



Upgrade Guide

 | **ARIES GRAPHICS INTERNATIONAL**

Sign Wizard 7 Upgrade Guide

Copyright © 1991-2011 Aries Graphics International

Portions Copyright © 1991-2005 Lead Technologies, Inc.

Portions Copyright © 1993-2007 Liberty Technologies Systems, Inc.

Anti-Grain Geometry Version 2.4 Copyright © 2002-2005 Maxim

Shemanarev (McSeem)

This software is provided "as is" without express or implied warranty, and with no claim as to its suitability for any purpose.

Worldwide Headquarters:

Aries Graphics International

365 S. Rancho Santa Fe Rd. – Suite 203

San Marcos, CA 92078 USA

Web Site: www.aries-graphics.com

Telephone: 760 752-7640, 800 294-7273

Fax: 760 752-3221

Email: sales@aries-graphics.com

Support: support@aries-graphics.com

Table of Contents

Welcome to Sign Wizard 7	4
Paragraph Text Tool	6
Live Spell Checking	13
Image Fills	15
Easy Bevel	18
Dynamic Outline	24
Dynamic Shadow.....	29
Glow.....	32
Effects Library.....	35
Brush Tool, Clone Stamp Tool, Background Eraser Tool	37
Dynamic Contour Cut Path	45
Create Contour Cut Paths from Bitmap	49
Multiple Panes in the Sidebar.....	50
Color Tab Improvements	51
Layers Tab Improvements	52
Highly Customizable High Color Toolbox and Editor.....	53
Glossary.....	55

Welcome to Sign Wizard 7

Sign Wizard 7 represents a major step forward for sign designers and graphic artists who want to do more in less time. If you are a long time Sign Wizard user, you'll appreciate the many new features and capabilities that are consistent with what the software has always delivered: powerful capabilities that are easy to use.

If you are a brand new or relatively new user, you'll be amazed at all that this software can do, all the various combinations of capabilities that go into making some of the examples in this guide.

As we work through this guide, you'll notice that while the focus is on the new features in version 7, we also cover how they integrate or augment existing features to deliver new design capabilities. Some prior knowledge of Sign Wizard is assumed, and if you get lost at any point, please access the Online Help.

One important set of improvements in version 7 is the underlying text engine, which has been dramatically enhanced, especially for large amounts of text. Sign Wizard has always been very strong with text editing, and this continues with lots of new capabilities. Some of the other new features are actually enabled with this new text engine. You'll be amazed at how far you can go with a design, and then go back and change the font or change the copy.

Another focus of this release has been on "dynamic" effects and functions that have some "memory." This means that you can create an Effect, or perhaps several Effects, and still go back into the settings and adjust them later. Nothing is set in stone, and as a result, the design process is more "non-linear." The particular order of steps in the design doesn't matter as much anymore, so that you can experiment with fresh ideas and mix things up a bit.

Another tangent with version 7 is that of libraries for design elements that can be accessed at any time to augment your designs. There are libraries for Effects and for Image Fills that let you save your favorites for future use. The items in the Effects Library can incorporate several Design elements, saving you many steps should

you decide to use them again in the future. The Image Fills library lets you save and categorize bitmaps that you can use as fills for text and graphics, such as gold leaf, various textures, repeating patterns, etc. This is consistent with what we've done with Blends, Warp, and other features, but to a new level.

The management and editing of bitmap images has also been a focus of this release. The Brush Tool, the Eraser Tool, and the Clone Stamp Tool are new, giving you additional ways to edit your bitmaps for situations like removing an existing sign in a picture and replacing it with yours!

The new Dynamic Contour Cut Path feature makes it easy to create a cut path for a print and cut output, and the path will update as you make changes to the design or even add new elements to it. There is also a new feature for creating a cut path around an irregularly shaped bitmap.

Sign Wizard 7 has a unique set of abilities for both vector and bitmap images, enabling you to include both types of graphics in the same designs for increased creativity. In fact, much of the power in the software comes in the ability to handle both bitmap and vector graphics with rich features that can add up to more than the sum of the parts. For example, the new Easy Bevel tool starts with a line of text that is vector-based and adds highlights and shadows to give it depth, a bitmap-based feature. Then you can add a Soft Shadow to separate it from the background, and add a Contour Cut path tightly around the object for your print/cut enabled machine.

Never before has so much design power been available to the sign industry. Sign Wizard 7 is at your disposal, what will you create?

Paragraph Text Tool

Advantage, Grand, Pro

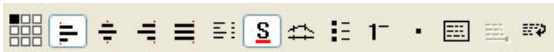
The new Paragraph Text Tool is a whole set of new features and capabilities designed to give you even more power with text. It is really a redesign of the text engine, opening up new doors for text-rich designs and new Dynamic Effects. Even in today's image-rich sign market, text is still a vital part of the vast majority of your signs.

You already know how well Sign Wizard works with text. Here is a quick summary of the new capabilities of Paragraph Text:

- Three modes for entering text and managing the paragraphs
- Control points for kerning and tracking, word spacing, line spacing
- Easy justification of the entire paragraph: left, right, center, justified
- Auto Weld of any overlapping sections in real time
- Autonumbering and Bullets with one click
- Menu Board feature for listing items with prices, justified left and right
- Multiple columns with various options for spacing
- Map to a Path, Map to a Circle, and Arc Text, all fully editable in various ways.
- Real-time Spell Checker as you type
- Paste large amounts of text from the Windows clipboard

These will be explored in more detail below.

There is a new menu called **Paragraph** that contains the new features, as well as a toolbar that will appear when you are in the "Paratext" mode.




A The traditional text entry mode is still available, and we now call it Basic Text. For small amounts of text, and text that will not have lots of Effects applied, Basic Text still works great. As you get used to the new mode, you can decide when to use which mode.

P Paragraph Text mode can be entered with this icon in the toolbox on the left. When you click in the layout window, just type normally. There are three modes for the Paragraph Text Tool:

1. Basic Mode (non-wrapping) – just enter text and hit Enter for each new line.
2. Simple Wrap Mode – uses a control line below the text to set the width of the paragraph. No need to hit Enter for a new line.
3. Frame Mode – the paragraph text is constrained within a frame that can be adjusted at any time.



When you enter some lines of text, you will be in the default Basic Mode, where the text does not wrap. Just press Enter for a new line.

You will see two new control points that look like this  , one at the lower right and one at the lower left of the paragraph. As you would guess, the one at the lower right controls the tracking, uniformly across all the lines of text. Holding SHIFT while moving this point will change the word spacing. The lower left point will change the Line Spacing, again evenly across all the lines in the paragraph.

Paragraph Text makes it easy to adjust kerning and line spacing for a paragraph in one operation. →

Paragraph Text makes it easy to adjust kerning and line spacing for a paragraph in one operation.


↓ Paragraph Text makes it easy to adjust kerning and line spacing for a paragraph in one operation.

In any of these modes, you have control over the justification – left, middle, right, or justified – by clicking on the appropriate icon in the toolbar. This may not seem too exciting yet, but keep reading, as it gets better.

Welding of overlapping text characters and/or graphic elements has been a Sign Wizard feature for many years. But after welding a line of text, it has always meant that you can't go back and change the font or change the copy...until now.

With the new **Auto Weld** (*Grand, Pro*) with ParaText, you can adjust the kerning letter by letter, on a line of text, or the tracking on the whole paragraph, to create overlapping letters and it will Weld automatically. Then you can adjust the kerning and/or tracking again and it will re-weld. Then you can change the font, and it will maintain the kerning and/or tracking and re-weld if necessary. And you can change the copy and it will re-weld. Later on we'll talk about some of the new Effects, such as Dynamic Outline, Dynamic Shadow, Image Fills, and Bevel, and this Auto Weld will take on even more importance.

Auto Weld
Auto Weld
Auto Weld
Automatic Weld

Paragraph Text also automates the formatting of lists and menu boards with a few new capabilities. Let's say you need to make a listing of items available on a menu for a restaurant. You want the menu items on the left and the prices on the right. To enable this justification on both sides, just type "---" between the item and the price. When you click on the Menu Board (*Pro*) icon , you will get this:

Tacos ---	\$2.50	Tacos	\$2.50
Burritos ---	\$5.95	Burritos	\$5.95
Enchiladas ---	\$4.25	Enchiladas	\$4.25
Sopas ---	\$3.50	Sopas	\$3.50
Chile Rellenos ---	\$4.50	Chile Rellenos	\$4.50

Now say you want to add bullets  or make it a numbered list 

• Tacos	\$2.50	1. Tacos	\$2.50
• Burritos	\$5.95	2. Burritos	\$5.95
• Enchiladas	\$4.25	3. Enchiladas	\$4.25
• Sopas	\$3.50	4. Sopas	\$3.50
• Chile Rellenos	\$4.50	5. Chile Rellenos	\$4.50

You can easily switch between the regular menu board, the bulleted list, and the numbered list with a click of the appropriate icon. This feature can be used for any design where you need justification on both sides.

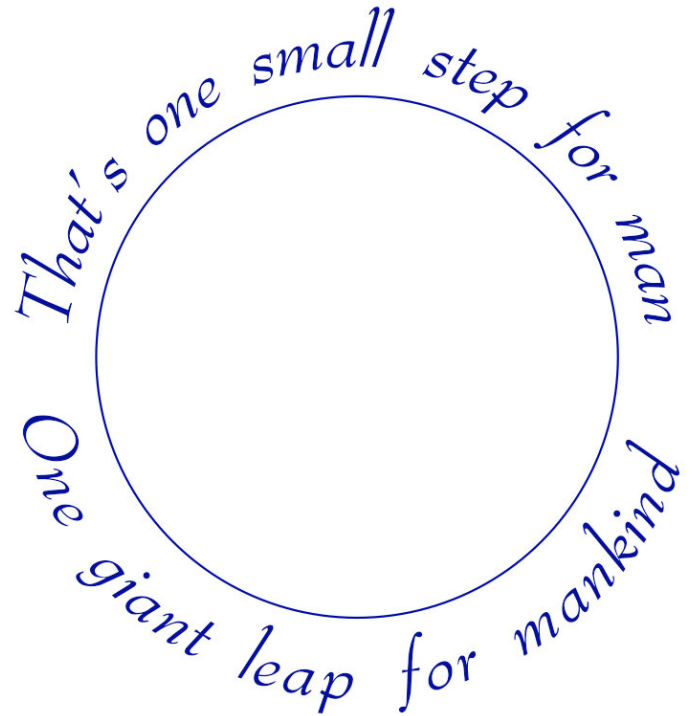
The next Paragraph Text features we're going to look at are **Map to Circle** (*Pro*) and **Map to Path** (*Pro*). These are dynamic features in the sense that you can always go back and change the font, change the copy, change the kerning or tracking, change the scale of either the text or the path/circle, or change the path itself. Here is the example text that we're going to start with:

*That's one small step for man
One giant leap for mankind*

The next step is to add a circle, with a size that will enable the text to wrap most of the way around it. Now we group the circle with the text and select Map → Map to Circle from the Paragraph Menu.

If you have two lines of text, the top line will map to the top of the circle, and the bottom line will map to the bottom. If you have just one line, it will map to the top, but you can break the text into two lines and the second line will automatically map to the bottom.

From here we have several options: change the size of the circle, change the size of the text, change the tracking, and change the space between the text and the circle (a negative space will place the letters inside the circle). If you change the tracking so that the letters are overlapping, and have Auto Weld on, then whatever subsequent changes you make, welding will be automatic.



In this example, we changed the font, tracking, spacing on the top and bottom, and had Auto Weld turned on.



Perhaps a more capable feature is Map to Path, since that path can be virtually anything. It can be a Bezier curve (or multiple Bezier curves), a vector graphic of some kind, a regular character, or a variety of other paths.

Taking the same text, with the proper punctuation added to make it a single line (which is a requirement for Fit to Path), we can now explore this feature. If you have a path that you want to map to, just make a group of the path and the text and then select Map → Map to Path (*Pro*) from the Paragraph Menu. If you do not have a path selected, then a default Bezier curve will be used.

That's one small step for man... One giant leap for mankind.

The path can be anything, really, but watch out for sharp/tight corners, as your individual letter spacing may have to be adjusted. Having Auto Weld turned on is a good idea! Here you can see that the “giant leap for mankind” is a little tight. The easy solution with Paragraph Text is to select that portion of the text and use the lower right tracking control point to add a little space between each letter. Problem solved.

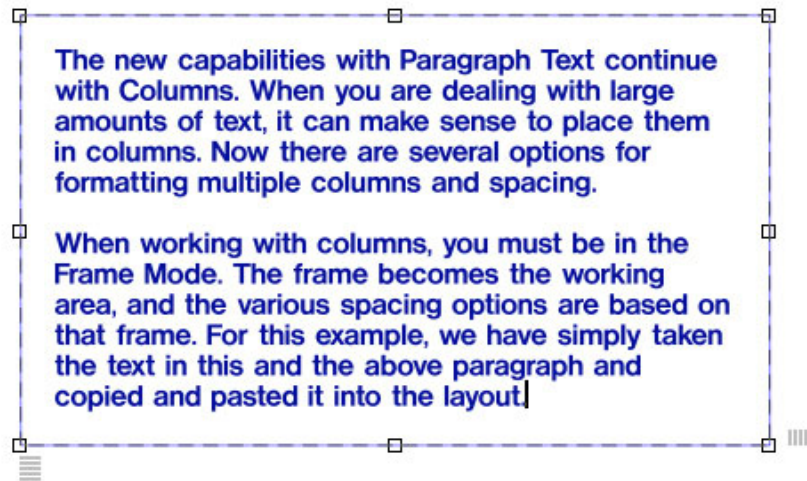
That's one small step for man... One giant leap for mankind.



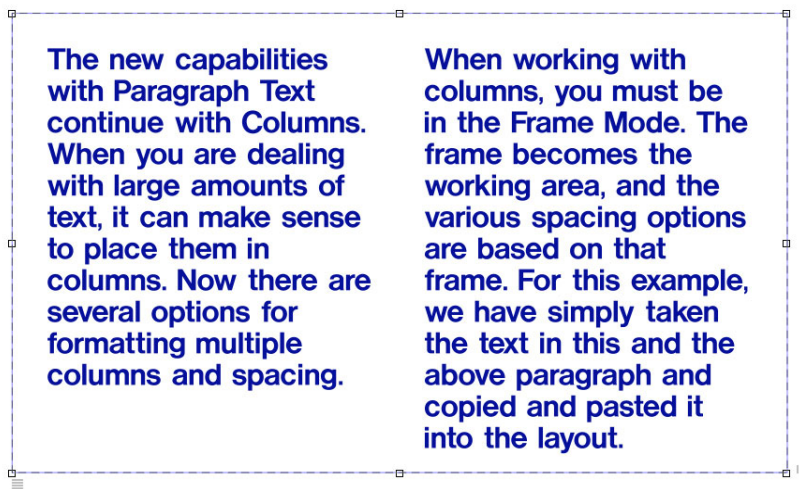
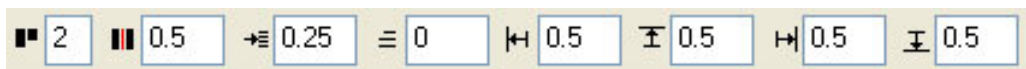
The path can also be a regular graphic, or in this case, a letter. On a closed loop, the path will begin at the Start/End point, so you can move the Start/End point if need be.

Even in a case like this, you can always change the font, change the text, and change the letter spacing. And as with Fit to Circle, you can also change the size of the path (in this case the letter “S” and or the size of the text.

The new capabilities with Paragraph Text continue with Columns. When you are dealing with large amounts of text, it can make sense to place them in columns. Now there are several options for formatting multiple columns and spacing. When working with columns, you must be in the Frame Mode. The frame becomes the working area, and the various spacing options are based on that frame. For this example, we have simply taken the text in this and the above paragraph and copied and pasted it into the layout. That's a fast way to enter lots of text.



Your initial text will look like this in the frame. To change this into two columns, just enter 2 in the columns box in the toolbar. The next box is for the center gap, then indent, then first line indent, then the last four on the right are for spacing from left, top, right, and bottom of the frame.



Live Spell Checking

All Sign Wizard Levels

Spell checking has become a standard feature for all authoring applications, as well as signmaking software. Now there is a mode that will instantly tell you if a word is misspelled. Live Spell Checking will work with both Basic Text and new Paragraph Text.

The tool works in real time if you have Live Spell Checking selected in the Text menu. Just type in your text as shown below:



The red underline will appear under any word the program is not able to find in its list of words. You have the option to fix it if it's an obvious error, or you can pull up a menu of suggested words by holding CTRL while right clicking on the word. Then you can select from the list of similar words and it will replace the misspelled word with the new one.

If the underlined word is not known to the dictionary, and it annoys you that it shows up as being misspelled, click on Add to Dictionary.



Live Spell Checking can be an important time saver when you're entering a lot of text using the new Paragraph text tool. You can enter text as fast as you want and let the spell checker do its job after all the copy has been entered. Of course it will not check your grammar but it will let you know if you misspell grammer.

Almost anyone who has been in the sign business very long has a few misspelled words to his credit. In the early 1950s William Knowland was running for re-election to the U.S. Senate in California. The election was just a few days away and he wanted a large bulletin board on a local highway to say Re-elect Senator Knowland. A local sign painter was given the details over the phone. He was told that he had the job if he could have it painted the next day. The sign was up on schedule but there was a problem. It said:

RE-ELECT SENATOR NOLAN

The sign painter was Riley Fassett - my father. He repainted the sign the following day. Senator Knowland was re-elected. Both Nolan and Knowland are proper nouns, so Sign Wizard's Spell Checker would not have saved the day.

Image Fills and Image Fills Library Manager

Pro

In previous versions of Sign Wizard, you've been able to fill text and graphics with images. Now this is made much easier and much more powerful with the new Image Fills feature and associated Image Fills Library Manager. This is one of many features that combines the best of vector graphics with bitmap images. The vector outline contains the image, and both the vectors and the image can be edited independently with different tools.


This is also the first of the new Dynamic Effects that we'll look at, which deserves a little explanation. A Dynamic Effect is one where you can go back later and change the settings to rework the effect. Put another way, a Dynamic Effect maintains "state." So as you develop your design and you realize that you want to scale the Image Fill, or adjust the saturation, you can do it. Or perhaps you want to remove it altogether.

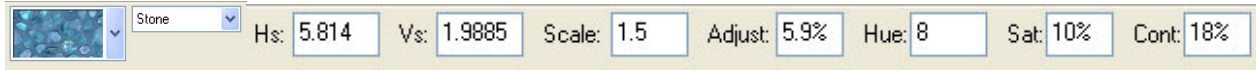
Dynamic Effects also enable a term we brought up in the Introduction: non-linear design. The order of the steps in your design is far less important than it once was, because it is easy to make changes to the initial elements of the design, such as the text or font. Later we'll talk about Bevel, Dynamic Outlines, Dynamic Shadows, Transparency, Blends, and more features that can be applied to text, perhaps even all together, without disabling the ability to change the text or font.

So back to the Image Fills feature, we've created a system where you can add your own images to the image fill library, in addition to the ones we've provided. The images are categorized so that you can quickly find the right image and you can also add new categories. The library comes with over 100 images to get you started.

If your design is too big for the image to completely fill, it will automatically tile. You have the ability to move and scale the image to best fit your design.



To use Image Fills, select an object and go to the Effects Menu or use this icon  in the toolbox. The following toolbar will appear at the top of the screen.



The left of the toolbar displays the images and the categories, and allows you to scroll through to choose the right image. When you have selected an image, it will fill the object as below. At this point you are free to move the image fill to position it in the best way for your object. As you do this, the Hs (Horizontal Shift) and Vs (Vertical Shift) numbers will update automatically. You can, of course, enter a numerical value in these boxes.



You may also want to Scale the image up or down as well. The mouse wheel can be used for this – just click on the Scale value. In fact, the mouse wheel can be used to adjust any of the parameters up or down, and your graphic will be updated in real time to reflect the changes.

The other options in the toolbar are for brightness (positive values for brighter and negative values for darker), hue, saturation, and contrast. These are persistent values, meaning that if you come back into this feature again, the values that you originally set will be displayed.

When using Paragraph Text with Image Fills, you have all the capabilities we described above, such as Auto Weld, Map to Path, etc.

Here are some additional examples:



Gold leaf has long been a favorite technique of sign makers. Using a gold leaf fill on an outline, we can recreate this wonderful look.



Easy Bevel

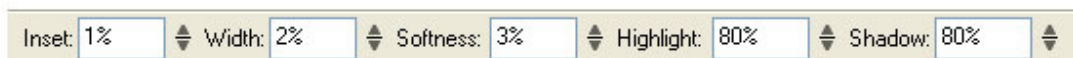
Pro

Let's continue now with another new Effect with lots of potential for your printed and print/cut designs: Easy Bevel. A bevel is a highlight and a shadow that gives a 3D look to your text and graphics. The Easy Bevel feature has several options and settings that really give you control over how the final design looks.

Now we get to start combining the effects, and we'll continue with that in the next few sections. As you would guess, Sign Wizard 7 can add a bevel to your Image Fills, and you can still Auto Weld with bevel.



As with Image Fills, you can go back and edit an existing Bevel. And finally, after you add a bevel, you can change the text or change the font. But first we'll go through the various options so you can see how the bevel looks as you change the settings. The original example is this text "Bevel" in Gill Sans Bold:

The word "Bevel" is displayed in a large, bold, green font with a 3D bevel effect. The letters have a dark green shadow on the bottom and a lighter green highlight on the top, giving them a three-dimensional appearance.

The first setting is Inset, which will adjust how close the bevel is to the edge of the letter. The % is of the height of the letter. It may help to think of this as an Inline. The smaller the value, the closer the bevel will be to the edge of the letter, and the larger the value, the more the bevel will be inset from the edge. The next setting is Width, which refers to the width of the bevel itself. A smaller value will result in a smaller, more subtle bevel, while a larger value will be a larger, more pronounced bevel. See examples on the next page with these values higher and lower.

Bevel

Inset: 0.1% Width: 2% Softness: 3% Highlight: 80% Shadow: 80%

Bevel

Inset: 2.5% Width: 2% Softness: 3% Highlight: 80% Shadow: 80%

Bevel

Inset: 1% Width: 1% Softness: 3% Highlight: 80% Shadow: 80%

Bevel

Inset: 1% Width: 3% Softness: 3% Highlight: 80% Shadow: 80%

Continuing on, the next setting is Softness, which is really the softness of the light. A low setting will give very hard edges between the highlight and the shadow, while a higher setting will give very soft edges.



The image shows the word "Bevel" in a large, bold, green, 3D font. The letters have a smooth, rounded appearance with a soft, glowing highlight on the top and a subtle shadow on the bottom, giving it a three-dimensional effect.

Inset: 1% Width: 2% Softness: 6% Highlight: 80% Shadow: 80%



The image shows the word "Bevel" in a large, bold, green, 3D font. The letters have a sharp, defined highlight on the top and a dark, well-defined shadow on the bottom, giving it a more rigid and metallic appearance.

Inset: 1% Width: 2% Softness: 1% Highlight: 80% Shadow: 80%

The last settings in this property bar are Highlight and Shadow. The examples given keep the values consistent, but there's no rule that says you have to do that. A higher value for Highlight will give you a brighter highlight, and a higher value for shadow will give you a darker shadow. 100% highlight is pure white, 100% shadow is pure black.

Bevel

Inset: 1% Width: 2% Softness: 3% Highlight: 100% Shadow: 100%

Bevel

Inset: 1% Width: 2% Softness: 3% Highlight: 60% Shadow: 60%

You can, however, change the highlight and shadow colors by clicking on the small color boxes beneath the highlight value, and then choosing a new color in the Color Tab. For example, you may want the highlight to be yellow, to indicate warm sunlight, or you may want the shadow to be a cool blue color. Or perhaps you want the highlights and shadows to simply be lighter and darker shades of the same color.

So these are the basics for Bevel, but there are more advanced effects that you can create. For example, if you use a letter style with a consistent stroke width, you can easily create a rounded shape:

BEVEL

Or if you use a letter style that has thin strokes, or a connecting script like the example here, you can create more of a flat look.



The word "Bevel" is written in a highly decorative, cursive script font. The letters are a deep magenta color and have a 3D bevel effect, giving them a raised, embossed appearance. The strokes are thick and elegant, with a classic calligraphic feel.

Bevel can be combined with Image Fills to give a three dimensional appearance to images:



The word "Wheatgrass" is written in a bold, blocky, sans-serif font. The letters are filled with a detailed image of green wheatgrass, creating a textured, natural look. The text has a 3D bevel effect, making it appear raised and three-dimensional.

And to take this one step further, adding a Soft Shadow to a bevel gives it a very finished look.



The word "Coffee" is written in a decorative, rounded, serif font. The letters are a rich brown color with a textured, coffee-like appearance. The text has a 3D bevel effect and a soft, dark shadow cast behind it, giving it a polished and finished look.

Continuing on with additional ideas, a Bevel can be added to an outline, instead of, or in addition to, a regular font. This is actually using a Sign Wizard outline font. We'll have much more about Outline coming up...



BAR

Yet another option with Bevel is to combine it with Blends



Blend it

You can now see how many options there are for Bevel, as well as adding some other effects in addition to Bevel. We'll continue to show more combinations of Effects in the upcoming sections. Finally, in a few steps we have created a reflection of text with an Image Fill and Bevel. This design also uses Transparency for the reflection.



REFLECT

Dynamic Outline

Grand, Pro

Outline is another long-time Sign Wizard feature that has been given a major upgrade for version 7. Outlining is so common that we've made it as easy as possible to use. Dynamic Outline means that you can always go back and change the outline(s) as necessary and it will also automatically update if you change the path of a graphic or text.

Dynamic Outline includes the ability to add up to three outlines, and you can determine the amount of the outline by a numerical value or as a percentage of the height (usually 1% - 5%). (If three outlines aren't enough, you can always add a Stroke.) This new tool adds a persistent outline option, which means that no matter what else you do to change the path of a vector graphic, your outline remains updated, automatically. A great time-saver!

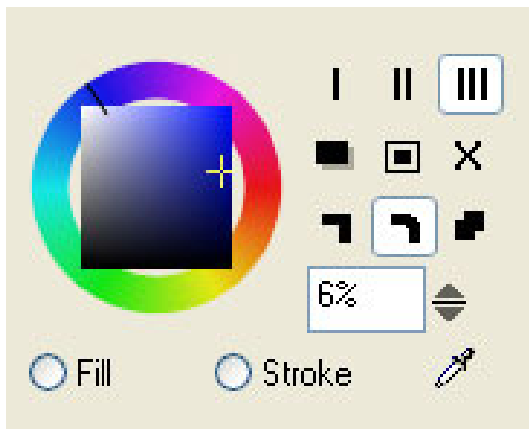
Dynamic Outline automatically welds, along with the text if it is Paragraph Text. If you want the dynamically created outlines to be detached from the original object, then you can do this with the Detach command found in the Arrange Menu. When you select Dynamic Outline from the Effects Menu, the property bar will give you 1st, 2nd, and 3rd outline options, where you enter the amount and select the color of each outline.





If the outlines overlap, they will automatically be welded: Now we're going to stay with this idea, and add another element, which is to have the Glow on an image. To make this look realistic, we'll manage the opacity so that the background image shows through.

Now there is another way to create your outlines that is even easier and faster, and that is in the Color Tab on the right of the screen. This has been updated to include the main outlining capabilities.



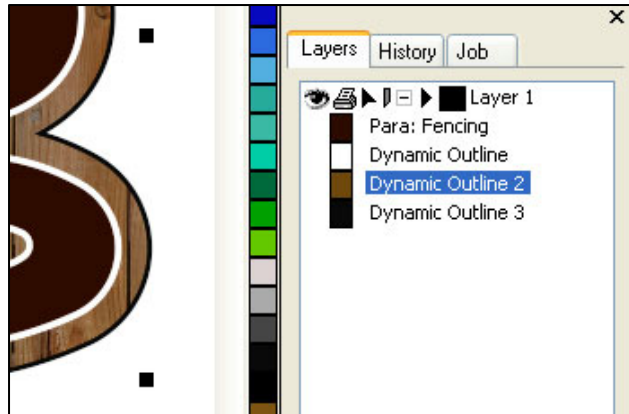
The top three icons here represent the 1st, 2nd, and 3rd outlines. When you have one selected, you may enter the value in the box (6% in this example). The mouse wheel can be used to change the value or the arrows can be clicked up or down.

The middle icon in the second row will create an outline with a gap between the first and third outlines. The icon on the right of the second row deletes whichever outline is selected. There will be more discussion later about the new Color Tab. Now we can start to look at ways of combining Dynamic Outline with some of the previous Effects we've looked at, namely Image Fills, Bevel, and Auto Weld, as well as some old favorites, such as Soft Shadow, Blends, Transparency, and Feather. As you become more familiar with each of these, and how to combine them, the design power of Sign Wizard 7 starts to come through.

The first example here is placing an image Fill into one of the outlines.



Since the outlines are dynamically created and updated, they aren't selectable like ordinary objects. In order to achieve an effect like this, you have to select the appropriate outline in the Layers Tab, and then apply the Image Fill.



The next step with this design might be to add a Bevel to the outline or to the text.



That really makes the letters pop. Just for fun we can also add a slight Blend to the lettering.



Oh no, the client called and wants the sign to read “Fences” instead, with Souvenir Medium as the font, and more spacing between the letters. Each change is one simple step. And if you do want to adjust the outlines, bevel, or blends, you can just open that tool again and make the appropriate changes.

The word "Fences" is displayed in a decorative font. The letters are filled with a wood-grain texture and have a thick, dark brown outline. The font is a serif style, and the letters are spaced out. The overall appearance is that of a wooden sign with a beveled edge and a soft shadow.

Here’s an example of an outline font, with an Image Fill, Bevel, an additional Outline, and then a Soft Shadow.

The word "STATE" is displayed in a decorative font. The letters are filled with a bright orange and yellow gradient, resembling a flame or a metallic finish. The font is a bold, blocky serif style. The letters have a thick, dark orange outline and a soft shadow effect. The overall appearance is that of a glowing, metallic sign.

With an outline font, the Soft Shadow will be seen inside the letters. It would be easy to create this same design with the letters a solid color and the shadow only on the outside of the letters.

The final item to note with Dynamic Outline is that if you want to vector edit one of the outlines, you must first detach the dynamic outline from the text or graphic. That means that any changes you make to the original item will not be reflected in the outline from that point forward. A good example of this would be if you wanted to create a large contour outline of a line of text. You might start with this:



But you want the contour lines to be cleaner, straight across. So select the text and go to Detach from the Arrange Menu. Select the black outline and quickly vector edit to get this:



At first glance, you may prefer the original, but this might be an intermediate step to this kind of design:



We have been focusing almost exclusively so far on text, to get you used to the new Paragraph Text. But of course Dynamic Outline, as well as the other Effects we've covered so far, will also work with graphics.

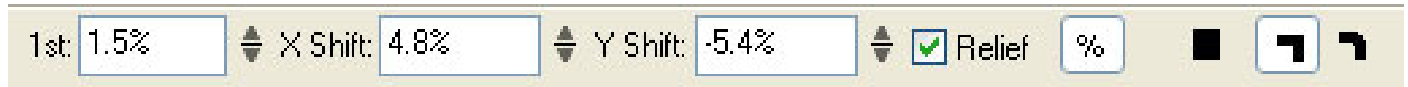
Dynamic Shadow

Grand, Pro

Very similar to Dynamic Outline, there is also Dynamic Shadow, which will automatically be updated to reflect any changes you have made to the original text or graphic.

Most of the Effects we've talked about so far can be done in any order, which is the concept of non-linear design. However, if you want to use Dynamic Outline and Dynamic Shadow together, it is best to add the outline first and the shadow second.

When you select Dynamic Shadow for a line of text, this property bar is displayed at the top of the screen:



Shadow

The value for 1st refers to either an outline or a gap if you have Relief checked, as in this example. The X Shift and Y Shift indicate the position of the shadow. The small black square towards the right is the color of the shadow, and the last two icons indicate how the corners are drawn, squared off or rounded.

When you are in the Shadow tool, you can move the shadow around to position it as you see fit, and the X and Y Shift values will update. This is all consistent with how Shadow has worked in the past.

What's new with Shadow is the dynamic persistence of the values as you change the original object, as well as the ability to be combined with other effects as we've shown in the many examples so far.

Here's the same example with the text welded, and an outline with Relief unchecked. If you've been reading this guide from the beginning, you know that at this point you can change the copy, change the font, and change the letter spacing with the shadow remaining consistent.

The word "Shadow" is rendered in a yellow, cursive font. Each letter has a thick black outline and a soft, grey shadow cast to the right and slightly downwards, giving it a three-dimensional appearance.

Note: Dynamic Shadow *does not work* with Extruded Shadow, Perspective Shadow, or Cast Shadow. Soft Shadow, while listed as a different Effect, is also dynamic, but it is not new for version 7.

Shadow can be an important feature for giving a printed design depth, especially when working with other features like Bevel and Outline.

This image is identical to the one above, showing the word "Shadow" in a yellow, cursive font with a black outline and a soft shadow effect.

As mentioned above, if you are going to use both Dynamic Outline and Dynamic Shadow together, which is a great idea, do the outline first and then add the shadow:



That's a lot of outlines, but it shows a couple important things. First, the shadow will be applied to the outside outline. Second, if in the Dynamic Shadow Effect you add an outline that goes around the outside as well, with the same color as the shadow itself.

Another idea for Shadow that you may incorporate into your designs is to add Transparency to the shadow if you have text or graphics on top of an image. This example also Feathered the shadow (Soft Shadow could also be used to get the same effect).



Glow

Pro

Glow is another new Effect that will create more depth and separation with your printed designs. Somewhat similar to Soft Shadow, Glow radiates out in all directions, and falls off softly to create a nice lighting effect. You can create this “backlight” look with just a few clicks, and there are some more advanced techniques that we’ll look at as well.

The basic effect is best seen with a light colored glow on a darker colored background. This is not a shadow; it is a light that is spilling onto a surface. Think of a neon or LED channel letter open in the back.



The options in the toolbar are Opacity, Softness, and Thickness, and you can choose a color for the glow. If we crank up the Softness and the Thickness, we get this:



Glow can also be used in a slightly different way to really enhance the effect. Here's text with an outline the same color as the glow (colors reversed from the previous example).



Now if we Feather the outline, it creates this, which is kind of a double glow.



Why stop there? Here's a triple outline Feather/Glow with multiple colors.



Since this was starting to get tight, we increased the letter spacing a bit.

Now we are going to stay with this idea and add another element, which is to have the glow on an image. To make this look realistic, we'll manage the opacity so that the background image shows through.



This design includes several concepts that we've covered so far, including Bevel, Outline, Feather, Blend, and Glow. Here's one final idea – a double glow, inside and outside the letters.



Effects Library

Pro

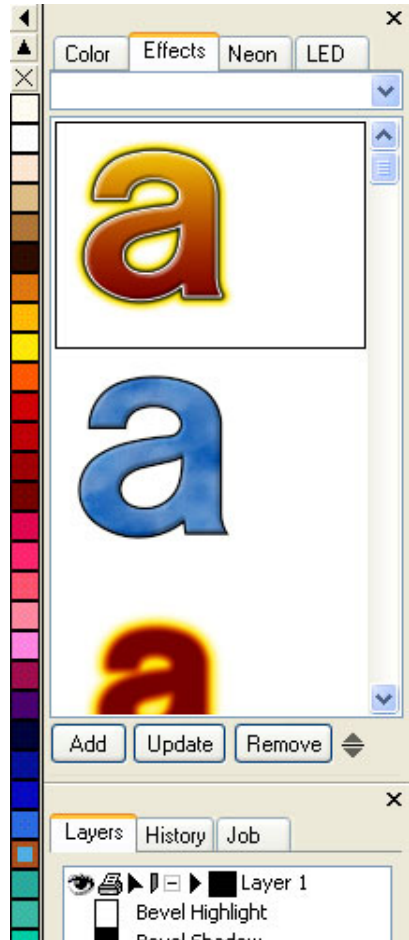
So now you can do all these cool effects, combining them in interesting ways, experimenting with new ideas. Wouldn't it be great if you could save these and use them later on future designs? Not save them in layouts, but save them right in the software so that they are always available? Now you can with the Effects Library. This is one of the most powerful new features, not to mention a huge time saver!

The Effects Library will save the following:

- Dynamic Outline
- Dynamic Shadow
- Image Fill
- Bevel
- Soft Shadow
- Feather
- Gradient
- Transparency
- Stroke

It will not save the font or the actual text used.

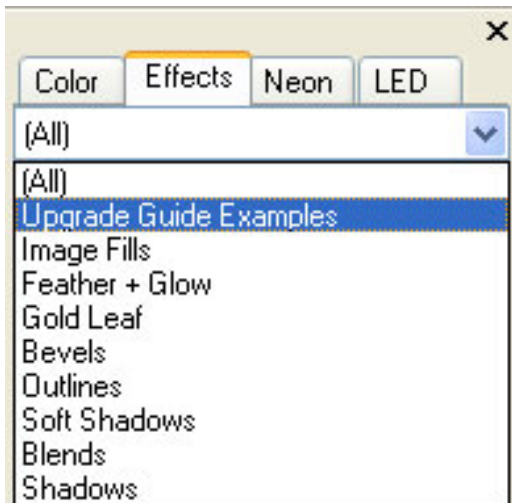
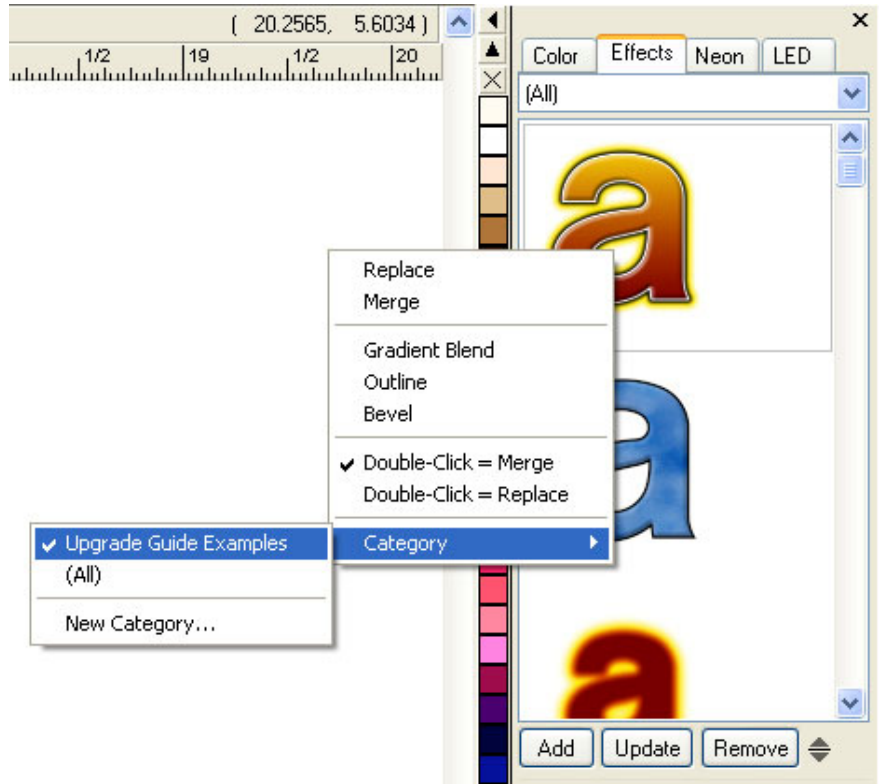
Let's say that you love that first "Jazz" example and want to use it again. All you have to do is select the text, go to the Effects Tab on the right side, and click Add. The basic properties of the effects will be saved, and displayed in the list with an "a."



When you are ready to apply one of the saved Effects to a line of text or object, just select the object and then double click on the "a" that you want. It's that simple. If your selected object has some Effects already applied to it, then you have the option to Replace or Merge when you add the saved effects. Replace will completely replace any effects already on the object, whereas Merge will only add any saved effects not present in the object, but not replace any that are present.

For example, if your selected object has a Dynamic Shadow already, and your saved preset has both Gradient and Dynamic Shadow, then the Gradient will be added but the Shadow will not.

Since you can probably imagine this list of saved Effects getting pretty large, there is a way to name and categorize them. If you right click over one of the presets, a menu comes up. At the bottom, it says Category, and if you move the mouse over that, another menu pops up allowing you to place the preset into an existing category or make a new one.



Something else you'll notice in this menu is that each preset will show the Effects that are included, and if you put the mouse over one of those and click, then just that Effect will be added to your object.

Have fun! This is a great way to impress your clients with your design capabilities

Brush, Clone Stamp, Background Eraser

Pro for Clone and Eraser, Grand for Brush

Now we are going to change gears a bit and focus on some tools for editing bitmap images. These are largely raster-based tools, as opposed to the primarily vector-based tools that we've discussed so far. Sign Wizard 7 includes design features that integrate both types of files, giving you the best of both worlds. These three tools have been batched into the same section here because they are similar enough to describe together, and we can use one example to show them all. Each provides a way to add or subtract pixels in a bitmap, with options for Size, Opacity, and Hardness.

The Brush Tool provides a way to paint color onto an image using your mouse. It includes several settings to fine tune how the brush effect looks, including the Size of the brush, the Opacity, the Flow, the Hardness, and of course, the Color. To use the Brush Tool, first select a bitmap and then click on the brush icon in the Bitmap Editing Toolbar:



This will bring up these options:



The first thing to do is just get a feel for how the Brush Tool works with the various settings:

Size – the size of the brush in pixels. Obviously this relates to the size of the image in pixels, and how fine or large you want the brush strokes.

Opacity – determines how much coverage the brush stroke will provide over the background. A higher opacity value will paint over the background more thoroughly (100% opacity will completely replace the background with the selected brush color), and a lower opacity will have a much lesser effect (0% opacity won't do anything!).

Flow – determines how fast the brush “lays down the ink.” This is different from Opacity in that you can go back and forth over the same area and add more coverage with Flow.

Hardness – refers to the hardness or softness of the brush edge. A high value will give a harder edge to the brush, while a lower value will give a very soft brush.

Here is our example image for this section, a beautiful tile mosaic welcoming tourists to Catalina Island.



The first thing we'll do with Brush is add some red color to the bricks. To choose the color for the brush, go to the Color Tab and select a medium-dark red color.

By using a lower Opacity, 10% in this case, you can paint on the color without losing the texture of the bricks. If you use a higher Opacity in this case, you will just have red, without the brick texture.

Note that Opacity will be consistent as long as you hold down the mouse button. If you release and start again, you will be adding another 10%.

Now let's say that you want to change another color, but you want that color to come from the image directly. Just click on the Color Sampling Tool from the Color tab and click on the color you want in the image. Now you can paint with that color, as in the green sail, sampled from the palm trees.

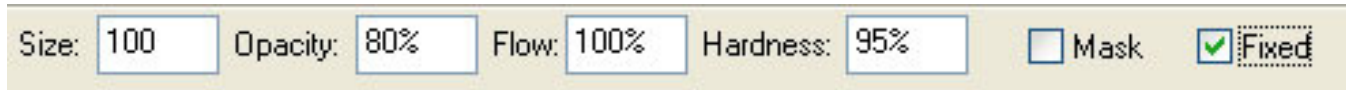


The last task with Brush is to remove the “sightseeing” text from the background, as it takes away from the main sign. In this case, we want the brush to have 100% Opacity to completely cover up that text, and we want to sample the color so that it looks natural. We can use a softer brush, maybe 50% Hardness to make it nice and smooth.

OK, pretty simple so far. The Brush Tool can be used in all kinds of ways to tidy up your images.



The next tool we'll look at is the Clone Stamp Tool, which is similar to the Brush except that you are choosing an area within the image that will be cloned to a new location. You can use this tool like a brush, where you move across the image, or like a rubber stamp for just one spot.



To use the tool, first you select the area that you want to clone from (the “source”) by holding down ALT while you click the mouse. Then you move the mouse to the spot that you want to clone to (the “destination”), and click or click and hold as you move the mouse. In the normal mode, the source position will move in relation to the movement of the mouse. However, if you check the Fixed box, the source position will remain consistent as you move the mouse. This can be very useful if you are trying to make a consistent background, or are cloning some kind of texture or grain.



So there are a couple spots in this image where you could use the Clone Stamp. If you were fixing up this image to show clients as one of your installations, you might want to get rid of the chain at the bottom and/or remove some of the distracting elements in the upper right behind the sign.



Clone Stamp has the same options of Size, Opacity, Flow, and Hardness. For these examples, an Opacity and Hardness of 100% were used. If you are using the Clone Stamp to do more blending instead of this kind of “removal,” then you would want to use lower Opacity and Hardness settings.

Now let's say that you decide to place this sign on a different background. You want to show the client how great it would look somewhere else so that they buy another one from you.

So first let's remove those lights on the top, which are also a distraction from the beauty of the sign. This will also involve a bit more of the Clone Stamp Tool, since the light covers part of the top of the sign, but mainly we are going to use the Eraser Tool, the third of the tools in this section

By erasing the background, we can then place this sign somewhere else in Catalina. The Eraser Tool has Size, Flow, and Hardness, but also two additional settings: Tolerance and Feather, which we'll discuss in a minute.



For large areas of the background, we can use a large eraser, but we have to make it smaller and be more precise when we get to the edges. Your first pass might look like this, done with a huge 500 pixel eraser.



Then you would zoom in tighter and use a smaller eraser to get the final selection of just the sign. You should also use maybe 80% hardness so that you don't have too hard of an edge for blending into the new background. On the right here is the final cut-out of the sign.

There is another way to do this, one that can be much faster and more automatic, although it very much depends on the image characteristics. Remember from the toolbar, there are options for Tolerance and Feather. These are used in the Limited Knockout and Unlimited Knockout options for erasing pixels. This somewhat-automatic approach will erase all pixels that are close to the original color of what is selected in the image. Tolerance will determine how this works – a low value will only erase pixels that are very similar in color, while a high tolerance will delete pixels that have more color variation.

Limited Knockout (CTRL+Click) requires that the pixels be “neighbors” while Unlimited Knockout (SHIFT+CTRL+Click) will erase all pixels in the whole image that are similar in color.



So going back to the original image, we can use Limited Knockout on the background.

This requires CTRL+Click on each color range that you want to delete. Not bad, but in this case it is probably faster to use the manual tools.

Using the Unlimited Knockout on the bricks did much better, but it had an unintended side-effect of erasing some red pixels inside of the sign. So it might be better to use Limited Knockout and then do a final cleanup with the manual eraser.

You can see that if you have an image with cleaner edges and spot colors, the Knockout approach would be ideal.



For the final design here, we brought in the background image and then put a Soft Shadow on the sign to make it look consistent.



One thing to note here – the Eraser Tool will make the background transparent, so that this kind of compositing is possible. If instead you used the Brush Tool to paint white around the outside of this sign, that white would cover up this wall and bougainvillea.

Before we finish this section, here's a very practical way to use the eraser tool to wow your clients. A client comes to you and asks you to work up a design to replace their current sign, which he happens to have a digital picture of with him. So you import the picture, and using the Clone Tool, you erase the current lettering on the background. Very quickly, using Paragraph Text and the Effects Library, you work up a design with him watching.



Then you place the new design on the bottom of the old sign, and start erasing the old sign to reveal the new one below. The client says Wow and you get the job.



So there you have the Brush Tool, the Clone Stamp Tool, and the Eraser Tool – bitmap editing tools that have many uses. One final note on the use of these tools: you must have a bitmap object selected for them to work. If you have a vector-based object, you must first rasterize it (by converting it to a raster object) in order to use these tools. Remember that once you rasterize a vector-based object, it loses those vector qualities, such as being able to change a font.

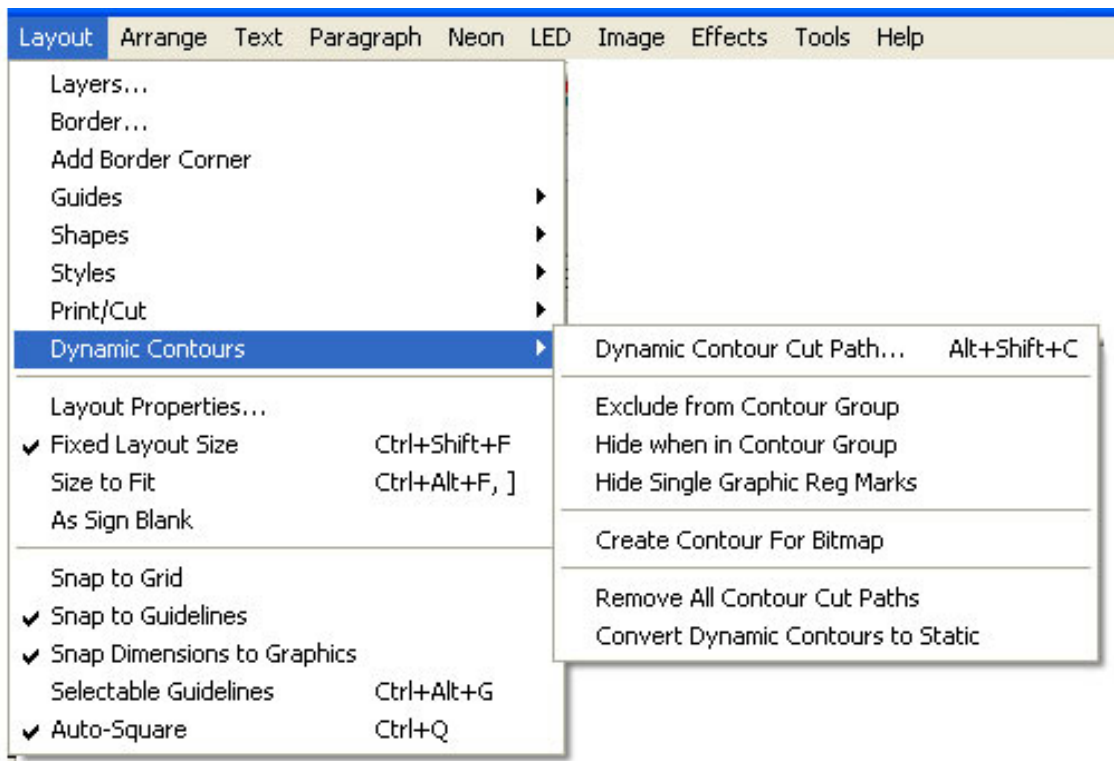
You can work with bitmap and vector objects together within the same design, and in fact, many of the techniques that we've described in this guide contain both bitmap and vector elements, such as an Image Fill inside of a Paragraph Text object. Be aware of what kind of objects you are working with so that you know what kind of actions you can perform on them.

Dynamic Contour Cut Path

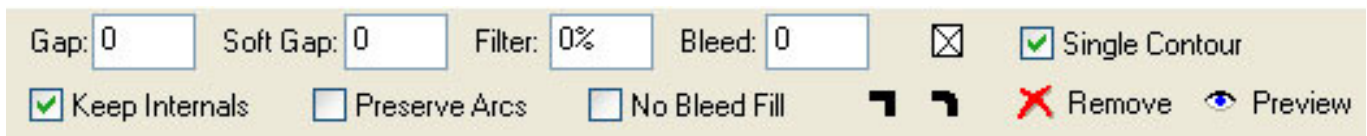
Pro

In order to produce these printed signs and graphics that have both vector and bitmap elements to them, you'll need to print and cut, ideally on the same machine. The Contour Cut Path is the last step, essentially an outline cut around the printed design. This new Dynamic feature will keep this cut path updated as you make changes to the design, along the lines of the other dynamic features we've talked about in this guide.

In addition, the Dynamic Contour Cut Path will also handle groups of objects, updating the path around the outside of the group, or essentially welding the paths of multiple individual objects that are grouped. When you want to add a Dynamic Contour Cut Path, select the object and then go to the Layout Menu → Dynamic Contours.



You will then see this toolbar at the top of the screen.



The main setting in the property bar is Gap, the amount of space that you want from the edge of your object to the contour cut path. This number can be negative, in which case it cuts into the object like an Inline, it can be zero, in which case it cuts right on the path, or it can be positive, in which case there is a gap, or a space, between the edge of the object and the contour cut path. This is an absolute number, not a percentage.

The contour cut path is shown as a dotted line, so that you don't get it confused with an Outline or Stroke. Here is a contour cut path on 5" letters with a .10" gap.



If we now add an Outline to this text, the contour cut path will adjust dynamically and weld:



We've been through this several times by now...this will update with any changes that you make to this text.

The Soft Gap setting is used when you have added a “soft” effect, such as Soft Shadow, Feather, or Glow to your text or graphic. This will give you a little extra room for that soft effect to blend to the background color. This example was taken from the Effects Library, and it has a Glow. The Soft Gap is set at .05” on top of the original .10” Gap.



Now let’s say that you want to add another element to this design, and do a contour cut around the new design. So the new text is “CUT” and it is going to be placed behind the “Contour” text. All you have to do is add the Dynamic Contour Cut to the new text, in this case the same .10” amount and then make a group of the two lines of text. The contour cut paths will weld, and if you look closely, you’ll see that the original text with the Glow will have the extra Soft Gap, but not the new text.





In many cases with a contour cut, you want to remove the internals so that you have just one outline cut. Just uncheck the box that says Keep Internals in the property bar. Now the paths inside the “o” and between the “n” and “t” are removed.

Finally here we add an image in the background that we added to the group. Dynamic Contour Cut will work with images that have regular borders, such as rectangles and squares. For images with irregular borders, please see the next section.



Create Contour Cut Paths from Bitmap

Pro

This feature will create a contour cut path around an irregular shaped bitmap. It is not designed for rectangular shaped images, which is easily covered with the Dynamic Contour Cut Path described above. Perhaps the image has been cut out, imported as a bitmap with transparency around the outside, rasterized from a vector image, etc.

Create Contour For Bitmap makes it a snap to create a special contour cut path for a bitmap that has knock out or transparent areas. It automates the vectorizing process and creates a contour cut path, all in one simple step. In this example, we selected the left hand bitmap and choose the Create Contour for Bitmap command in the Layout, Dynamic Contours menu. After a few seconds we had what you see on the right side: the original bitmap along with a new contour cut path that hugs the edge of the transparent bitmap. Since the contour cut path is a vector graphic, you can easily expand or contract the contour as required, using the Dynamic Contour Cut tool.

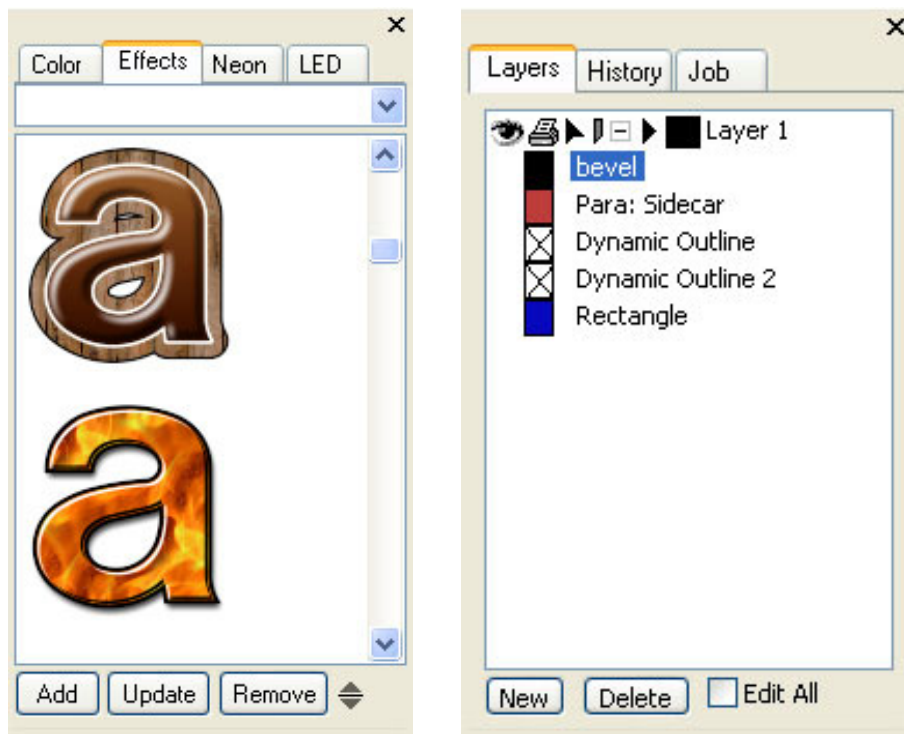


Multiple Panes in the Sidebar

All Levels

The sidebar on the right side of the layout window has been expanded and now has upper and lower sections to accommodate some of the new capabilities in Sign Wizard 7.

The top section includes Color, Effects, Neon, and LED, while the bottom section has Layers, History, and Job.

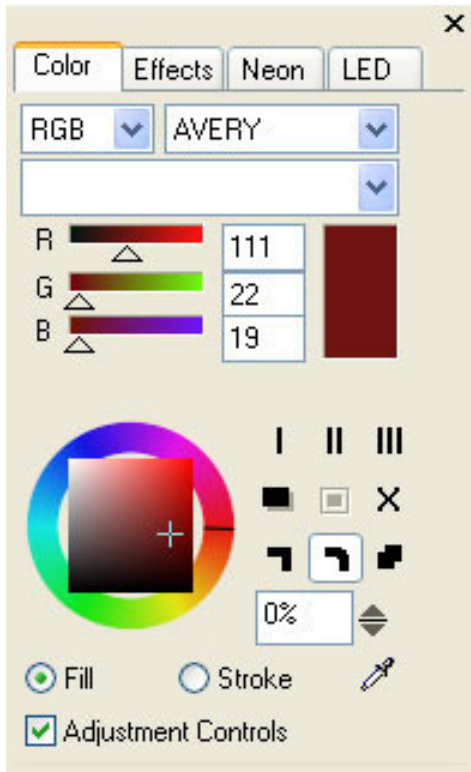


The Color Tab will be discussed in more detail in the next section. We covered the Effects Tab previously in this guide as part of the Effects Library. The Neon and LED tabs provide summary information on your neon tubes and LED units for job estimation, materials usage, etc.

The Layers Tab lets you keep track of your layers, and sometimes is the best way to select a layer, especially those that are dynamically created. The History tab shows you a step-by-step history of your actions on a design and lets you go backwards in a multiple-Undo action in one step. Finally, the Job Tab provides a summary of the information entered in the Job Manager, or can be used to enter the basics of a job.

Color Tab Improvements

All Levels (Dynamic Outline/Shadow controls disabled if those features are not available)



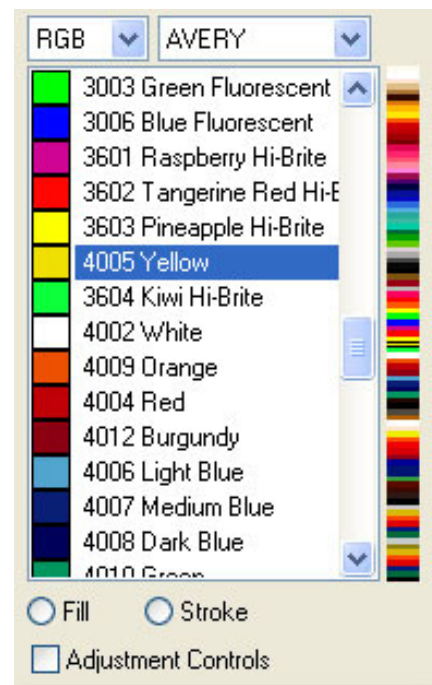
The Color Tab has had some work done on it for this release, some of which was discussed previously. As the tab that is most frequently displayed, we added the ability to create and edit Dynamic Outlines and Shadows

You can choose which color mode you want to work in, either RGB, HSV, or CMYK (Process or Spot), as well as which vinyl manufacturer's color palette you want to use.

Colors can be chosen from the list, they can be entered numerically, they can be chosen from the color wheel picker, or you can choose a color straight from the layout with the Color Picker tool.

As you recall from the sections on outline and shadow, you can set the first, second, and third outlines, as well as a shadow, right here in the Color Tab. The input box will enable you to enter a percentage, and you can also use the color wheel or the little arrows to change the amount. The "X" will remove the outline or shadow that is selected.

Most of the time the color will be applied as a Fill, but you can also select Stroke to apply the color to a stroke. If you uncheck Adjustment Controls, the Color Tab will show the full color palette, as shown here.



Layers Tab Improvements

All Levels

The Layers Tab is used to control elements of your design in a tree format and not graphically. This has been enhanced to give you more options.

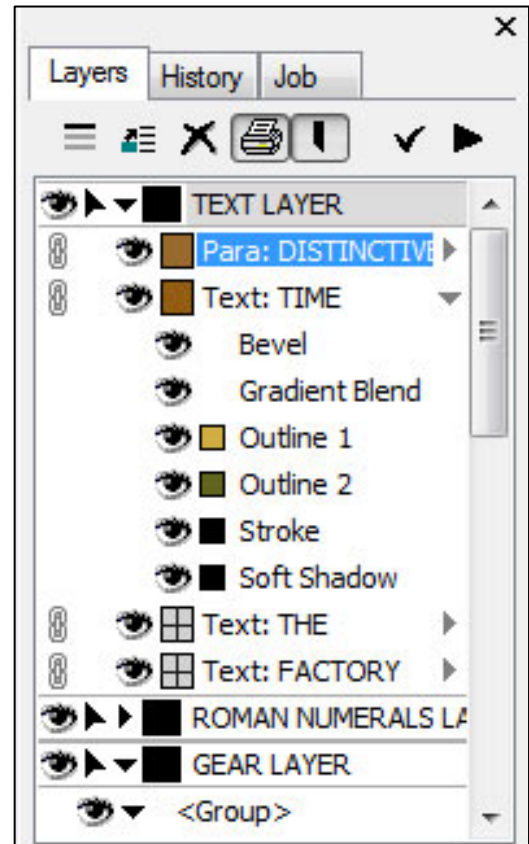
In the Layers Tab you can now see groups as nested elements and hide or show layers, groups, graphics and even individual properties of a graphic, such as Soft Shadow, Dynamic Outlines, etc.

The eye icon is used to show or hide element, and every item in the list has the eye option.

Some of the layer specific options have been moved up to the toolbar above the list. Here is where you can create a new layer, move objects to a new layer or an existing layer, delete a layer, mark a layer as printable and cuttable, and more.

Special properties of an object will now be listed below the object. These include the following:

- Bevel
- Clipping Path
- Contour Cut Path
- Dynamic Outline
- Dynamic Shadow
- Feather
- Glow
- Gradient Blend
- Image Fill
- Photomask
- Soft Shadow
- Stroke
- Transparency
- Wavy Baseline (Paragraph Text)



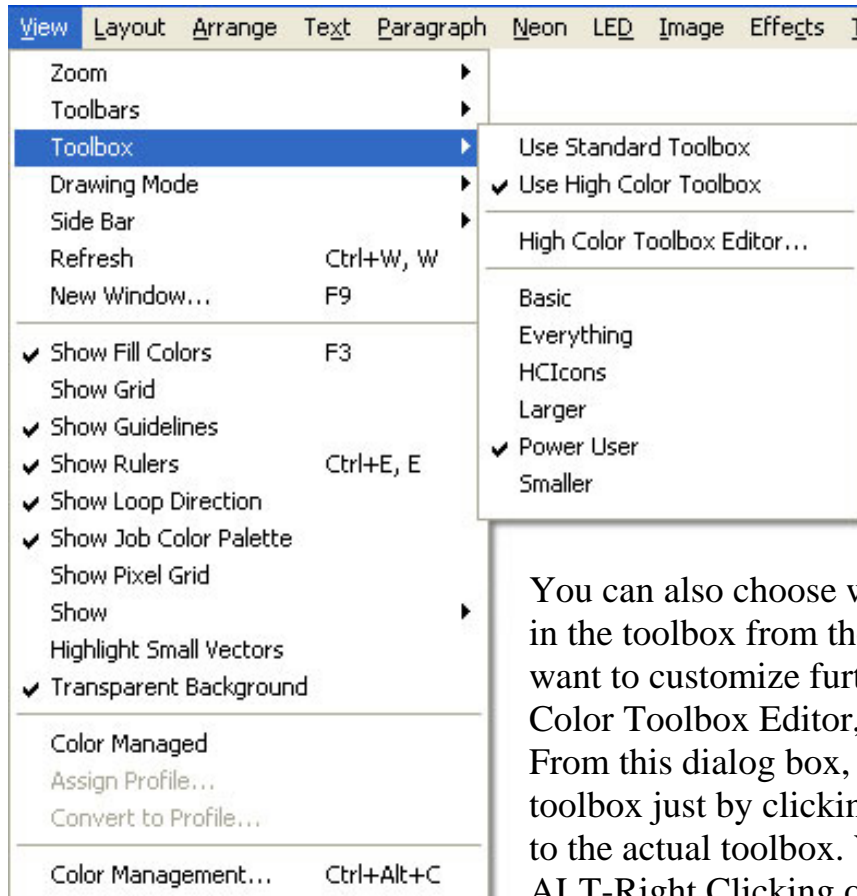
Highly Customizable High Color Toolbox and Editor

All Levels

This is the last topic to be included in this guide, and it is for those of you who really want to customize the Sign Wizard 7 icons - which ones are displayed, how they're organized, their size, even what they look like.

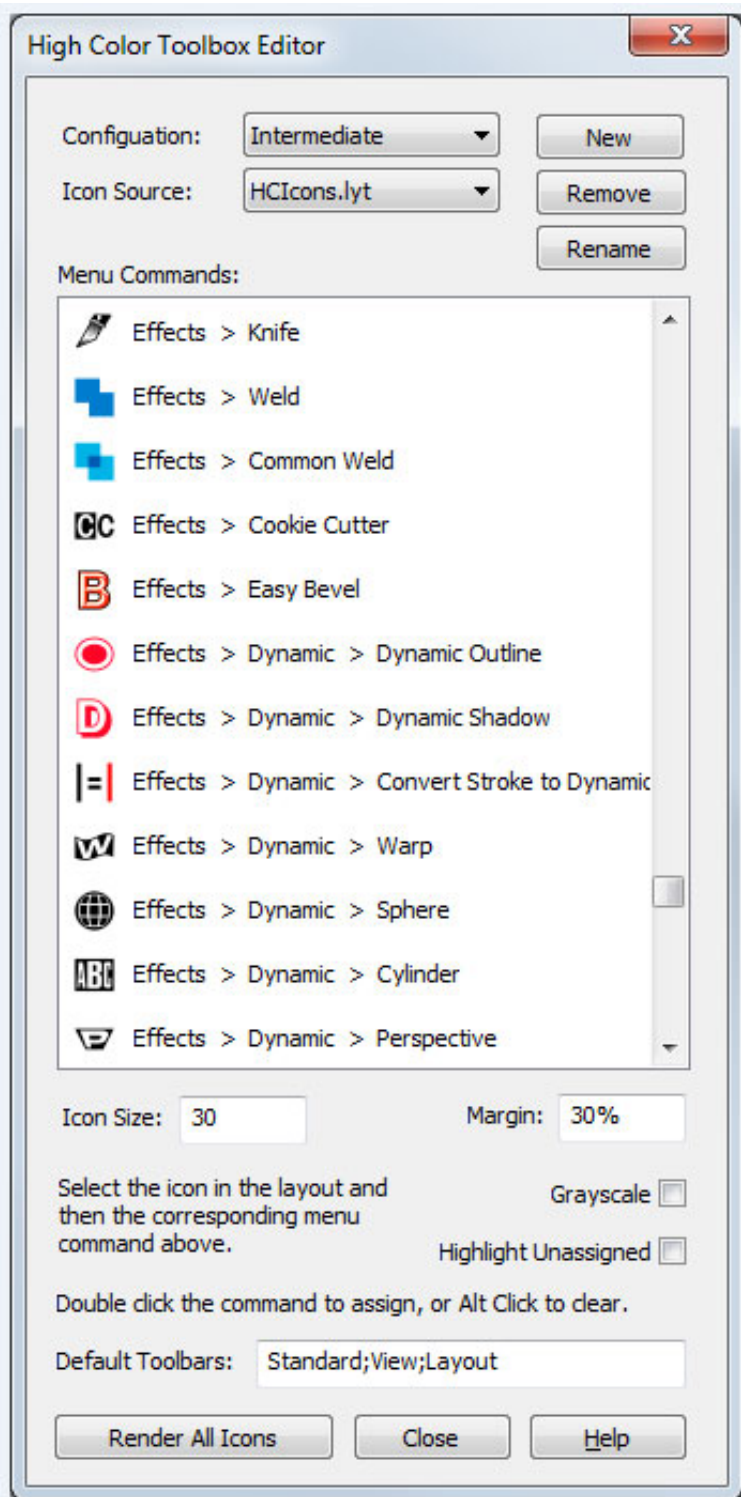
If you use the software every day to run your business, it is worth it to take a few minutes to customize the toolbox with the tasks that you frequently perform. It is equally as productive, if not more so, to learn the shortcut keys for your favorite tasks as well!

To see a listing of some pre-set collections of icons, select Toolbox from the View Menu.



The new High Color Toolbox provides icons that are larger and have more colors and detail. If you have a larger, high resolution screen, then you should try the high color toolbox.

You can also choose which set of icons you'd like in the toolbox from the presets listed above. If you want to customize further, then open the High Color Toolbox Editor, shown on the next page. From this dialog box, you can add icons to the toolbox just by clicking and dragging them across to the actual toolbox. You can remove icons by ALT-Right Clicking on the icon in the actual toolbox.



In this editor, you can also change the size of the icons to suit how you want the screen to be laid out. To do this, use the Icon Size box. Smaller icons might be a value of 20, larger ones a value of 40. These new icons are all vector objects, so they can be scaled to whatever size looks best to you. Click on the Render All Icons to change the size, and it only takes a couple seconds.

When you open the High Color Toolbox Editor, an LYT file is also opened that contains the actual icons. When you click on one of the icons in the layout, it will highlight that icon in the dialog box in the large list of Menu Commands. If a menu command does not have an icon, then you can create one yourself! If you don't like one that we've made, you can change it.

To make a new icon, just design it as you would anything else in Sign Wizard, and then select it. Go back to the High Color Toolbox Editor and double click on the Menu Command that you want that icon to represent. Now click on Render All Icons and that's it. Try this once and you'll see how easy it is. Pretty soon you'll be making all kinds of icons.

Glossary

Bevel – The ability to create a bevel effect with fonts and logos, resulting in a three dimensional look.

Clone tool – Used in bitmap editing to copy a color or pattern from one area of the bitmap to another

Connecting Script Font – Several of the fonts available in Sign Wizard that are designed to allow the lower case characters to be connected for creating a cursive style.

DPI or Dots Per Inch - DPI refers to how many dots or pixels there are per linear inch in a raster or bitmap image. The more dots there are, the more detailed the image, but also the more disk space it takes and the longer it will take to process for the printer.

Dynamic Effect - Effects such as Outline that are automatically recreated when the underlying vector path changes, for example, when changing the font.

Effect – A general term that includes bevels, shadows, fill patterns, inlines, outlines, blends, etc.

Feather – Soften the edge of a bitmap or graphic.

Full scale – This means the horizontal and vertical rulers in the software represent the full size – for example a sign on a storefront.

Glow – The effect similar to backlighting channel letters.

Gradient – Continuously variable fill color.

Icon – A graphic representation commonly used in software to initiate an operation.

Image fills and tiling – When you fill an area with an image fill, the pattern will automatically be repeated horizontally and/or vertically if the area to be filled is larger than the size of the original pattern.

Inlining – Used to make the stroke width of a font or logo narrower.

Kerning – Kerning is the process of adjusting the spacing between individual letters in a design. Sign Wizard provides much finer and easier kerning than most other graphic design software .

LYT file – Sign Wizard and Neon Wizard designs are saved using an LYT extension.

Non-Linear Design – Refers to the ability to change any element of a design without starting over – for example, correcting a spelling error or changing a font.

Opacity – Refers to adjustments that modify the lightness or darkness for the clone tool, the glow tool, soft shadow and transparency.

Outlining – Used to make the stroke width of a font thicker or to create one or more borders around letters or logos.

Presets – Previously configured settings.

Pixels – The very small colored dots that make up a bitmap image.

Raster or Bitmap images – These appear at a distance to be very similar to vector images, but when bitmaps are viewed very close they are small dots of different colors. Printers can print vector images or bitmap images, but pure vinyl cutters cannot deal with bitmap images. This type of graphic cannot be scaled up without loss of detail, but the expected viewing distance should always be considered when deciding on a DPI (dots per inch).

Raster Based Tools – Tools that are used to edit raster (bitmap) images as opposed to vector editing tools such as the vector editing and loop editing tools.

Rasterize – Converting a vector image to a raster (bitmap) image.

Scale – To scale (up or down) a graphic design element means to increase or decrease its size.

Soft Shadows – Shadows adjusted in sharpness and position to create a realistic three dimensional appearance.

Stroke Width – The width of the strokes for most fonts (letter styles) are not uniform with some varying a few percent and others varying by a factor of ten or more.

Tracking – Tracking is the process of changing the spacing a uniform amount between all the characters in a line or paragraph of text – easier and with finer adjustment than most other graphic design software.

Transparency – A special effect in which the design elements behind a graphic show through in varying amounts. This can be applied to be bitmap and vector graphics.

Vector images – Fonts, logos and other design elements made up of lines and curves (vectors) that are closed loops filled with colors. It is usually much easier to modify vector images than bitmap images.

Vector Path – Refers to the way scalable graphics are defined, in which lines, arcs and Bezier curves are used to define a shape that looks the same at any size. Contrast with Raster or Bitmap Image.

Vectorize – Converting a raster (bitmap) image to a vector image.

Welding – The process by which vector images are merged so that overlapping areas are eliminated and they will output to vinyl cutters without problems.