Using Advanced Features of Visio

When you began using Visio, you learned about Visio, how it worked, and what it did. You were taken through the basics of creating a diagram from scratch or by using pre-existing templates. You learned how Visio could be used to help with presentations and to improve documents.

Now that you have the basics, you need to know how to take that diagram, flowchart, or whatever you created, manipulate it, change it, and add data to it.

In this ReferencePoint, you will learn how to take a previously saved diagram, chart, or whatever you created, input data into it, manipulate the data, graphics, and structure, and importing data from other programs to work within Visio.

Now that you have created your first diagram, the next step is to build the diagram by adding more shapes, adding text to the shapes, and giving the diagram a title. If your diagram is a flowchart, or organization chart, you will also want to connect related shapes.

As you build your diagram, you will need to rearrange, resize, or rotate shapes, and, perhaps, add color to the background.

Open a Saved Diagram File

In figure one is a saved diagram about the development of a network. Notice how everything is strategically placed.
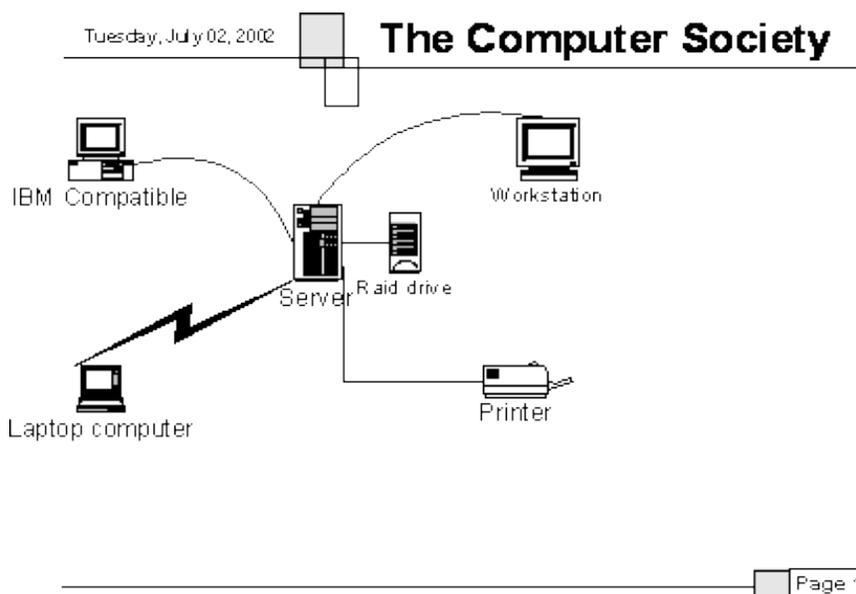
This figure represents a typical saved diagram done in Visio.

You can open a previously saved diagram file in the same way that you open other files. You can identify Visio diagram files by the distinctive icon and the VSD file extension.

1.   Click the **Start** button, point to **Programs**, and then click**Microsoft Visio**.

2.   On the **File** menu, click **Open**.

3.   In the **Look in** list, open the folder that contains the file you want to open.

If you already have Visio opened, on the File menu, click the name of the file from the list of recently opened files at the bottom of the menu. If the file you want to open is not listed, click Open, navigate to the file, select it, and then click Open.

Although, a diagram has certain shapes and connections in place, it does not mean that you cannot add more shapes or change the ones you have.

That is the power of Visio. Unlike some programs that can not be altered after a document has been created, Visio provides the ability to manipulate any image, shape, connector, or text.

This will be demonstrated as you work with Visio and learn to harness its vast power and capabilities.

Using Shapes

In Visio, having worked with shapes to create your document, you know it is the primary tool that is used to assemble any diagram. To find a shape to add you just have to look at the subjects, which are stored in areas called stencils.

As you know, a stencil is a container for shapes. See figure two for a sample of a stencil.
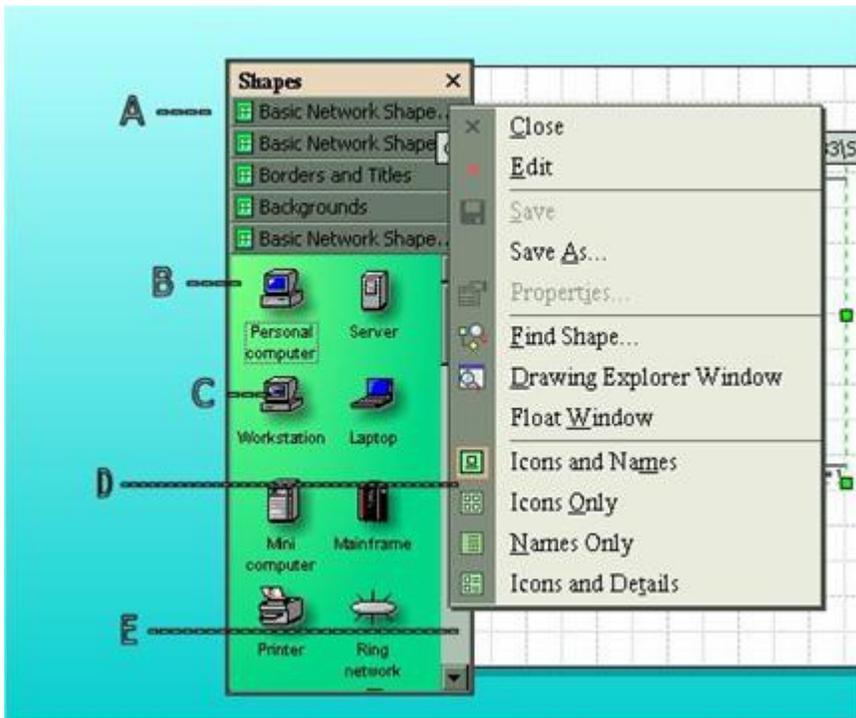
This figure shows an example of a stencil.

Looking at the figure you can see:

1)   A identifies the stencil.

2)   B is the area that contains the shapes to create the diagram.

3)   C is the shape that can be used in the diagram. All you have to do is grab a shape with the mouse and drag it to the drawing page and drop it in place.

4)   If you right-click the title bar, you will see what is depicted as in D. Here you have a menu of choices, where you can change the shape or perform other activities.

5)   Of course, E points to the scroll bar that allows you to see more shapes.

Using Stencils

When you created your document, you opened a template initially, which automatically opened stencils that contained the right shapes you wanted for the diagram you created. For example, when opening the Networking template it included:

☐   **Basic Networking Shapes** stencil, which contains all of the shapes you need to assemble a basic network.

☐ **Backgrounds** stencil, which contains 18 unique background designs that you can add to your diagram simply by dragging a shape onto the page.

☐ **Borders and Titles** stencil, which contains decorative borders and titles that you can use to brighten up your diagram.

The Basic Networking template includes three stencils. By default, when you open a template, the stencils are aligned vertically along the left side of the drawing page.

To use shapes in your diagram that are not included in the stencils of a template, open additional stencils. For example, to add a date to your diagram, you open the forms stencil and drag the "Today's Date" shape on to the drawing area of your diagram.

Table one shows a table describing various ways to use stencils.

| Move to Make	How to achieve it
Add a shape to a diagram	Drag a shape from a stencil onto the drawing page.
View the shapes on a different stencil.	Click the stencil's gray title bar to display its shapes.
Open a new stencil.	1. On the **File** menu, point to stencils, and then click **Open Stencil**. 2. Double-click the folder you want to open. 3. Select the stencil, and then click **Open**.

Connecting Shapes

Flowcharts, organization charts, any type of diagram is based on relationships. A flowchart, for example, shows sequential steps in a process. An organization chart shows who reports to whom.

To show a relationship in a Visio diagram, you have to use and connect two two-dimensional (2D) shapes with a third, one-dimensional (1D) shape called a "connector." Connectors at first appear to be simple lines, but they are "smart." They not only connect two shapes together, but they also can be attached to the shapes.

This means that you can move connected shapes without breaking the connection.

This can be seen visually by looking at .
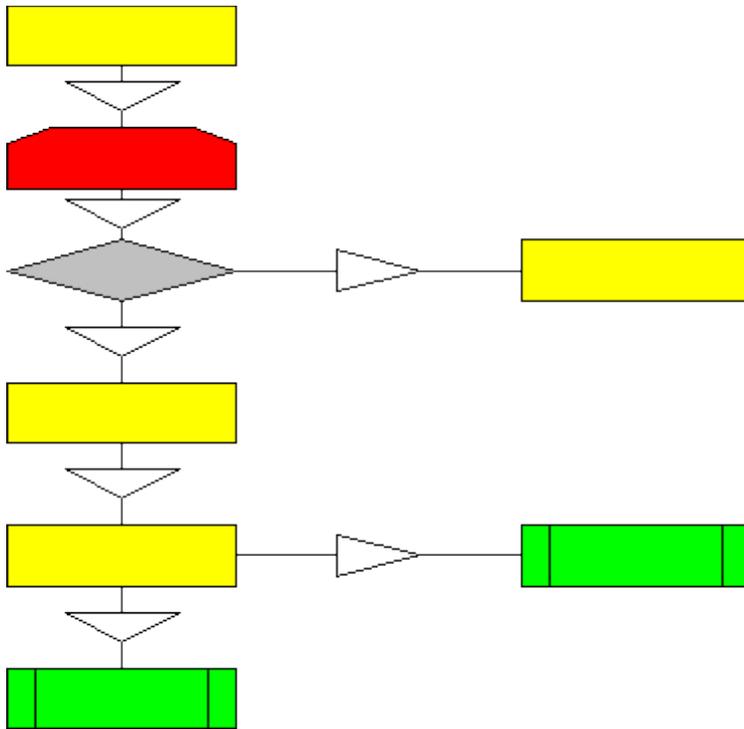
This figure shows a flowchart with connectors showing relationships between shapes.

To understand how these connectors work, it would be best to show the different type of connectors, how they look, and how they can be used.
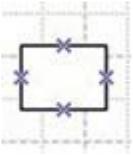
Shape Elements

There are two types of shapes to contend with - endpoints and connection points. Endpoints are points on the ends of connectors used to attach connectors to other shapes.
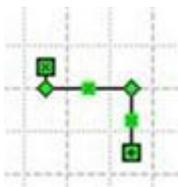

This figure shows a connector. Notice the endpoints are the green squares with the x inside.

Connection points are places on 2D shapes which you can attach connector endpoints.

This figure shows a 2D shape with connection points shown as an X.

Where you see the X is where the endpoints of the 1D connectors get connected. When an endpoint is attached to a specific connection point on a shape it looks like this:
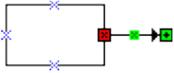
Notice the x inside the red box. The x in the red box shows where the shape is attached to the 2D shape.

When an endpoint is attached to a specific connection point, it stays connected to that specific connection point even if the shapes are moved.

When an endpoint is attached like this:
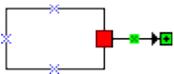
Notice there is no x inside the box. This shows that the 1D connector or endpoint is attached to the entire shape, not just where the X is. This means that when the shape moves, the endpoint shifts to the closest connection point.

Dealing with Shapes

When a diagram is saved and reopened, you may think the shape cannot be moved. That is a wrong assumption. A shape can be moved anywhere on the drawing or diagram. Look at the two pictures below:
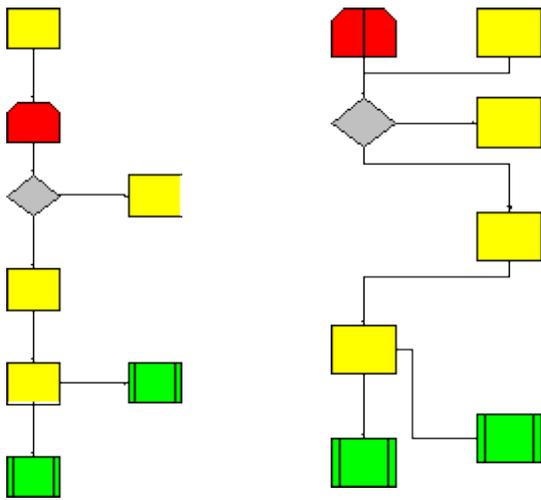
Figure showing two drawings of diagrams with the shapes having been moved.

If you look at the two pictures, you can see how the shapes were moved. The first yellow shape was moved to the side of the red shape. Also, notice the connector and how it readjusted itself to conform to the rearrangement.

The third yellow shape was dragged over to be under the second yellow shape. Again, notice the connector and how it moved. Finally, the green shape was moved down to be almost even with the second green shape.

Throughout all these movements you can see how the connectors repositioned themselves to the new shape's position.

Take a look at another example of moving shapes. Figure four gives a view of a flowchart for this example.
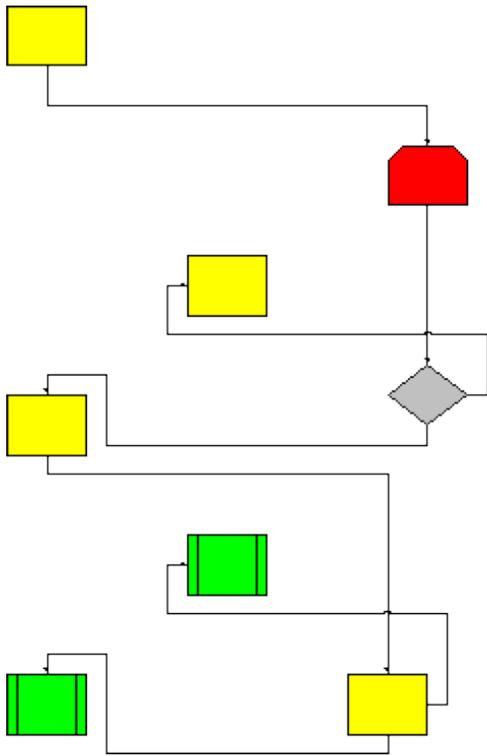
This figure shows shapes rearranged. Notice the connectors.

It does not matter what shape you place on the drawing and where you place the connector. When you move the shape or shapes, everything reorganizes according to the realigned format.
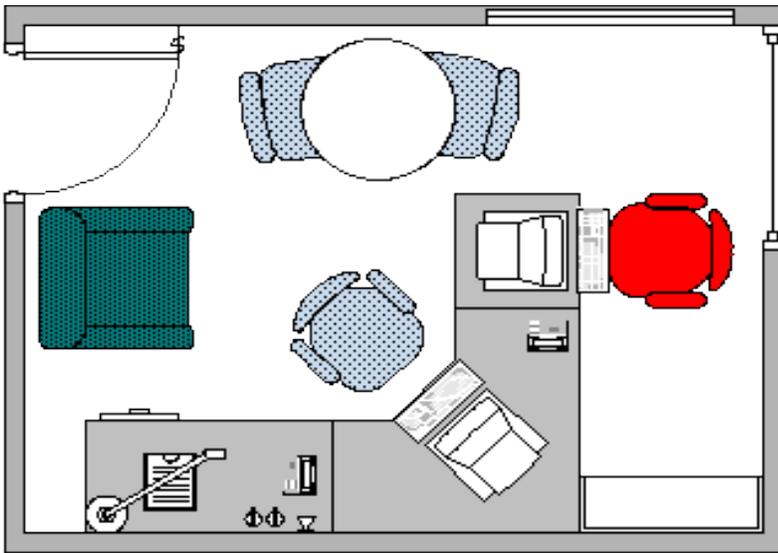
Examine another diagram. Look at :
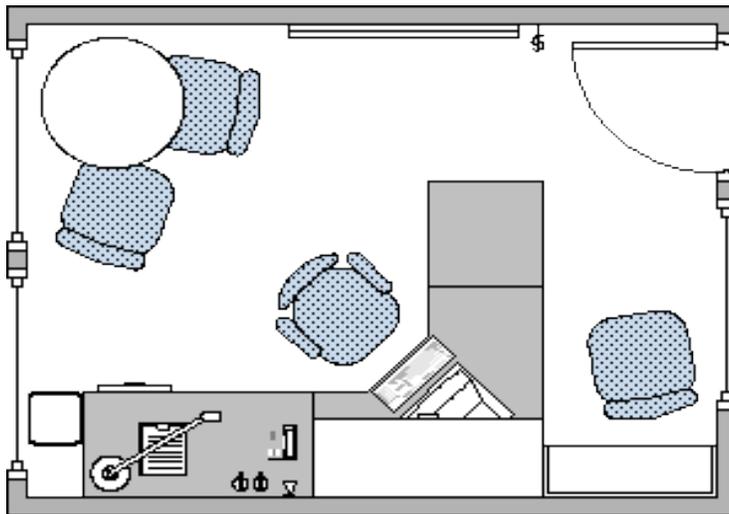
This figure shows a diagram of an office.

Notice the diagram, the placement of all shapes and connectors. Remember, you can move any shape in any diagram you create and any connector that is attached to the shape will realign itself.

Look at and notice how shapes have been moved and added.

This figure shows shapes having been moved and some were added.

The basic premise here, you can do many things to shapes. You can add a shape in a drawing, save it, and alter it later. Visio has the power and flexibility to do whatever you need it to do, whether it is developing flowcharts, organization charts, etc.

You were shown that you can change shapes, move them around, etc. The way to move a shape you have to move the pointer over the shape you want to move and drag it to the position you want. The grid lines guide you in moving the shape.

If you just want to change the size of the shape, drag a selection handle, if the shape is two-dimensional, otherwise, drag an endpoint. This can be seen by looking at[figure seven](#).
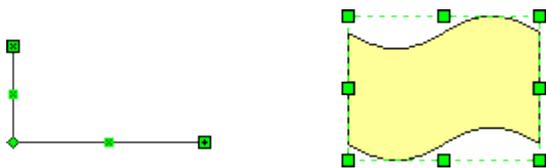

This figure shows small green boxes called endpoints (on 1D shapes) or selection handles (on 2D shapes). To change the size of the shape, drag one of these squares.

After you put the shape on the drawing page, you may want to rotate it. There are three ways to rotate a shape.

Rotation tool

On the Standard toolbar, click the Rotation tool, and then click the shape you want to rotate. Place the pointer over one of the round rotation handles at the corners or ends of the shape. This can be seen in[figure eight](#).
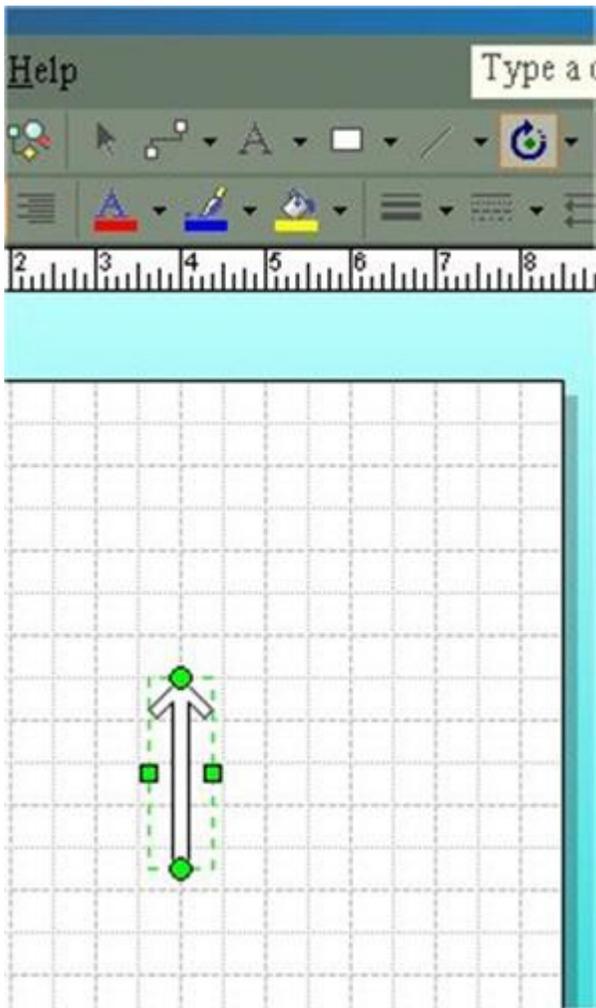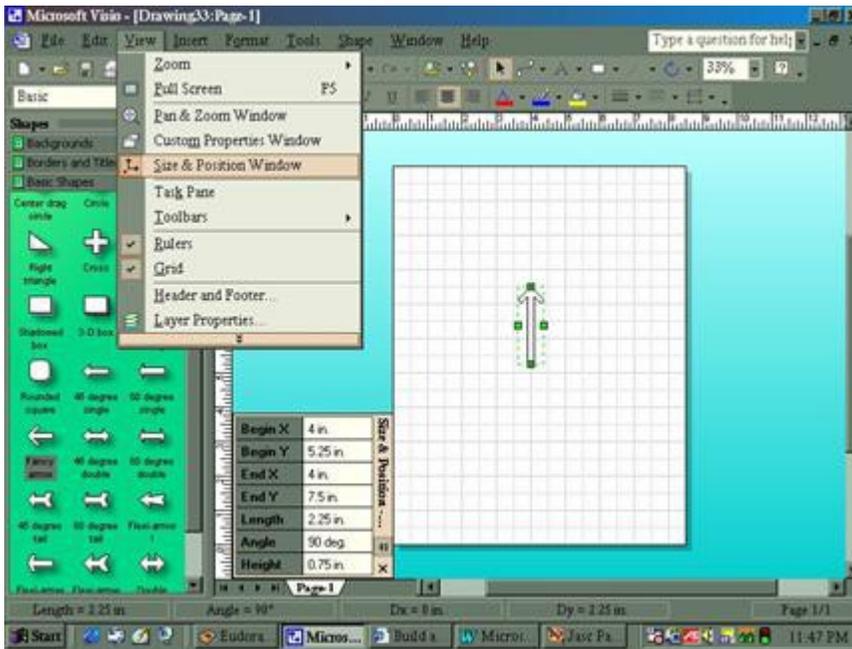
This figure shows the rotation tool in action.

Using the Size & Position window

To rotate a shape using the Size and Position window select the shape you want to rotate. On the View menu, click Size & Position Window.
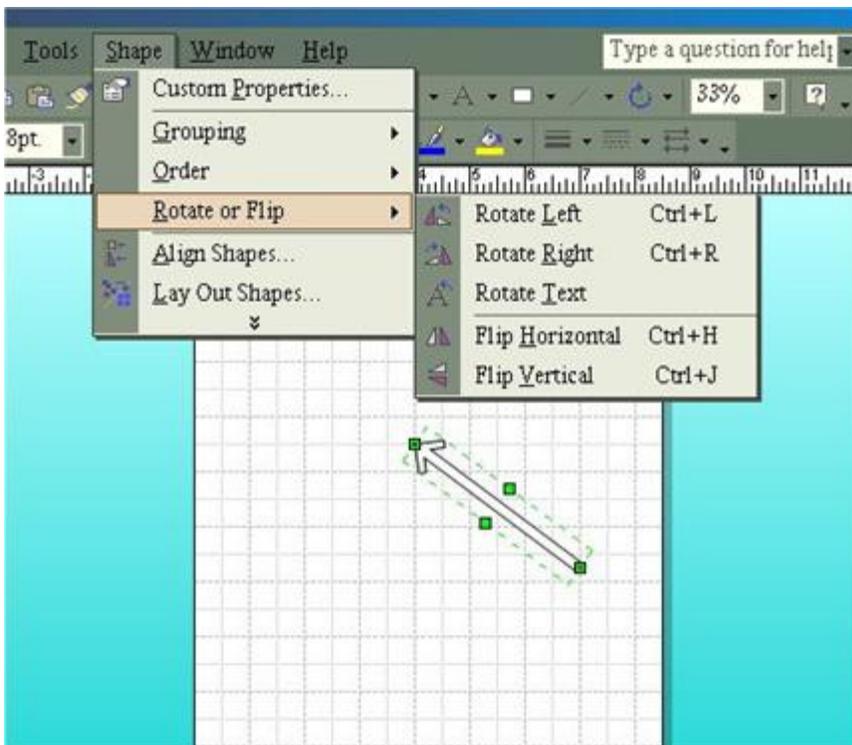
In the Angle box, type the amount of rotation you want, and then press ENTER. This can be seen in.

This figure shows the Size and Position window being used.

Rotate menu commands

To use the Rotate menu commands option just select the shape you want to rotate. On the Shape menu, point to Rotate or Flip, and click Rotate Left or Rotate Right. This can be seen in figure 10.


This figure shows the Rotate menu command being used.

As you can see, you have various ways of working with shapes on the drawing board, which means you do have a choice. If you have a preference of one type over

another, you have it with in your means to make that choice.

Visio provides great flexibility in the way the program can be used. You are not confined to using only one method over another. You can be adaptable just as Visio can be.

Working with a Diagram

In the Visio diagram you assemble, you will need to include text in at least some of the shapes. In a flowchart, for example, add text to describe what process each shape represents. This can be seen in figure 11.
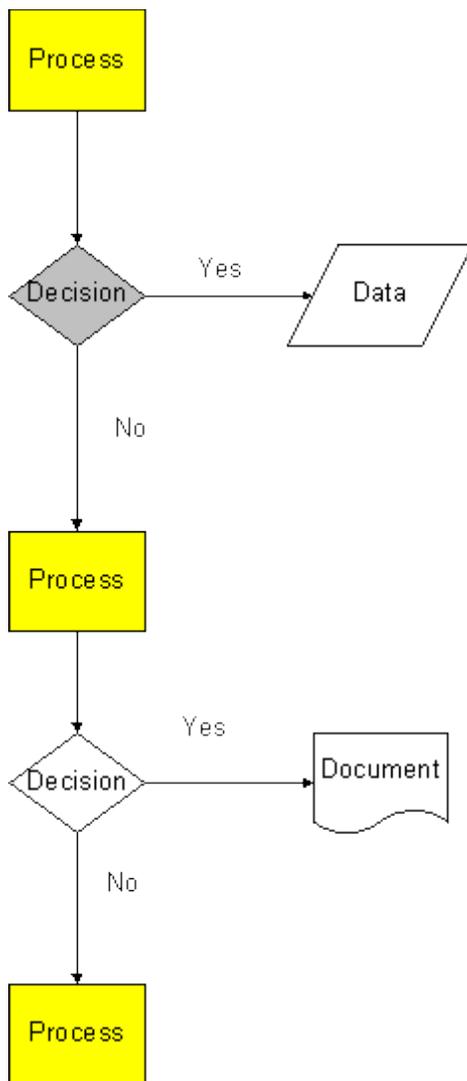

This figure shows a flowchart diagram with words added in the shapes.

In order to add words to shapes you have to perform the following actions:

To add new text - Select the shape you wish to add text to, then type. When you are done typing, click outside the shape.

If you want to edit existing text - Double-click the shape containing the text you want to edit. To replace the existing text, type any new text. If you just want to revise the existing text, click in the text where you want to start typing. When you have finished typing, click outside the shape.

If you want to change the font size, color, or style, select the shape with the text you want to change. Click the Format menu, then click Text. In the TEXT dialog box, choose the options you want, and then click OK as seen in figure 12.
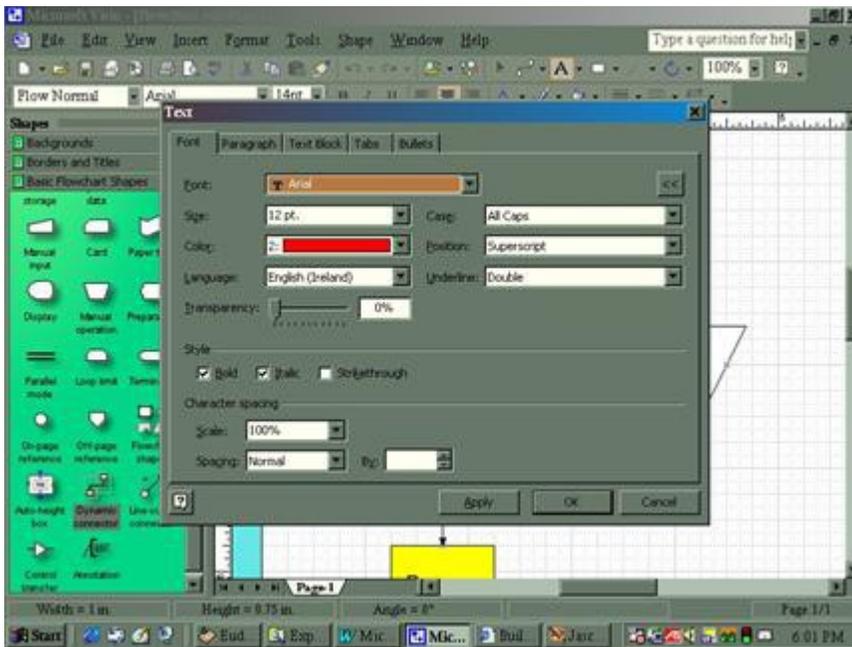
This figure shows the font tool in action.

Here are the results from using the font tool in figure 12.
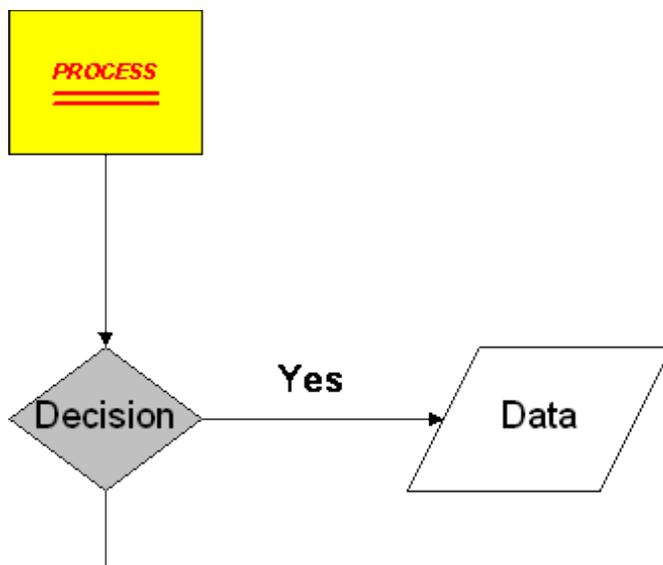
This figure shows the results of using the font tool in Visio.

If you want your text to appear fancy, like making it appear in a certain way across the screen, follow these steps:

1.   Double-click the shape that contains the text you want to change

2.   Right-click in the area surrounded by the green dashed line.

3.   On the shortcut menu, point to **Horizontal Alignment** and/or **Vertical Alignment**, and then select the alignment you want.

 See figure 13 for an example of this step.
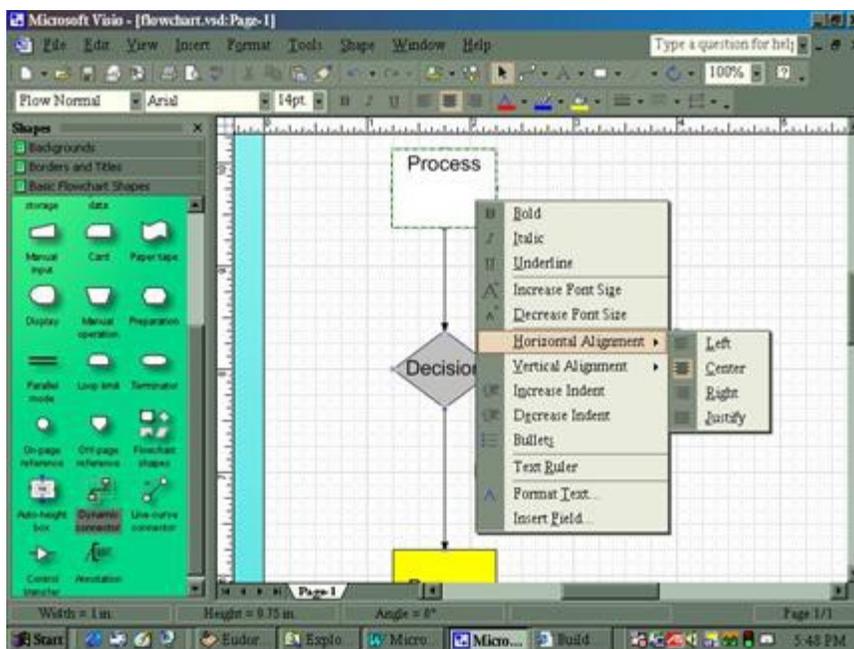
This figure shows how to use the horizontal alignment tool.

Add a Title to a Diagram

The title to a diagram tells the user what the subject and purpose of the diagram will be, plus more. The title also adds a decorative flair to the diagram.

To add a title to a diagram is to drag one of the pre-designed title block shapes from the Borders and Titles stencil onto the drawing page as shown in figure 14.

This figure shows the diagram with a title added.

There are 14 pre-designed title block shapes from the Borders and Titles stencil you can use. Use them to make a difference in your diagram. This way or presentation will stand out from the rest.

You saw an example of how a title can be added to a diagram. Now here is the exact procedure to follow to accomplish this task:

- [ ] With the diagram open, click the title bar of the **Borders and Titles** stencil to display its shapes.

- [ ] If you do not see the **Borders and Titles** stencil, on the **File** menu, point to **Stencils**, point to **Visio Extras**, and then click **Borders and Titles**.

- [ ] Scroll down until you can see all of the title block shapes on the stencil.

- [ ] Drag a title block shape onto the drawing page, and then position it where you want.

- [ ] Double-click the title block shape. Click to select the text you want to change, and then type your own information.

Tip If you inadvertently delete the current date or delete something you did not intend to, drag a new shape from the stencil.

☐ Click outside the shape.

Dealing with the Background

You designed your diagram. You have everything in place. But, there is still something missing. In order for a diagram to look good, you need to have a spectacular background that will spice it up. By choosing the right color and design, you can dramatically improve your diagram's appearance.

One point to note here is that if you apply a color scheme to a diagram, you change the colors of all the shapes simultaneously.

In order to add a background design to your diagram, just drag and drop one of the 18 pre-designed background shapes from the Backgrounds stencil as seen infigure 14.
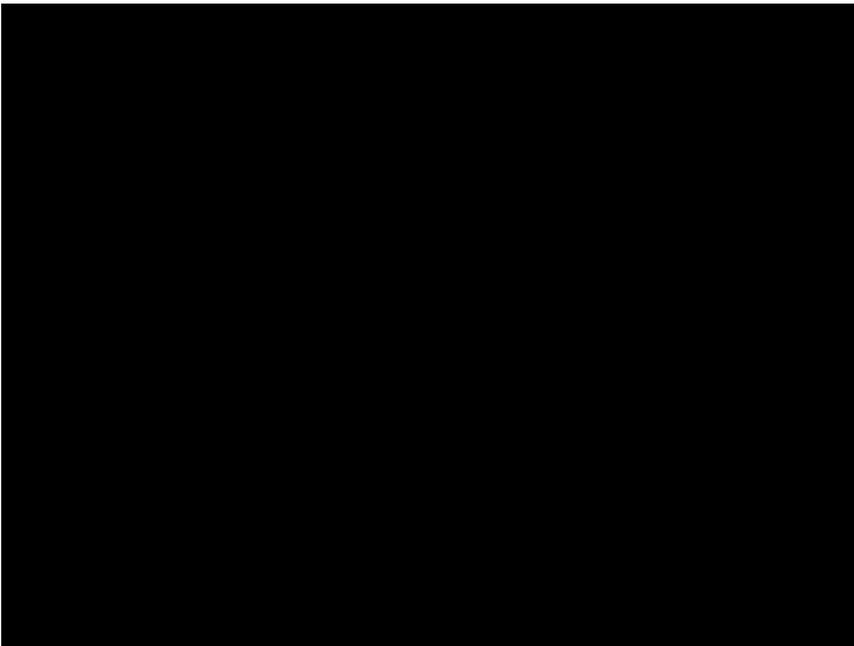
This figure shows a diagram with a background being added.

In order to remove the background, either click undo from the main menu, or locate the background (none) icon and drag that over to your diagram.

Here is what you would do if you wanted to add or change the color scheme.

☐ Place the mouse on the drawing page and right-click, bringing up the shortcut menu.

☐ Click **Color Schemes**.

☐ Select a color scheme, and then click **Apply** to see how the colors look.

☐ When you find a color scheme you want, click **OK**.