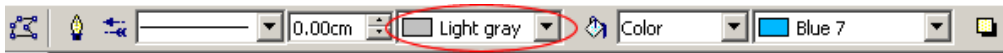


Figure 4.7



The second dropdown menu next to the paint bucket will also change the fill color of your objects.

### Textures

Instead of assigning a color to an object, you can apply a texture, such as cross-hatching or a color gradient. The texture tools are in the Object toolbar at the top of your canvas, Figure 4.8.




Figure 4.8

1. Choose the type of texture from the first dropdown menu.
2. Choose from the list of textures available for that type.
3. To apply a drop shadow to the shape, click on the small box at the right.

## Rotating Objects

Shape objects can be scaled and rotated similar to bitmapped objects. Refer to bitmapped objects for a refresher on scaling and rotation. The tools are the same.

 **PRACTICE**

- **Apply color and texture to object shapes.**
- **Rotate and scale the shapes to become comfortable with the tools.**

## Creating Lines and Arrows

Lines are created in StarOffice™ Draw the same as shapes.

1. Locate the **Lines and Arrows** icon in the Object toolbar, Figure 4.9.
2. Long-click on this icon to display a floating menu that contains the different lines and arrows you can create.
3. Select the line of your Your cursor should now have the line floating to the lower right of it.
4. Click on the main canvas of your document, and drag the mouse to “size” your line. Release the mouse button to create it.
5. To change the positioning of your line, highlight it so that the turquoise endpoints are displayed. Drag one of these endpoint to rotate your line to the desired position.
6. To change the color of a line, highlight it and select a color from the first color dropdown box in the menu at the top of your canvas.



Figure 4.9

## Creating 3D Objects

1. Long click the **3D Objects** icon in the Object toolbar, Figure 4.10.
2. A menu of 3D objects appears. Select the one you wish to draw, and drag your cursor over the main canvas of the screen.

Creating and editing 3D objects this way is identical to the steps you took to create a regular shape.

3. Try changing the color and scale of your 3D objects.




Figure 4.10

## Converting

You can also create a 3D object by converting one your regular shapes. This will stretch your shape across the Z axis to create a three-dimensional image.

1. Highlight one of your existing shapes or draw a new rectangle or ellipse.
2. From the Menu bar, choose: **Modify > Convert > To 3D**.
3. Your shape is now a 3D object. Alternatively, you can highlight a shape and choose **Modify > Convert > To 3D Rotation Object** to stretch your shape around a vertical 3D axis, like a globe.

**PRACTICE**

- Practice creating lines and arrows.
- Create and color one or two new 3D objects.
- Convert an existing, 2D shape to a 3D object.

## ADVANCED: Cross-Fading Between Two Objects

The process of cross-fading is a transition in increments between two objects. The increments created by the cross-fading, the orientation, color, and other attributes are adjusted uniformly.

1. Draw a rectangle in the bottom left and a circle in the upper right. Use two colors.
2. Select both objects. (Click on one, and hold down the **Shift** key while clicking on the other.)
3. From the Menu bar, choose: **Edit > Cross-fading**. A dialog box appears to define further settings. Select how many increments you want the transition to take by setting the number in the **Increments** field.
4. When you click **OK**, the two shapes on your canvas will be connected by a series of transitional images.

## Arranging, Aligning, and Grouping Objects

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When you have multiple objects on your canvas, it will become necessary to change the way your images are composed or arranged.

- “**Arranging**” refers to how objects are displayed in front of other objects or how they are overlapped.
- “**Alignment**” refers to where on the canvas an image displays.
- “**Grouping**” is a way to associate one object with another.

### Arranging

1. Create two separate shapes, and place one over the other so that they overlap.
2. Highlight the image object on top and right click. From the menu that pops up, choose **Arrange > Send Backward**.
3. The image now displays behind the other.

**Arranging refers to which objects are displayed in front of other objects, in case of an overlap.**

Take note of all of the Arrangement options that are available.

- **Bring Forward** places the image one step in front.
- **Send Backward** places it one step behind.
- **Bring to Front** places it in front of all other images, and **Send to Back** sends it behind all other images.

### Aligning

1. Select an image object, and right click. From the menu that appears, mouse over **Alignment**.
2. The options that are displayed allow you to place your image within 9 quadrants on the canvas. Choose to align your object left, center, or right horizontally, and top, center, or bottom vertically.

**Alignment refers to where on the canvas an image displays.**

## Grouping

1. Create two objects, and select both of them. Do this by highlighting one, and then holding the **Shift** key down and clicking on the other.
2. From the Menu bar, choose:  
**Modify > Group**  
This will associate the objects as one object.
3. Select the group, and move both objects at the same time.

**Grouping is a way to associate one object with another.**

Note that position of the objects will remain relative, since they are “grouped” together. Also, any color, texture, scale, or rotation changes you perform will affect both of them. They are, for all intents and purposes, now treated as one image object.

4. To ungroup grouped objects, select the object group, and choose:  
**Modify > Ungroup**

## Working with Text

You are able to enter text into your StarOffice™ Draw document, either standalone or associated with an image object.

1. Locate the **Text** icon in the Object toolbar, Figure 4.13 .
2. Click the **Text** icon. To insert a text box in your document., click on your canvas and drag. Once the text box is placed, you can start typing your text.
3. To associate text with an object, highlight the desired object and then click the **Text** icon. The text box is placed on the object and is considered part of that object's group.
4. To change the font and format of your text, make sure the Text icon is selected. Use the formatting bar that appears at the top of your canvas. Modify your text as desired.
5. To change the alignment of the text on an image, select the image and right click. From the menu, select **Text**. A window is displayed that allows you to select a radio button that represents where in the image frame the text will be aligned.



Figure 4.11

## Using Layers

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Drawing and Presentation documents have different layers, some of which can be hidden, prevented from printing or safeguarded against further editing. The layers are transparent. This means that you can always see all the layers on each slide. You can make each individual layer invisible, and hide it from view.

Working with layers is like putting your objects on top of each other on transparent overhead sheets. Essentially, layers provide a more organized way to arrange canvases with multiple objects.



### **TIP**

Every slide of your drawing can contain several layers, which in turn contain various objects.

In slide presentations, each layer always appears on all slides. The background can also contain several layers.

### Inserting a New Layer

1. Switch to the Layer View by choosing **View > Layer** from the Menu bar.
2. Select **Insert > Layer** from the Menu bar.
3. This opens the **Insert Layer** dialog. Give the new layer a name. At the same time, decide whether the layer should be **Visible**, **Printable** or **Locked**. For now, choose **Visible**.
4. Click **OK**. The new layer automatically becomes the active layer, and all objects now appear on the new layer.

### Moving Objects Between Layers

To move an object from one level to another, simply select the object and drag it to the tab on the other level.



### **PRACTICE**

- **Insert a New Layer into your Drawing document.**
- **Experiment with adding objects to the layers.**

## Inserting Objects into StarOffice Documents

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### Moving and Copying

You are able to copy image objects and insert them into new StarOffice™ documents, including other types of documents such as Writer files.

1. Select (right click) the desired image.
2. Select **Edit > Copy** from the Menu bar.
3. Open up the document into which you desire to place a copy of the image object.
4. Select **Edit > Paste**.

### Create Your Own

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The **Open Gateways Curriculum for Teachers** Web site provides opportunity to reinforce the material delivered in this Module. Download the "Create Your Own" document from: [www.sun.com/aboutsun/comm\\_invest/ogp/training/](http://www.sun.com/aboutsun/comm_invest/ogp/training/)