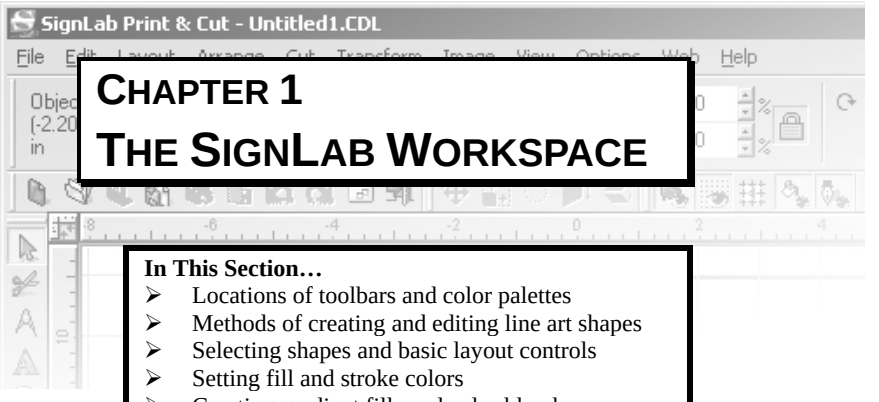


CHAPTER 1
THE SIGNLAB WORKSPACE

In This Section…

- Locations of toolbars and color palettes
- Methods of creating and editing line art shapes
- Selecting shapes and basic layout controls
- Setting fill and stroke colors
- Creating gradient fills and color blends

The center of the SignLab environment is the workspace, which includes grid lines, horizontal and vertical rulers, and a rectangular outline called the sign blank.

The **sign blank** dimensions are usually set equal to the sign that is being produced, such that the placement of art and text can be visualized. However, for some design work it may be more convenient to hide the sign blank.

Quick Customization Tips

Depending on the other software packages that you are familiar with, you may have certain preferences for how the workspace is set up. The following are some of the SignLab workspace settings that may be of immediate use to you:

- **Options menu | SignLab Setup | General Preferences** – Set the units of measurement, as well as the grid size
- **View menu | Show Sign Blank** – This is used to turn on the rectangular area that helps you visualize the size of the sign that you are working on
- **View menu | Show Fill** – This is used to show the fill color of line art shapes. Turn this off to see only the wireframe view of shapes
- **View menu | Show Bitmap Outlines** – This is used to show only a wireframe rectangle of bitmap shapes
- **View menu | Link Show Fill and Bitmap Outlines** – When Show Fill is toggled, also causes wire frames to be shown instead of bitmap image.
- **View menu | Show Line Style** – This is used to display the strokes that have been applied to line art shapes
- **View menu | Show Grid** – This is used to display the grid lines

- **Options menu | Grid** – This is where objects can be set to snap to the grid lines
- **Options menu | Guides** – This is where guidelines can be created or removed

Menu, SmartBar, and Toolbars

Above the workspace is the menu bar, the SmartBar, and one-or-more toolbars.

The **menu bar** is typical of most Windows applications.

The **SmartBar** is a special, dynamic toolbar that displays controls that are specific to the current operation that is being edited.

The other **toolbars** are not dynamic, though they are customizable. Buttons may be added or removed from these toolbars. New toolbars may also be created.

Color Palettes

Below the workspace are the color palettes.

The **Shop Palette** is the main color palette that displays colors that are available for use as either fill or stroke colors.

The **Sheet Layer Palette** provides the ability to arrange shapes on separate layers. Each layer can represent a different type of media (black vinyl, white vinyl, etc.).

The **Halftone Palette** provides the ability to set overprint, primer, and halftone settings on an individual shape basis.

Tools Toolbar

To the left of the workspace, the **Tools** toolbar contains the main shape creation and manipulation tools. For most of the **Tools** buttons, clicking will open additional toolbars.

Job Palette

To the right of the workspace, the **Job Palette** lists the process colors, foil colors, primers, and halftones that are currently in use on the workspace.

In addition to listing colors, the **Job Palette** can be used to perform global search-and-replace of colors, primers, halftones, etc.

Set all red shapes to a blue fill color

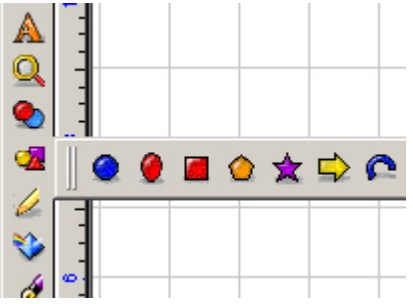
1. Suppose that you have several red shapes
2. In the Job Palette, click the ellipsis button and choose **Color View** from the context menu
3. Note that the red color appears in the Job Palette
4. From the Shop Palette, drag a blue color plate and drop it onto the red Job Palette color

Replace all shades of a spot color

1. Suppose that you have five shapes with different tints of a gold spot color, say 100%, 80%, 60%, 40%, and 20% tint
2. In the Job Palette, click the ellipsis button and choose **Foil View** from the context menu
3. Note that the Job Palette lists the different shades of gold as a single color plate
4. From the Shop Palette, drag a green spot color and drop it onto the gold Job Palette color

Shape Creation

From the **Tools** toolbar, the **Shape Tools** are used to create circles, rectangles, polygons, stars, arrows, and fan shapes. These shapes are sometimes referred to as “parametric shapes” because they have extra editing handles for adjusting the shape parameters, such as number of sides, notched corners, rounding, etc.



From the **Tools** toolbar, the **Graphic Edit Tools** are used to edit scanned or imported vector artwork. Often, scanned artwork has extra nodes and rough edges that need to be “cleaned up” using these node editing tools. In addition, the **Graphic Edit Tools** can be used to draw freehand shapes and trace simple artwork.

There are a wealth of editing features and shortcuts built into these node editing tools. In the past, the SignLab University video lessons were often cited as excellent visual examples of using these tools, both when node editing and when cleaning up scanned artwork. The latest versions of these lessons are currently available through **SignLab Factory Training** at http://www.signlab.ca.

Removing excess nodes when node editing

1. From the **Shape Tools** flyout, create an oval shape
2. Select the oval and choose the **Arrange | Convert to Polygon** command
3. Double-click the oval to begin node editing
4. Drag a marquee to select all of the nodes
5. Press the ‘u’ key to select only alternate nodes
6. Press the **[DEL]** key

From the **Tools** toolbar, the **Ginsu Knife Tools** are used to subdivide selected shapes. The **Open path**

tool will leave the subdivided objects as open paths, whereas the **Close path** tool will create closed paths.

When a **Ginsu Knife** tool is chosen, click on the workspace to place one-or-more cutting nodes that intersect the selection. Then click **Apply** to subdivide the selection.

Text Creation

From the **Tools** toolbar, the Text Compose tool is used to create text shapes. When creating text, the text frame determines the bounds of the text.

Methods of setting the text frame:

- **Click on workspace:** This will set an entry point for the text. As text is typed, the text frame will expand and contract to enclose the text.
- **Click along a shape contour:** Hold the cursor over the edge of a shape, such that the cursor turns black. Click and type text to fit text to the shape contour.
- **Click and drag marquee:** Dragging a marquee with the mouse will set the text frame bounds. As text is typed, the text frame will remain fixed, and the text will be constrained according to the text frame properties.
- **Press [Shift] and click on workspace:** This will set the text frame equal in size to the sign blank.
- **Frame Text Compose button:** This button will set the text frame equal to the sign blank.

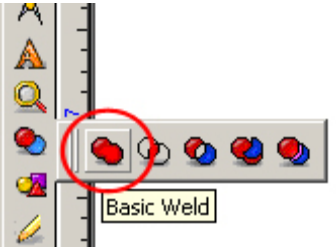
The **Spell Check** tool will check the spelling for all text shapes.

The **Text Underline** tool will create underlined text. Right click to set the underline properties.

From the **Transform** menu, the **Fit Text to Arc** command is used to fit the text to a circular contour.

From the **Transform** menu, the **Fit Text to Path** command is used to fit the text shape to the contour of another shape.

From the **Weld Tools** flyout, the **Basic Weld** is used to bond script lettering, such that there is no overlap between adjacent characters.



However, keep in mind that the result of the weld will no longer be a text shape, so make sure that the text is correct before doing the weld.

Selecting Shapes

Left-click a shape to select it. To add a shape to the current selection, press the **[Shift]** key.

To select multiple shapes, click-and-drag the cursor to form a marquee. All shapes that are within the marquee will be selected. Alternatively, press the **[Ctrl]** key when dragging the marquee, and all shapes that are overlapped by the marquee will be selected.

By default, a shape can be selected by clicking within its filled region. Alternatively, press the **[ALT]** key to only allow a shape to be selected by clicking along its contour. This is useful when you are attempting to select from among several clustered shapes. For example, when node editing a shape that overlaps other shapes, press the **[ALT]** key to prevent accidentally choosing a different shape.

SignLab can be set to select shapes only when they are clicked along their contours. From the **Options** menu, choose **SignLab Setup | Selection Tool Settings**. If the "**Use Filled Region to Select**" option is unchecked, then shapes can only be selected by clicking along their contours.

The **Job Palette** may be used to select shapes according to their color.

Select all shapes of a specific color or tint

1. In the Job Palette, click the ellipsis button and choose **Color View** from the context menu
2. Press **[Shift]** and then left-click a color in the Job Palette
3. All shapes of that color will be selected

Select all shapes of a specific spot color

1. In the Job Palette, click the ellipsis button and choose **Foil View** from the context menu
2. Press **[Shift]** and then left-click a color in the Job Palette
3. All shapes of that spot color will be selected, including tints of that color

Properties of Shapes

When a shape is selected, nine editing nubs appear about the shape. These nubs are used to move, resize, scale, flip, and rotate the shape. The SmartBar displays the position, size, rotation, color information, and type of the shape.

Of the nine editing nubs, the SmartBar indicates the **Current Nub** with a red highlight, and the SmartBar **x** and **y** values represent the position of the Current Nub. When the SmartBar is used to resize a shape, the shape will be resized with respect to the Current Nub.

From the **View** menu, the **Show InstantReplay** item will activate the InstantReplay window, which is used to list the changes (properties and operations) that have been applied to a shape. Double-clicking will edit the property or operation without changing the order in which it was applied. Pressing the **[Delete]** key will reverse changes to a selected property, and it will remove a selected operation.

Using the cursor keys, a shape is moved ("Nudged") one pixel at a time. Holding **[Shift]** will move the shape by five pixels.

When rotating a shape, press **[Ctrl]** to constrain rotation to the **Snap Angle**, which is set on the **General Preferences** dialog.

When dragging a shape, press **[Ctrl]** to constrain the move horizontally or vertically. In addition, pressing **[Alt]** will create a duplicate of the moved shape.

From the **Layout** menu, the **Size/Move** commands are also used to modify the shape properties, as follows:

Layout Menu Size/Move Commands

- **Size:** Set width and height of shape, or set scaling amount.
- **Move:** Place shape at an absolute position, or move the shape by a relative amount.
- **Slant:** Slope or skew the shape either horizontally or vertically.
- **Rotate:** Rotation can be with respect to a specific point on the workspace.
- **Mirror:** Flip the shape either horizontally or vertically.
- **Flip:** Similar to mirror, except that the line of reflection can be adjusted.
- **Clear Size/Move:** Remove all Size, Move, Slant, Rotate, Mirror, or Flip operations that have been applied to the shape.

Adding Fills and Strokes

The Shop Palette contains the colors that can be applied to shapes as fill or stroke colors. In addition, the Job Palette will list all colors that are currently being used on the workspace.

For a selected shape, left-clicking a Shop Palette color will change the fill color, and right-clicking will change the stroke color. The Shop Palette also has a **Line/Fill** button, which is used to alternate this behavior.

When there is no selection, the SmartBar indicates the default fill and stroke colors that are applied to new shapes. Within the Shop Palette, a white hairline is drawn about the default fill color.

A newly created shape has no stroke, so its stroke color is not initially visible. From the **Stroke and Fill Tools** flyout, the **Line Style** tool is used to add a stroke.

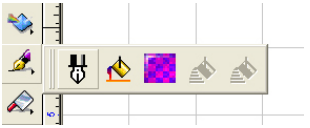
At the far-left of the Shop Palette are the Invisible Color and Clear Color. All other colors have a letter designation (P, SF, or SC) to indicate their type.

Types of Colors

- **Invisible Color:** Indicates the absence of color. For example, when a shape fill is Invisible, only its thick line attributes (i.e. its stroke) are available for printing or cutting.
- **Clear Color:** No colorant will be applied to that shape, such that the substrate color (i.e. vinyl) will show through.
- **Process (P):** Use the Process option when process colors are being used (i.e. where CMYK colorants are combined to produce a given color).
- **Spot Foil (SF):** Used to represent colors that will be printed with foil cartridges (i.e. pure colorants are applied, rather than by combining proportions of CMYK). Shades of spot foils are created by adjusting the Tint values (less than 100%), or by applying a gradient.
- **Spot Color (SC):** Defined in terms of the LAB color space, and used to represent distinct color planes when printing color separations.

Gradients and Pattern Fills

From the **Stroke and Fill Tools** flyout, the **Gradient Fill** tool is used to create a process color gradient. When printed, this fill will be rendered using CMYK colorants.



From the **Stroke and Fill Tools** flyout, the **Spot Gradient Fill** tool is used to create a foil color gradient with either one or two foil colors. The tint values will be calculated to provide a smooth transition of shades.

From the **Stroke and Fill Tools** flyout, the **Multi Spot Gradient Fill** tool is used to create a foil color gradient with one-or-more foil colors. Like the **Spot Gradient Fill** tool, the tint values will be calculated to provide a smooth transition of shades.

From the **Stroke and Fill Tools** flyout, the **Pattern Fill** tool is used to tile a bitmap pattern on the shape.

Blends using Metamorphosis

From the **Transform** menu, one of the functions of the **Metamorphosis** tool is to create a smooth gradient blend between two line art shapes.

Depending on the metamorphosis setting, either new colors can be created, or existing Shop Palette colors will be used.

- **Target layer:** Use the currently selected Shop Palette color
- **Match layers:** Locate and use only colors that are currently in the Shop Palette
- **New layers:** Create and add new colors to Shop Palette

Metamorphosis creates the effect of a gradient blend by creating a large number of intermediate shapes. For example:

Create a metamorphosis color blend

1. Create some blue text that is 1" height
2. Create a red duplicate of the text that is 5" height
3. Select both text shapes and choose **Metamorphosis** from the **Transform** menu
4. Set the **Mode** to **New Layers**, such that new color plates will be created
5. Set a high **Count** value, such as 64
6. Click **OK**, and the resulting series of line art shapes will create the effect of a gradient

If the Spot Color Module has been installed and spot colors are used for the metamorphosis blend, then the gradient will be comprised of tints and duotones using these spot colors.

To create a blend that fades to “no color,” then assign the **Invisible Color** to one of the shape fills.