Using Shape Help

You can quickly find out what a shape does and how you can use it.

To get help on shapes:

1. Right-click the shape on the stencil or on the drawing page.

2. Choose Shape Help from the shortcut menu.

   A popup window appears containing information about the shape.

3. To close Shape Help, click away from the popup window.

4. To print or copy the information, right-click inside the popup window, then choose Copy or Print Topic from the shortcut menu.

Vanishing point

A nonprinting shape used to set the perspective orientation for 3-D shapes on the page, such as the Block shape. Drop this shape on the page first, then the Block shape.

The Vanishing Point master includes formulas in the Scratch.C1 and Scratch.D1 cells that are not used by the shape but refer to the page, so that when the shape is dropped, the page creates the referenced user-defined cells. The value of these cells is then used by the Block shape to set its perspective.

For details about user-defined cells, see page 30 in the Developing Visio Solutions manual.

Block

The shape's perspective is set by its control handle, which has coordinates that refer to user-defined cells of the page. These page cells in turn refer to the location of the Vanishing Point shape. If that shape is moved, the value of the page's user-defined cells changes, which in turn causes the Block shape's control handle to move.

To express the control handle coordinates in terms of another point, formulas in the Controls section use the LOC function.

In addition, users can change the shape's depth by right-clicking the shape and choosing Set Depth, which sets a custom property value.

For details about control handles, see pages 82 to 84 in the Developing Visio Solutions manual. For details about the LOC function, see page 101.

3-D box group

Shows how component shapes in a group can have different resizing behaviors. Also, the alignment box is customized to encompass only the face of the box.

When the group is stretched, the top shape increases only in width, and the side shape increases only in height. This behavior maintains the 3-D look.

For details about this shape, see pages 71 to 75 in the Developing Visio Solutions manual.

Rounded rectangle

To make sure this shape resizes without distortion, its corners are circular arcs rather than a rounded corner style or elliptical arcs. Custom formulas in the Geometry section control the curvature, which is always 90 degrees in a rectangle.

For details about corner rounding formulas, see pages 63 and 422 to 423 in the Developing Visio Solutions manual.

Smart arrow

A 2-D shape that resizes in only one direction: as the tail gets longer, the arrowhead stays the same. If the shape is stretched vertically, the arrowhead resizes proportionately. Height-based formulas in the Geometry section control the vertices of the arrowhead.

For details about this shape, see pages 60 to 62 in the Developing Visio Solutions manual.

1-D pipe and valve

Drawn as three components, then combined into a single, 1-D shape with multiple paths. Height-based formulas in the Geometry section maintain the valve's proportions when the shape is resized.

For details about this shape, see pages 107 to 108 in the Developing Visio Solutions manual.

Pipe and valve group

A group of a line and a valve.

The valve component uses height-based formulas to resize proportionately when the group's height changes. When the group's width changes, only the line changes in size.

For details about this shape, see page 108 in the Developing Visio Solutions manual.

Flowchart shapes

A combined shape—or "multishape"—with multiple Geometry sections that define the paths of each of the original shapes.

To switch between the shapes, formulas in the Actions section define commands that appear on the shapes' shortcut menus.

For details about this shape, see pages 90 to 91 in the Developing Visio Solutions manual.

Transistor

Shows customized flipping and rotating behavior.

Formulas for LocPinX and LocPinY offset the local pin so that when the shape is flipped, the transistor's leads stay in the correct position. When it is rotated, the connection points always fall on grid lines.

Also, an EventDblClick formula in the Events section hides and shows the transistor envelope when the shape is double-clicked.

For details about this shape, see pages 66 to 67 in the Developing Visio Solutions manual.

Cylinder

A group of the Face and Top shapes. The Face shape is locked (LockFormat=1 in the Protections section) to prevent its fill pattern from being overwritten. Custom formulas in Face refer to the fill color of Top, which is not locked against formatting.

To view the color formulas, subselect only the Face shape, then choose Window > Show ShapeSheet. The FillForegnd and FillBkgnd cells in the Fill section use the HSL function to set the gradient fill based on the color of Top. The gradient starts with the color of Top plus increased luminosity (LUM(Top!FillForegnd) +100).

For details about color, see pages 144 to 146 in the Developing Visio Solutions manual.

2-D word balloon

A 2-D shape that uses a control handle to position the mouthpiece. In addition, the alignment box is customized to encompass only the rectangle portion of the shape.

To see an even smarter shape, see the 2-D word balloon on the Callouts stencil in /Solutions/Visio Extras. Additional formulas in the Geometry section move the mouthpiece to the side of the box closest to the control handle.

For details about this shape, see pages 83 to 85 in the Developing Visio Solutions manual.

Chair

A combined shape with multiple Geometry sections that correspond to the seat, back, and arms of the chair.

To hide and show the chair arms, formulas in the Actions section define commands that appear on the shape's shortcut menu.

For details about this shape, see pages 88 to 90 in the Developing Visio Solutions manual.

Combined circles

A shape with multiple Geometry sections that can fill like a doughnut or like two concentric circles.

To set the fill style, formulas in the Actions section define commands that appear on the shape's shortcut menu.

For details about this shape, see page 70 in the Developing Visio Solutions manual.

LED digit

A shape with custom properties that specify the digit to display and its color. The Ask cell in the Custom Properties section is TRUE so that users must set the digit and color when they drop the shape on the page.

The user's choices in the Custom Properties dialog box set the Value cells in the Custom Properties section. To return the current value, formulas in the User-Defined Cells section use the LOOKUP function. To form the digit, the appropriate Geometry sections are then hidden or shown by setting the Geometry*n*.B1 cell.

To set the digit's fill color, a user-defined cell uses the RGB function, which the FillForegnd cell then refers to. To set the line color to a variation of the fill color, the HSL function is used.

For details about color formulas, see page 146 in the Developing Visio Solutions manual. For details about hiding shape geometry, see pages 59 to 60.

Variable bolt

A shape with custom properties that control the appearance of the bolt. The Ask cell in the Custom Properties section is TRUE so that users must set the bolt's properties when they drop the shape on the page.

When a user selects a bolt head type from the Custom Properties dialog box, a formula in the User-Defined Cells section uses the LOOKUP function to return the value. A second formula refers to this value to set the correct descriptive text that appears with the bolt.

Other formulas in this section refer to the control handle to adjust the length of the threaded portion of the bolt's shaft.

For details about custom property formulas, see pages 92 to 96 in the Developing Visio Solutions manual.

Master pattern

This shape is a placeholder shape to represent the master patterns on the stencil, which do not appear as master icons when the stencil is open read-only.

This stencil contains two master patterns: Triangle is an unscaled fill pattern; Brick is a scaled fill pattern. These appear as options under Pattern in the Fill dialog box.

When you open the stencil as an original or copy, the master icons for the Triangle and Brick patterns appear.

For details about master patterns, see pages 150 to 158 in the Developing Visio Solutions manual.