Using Cut-Only in ONYX CUT-Server

ONYX has a feature in CUT-Server, called Cut-Only. Cut-Only makes it easy to cut vinyl without the need for printed output.

Introduction

Cut-Only works by creating cut paths defined from a SVG file. CUT-Server is the only ONYX application that is needed. SVG files can be created from most vector based programs such as Adobe Illustrator, Corel and Inkscape. Steps in designing will differ based on the design application.

Important Terms and Definitions

SVG: An open standard file type that stands for Scalable Vector Graphics. It is a XML based file type containing vector graphics.

Vector: A graphic type that uses mathematical expressions to define points, curves and shapes. The benefit is the image can be enlarged without pixilation.

Designing with Adobe Illustrator, Corel, Inkscape, or Other Vector Programs

Every vector path in the final SVG file is a cut path. Paths are not defined by spot colors or object order. View the image in a wire frame mode to verify where the cut paths will be.

Designing for Cut-Only may require additional steps before the file can be exported as an SVG file.

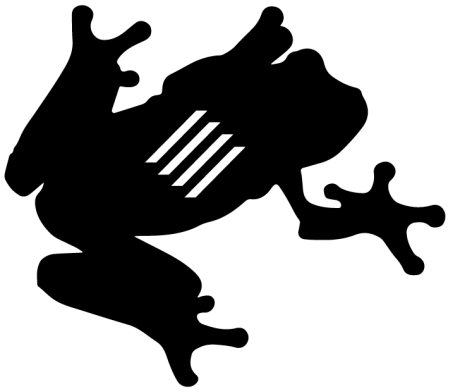

Figure 1: How a Cut-Only job looks in the design program.

Convert all fonts to outline. Fonts that remain as fonts may not be rendered correctly. Convert the fonts to outline before exporting out the SVG file. It is always good design practice to save the job as a native design file, before converting the fonts to outline.

Vector programs provide options that change the look of an object, but do not directly impact the path. This can include options such as rounding corners or grouping overlapping objects. When these options are used, additional steps are needed. The paths will need to be simplified, combined or expanded. This redefines the paths to follow the modified look of the object.

Do not use transparency or overprint. There is no need for transparency or overprint in a design for use with Cut-Only.

Do not use outline strokes, if it is not a part of the desired output. An outlined stroke results in two cut paths. There will be paths on each side of the stroke. The cut paths will follow the shape of the stroke and not the stroke's original path. In some cases when an object is expanded, strokes may get outlined. If that happens, remove the stroke before expanding the object.

In Adobe Illustrator shapes can be created as Compound Paths. Objects marked as Compound Paths can cause problems. Release the Compound Path and use the Shape Builder tool to remove the unwanted elements.

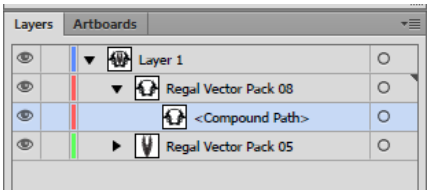

Figure 2: Compound Paths in Adobe Illustrator

For some applications there are multiple SVG file types. For example, in

Inkscape, there are Inkscape SVG and a Plain SVG file types. Use the Plain SVG file type. The Inkscape SVG file type does not work correctly in CUT-Server.

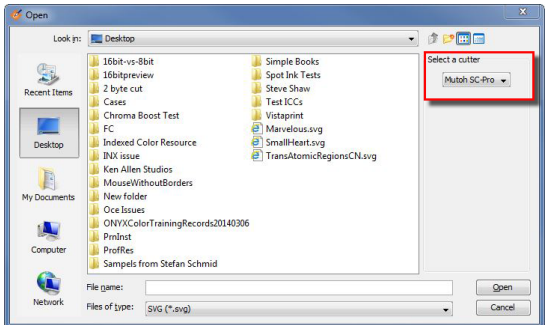

Figure 3: CUT-Server Open window

Bringing in the SVG into CUT-Server

In CUT-Server click the *Open* button. On the right side of the Open window is the option, *Select a Cutter*. Choose the SVG file, then select the cutter and click *Open*.

After the job has loaded it will appear on the left side of the screen. Click on the job on the left to review the cut paths.

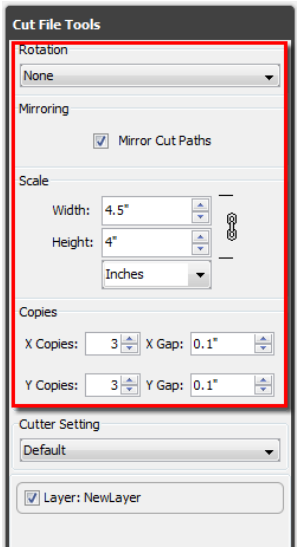

Figure 4: Cut-Only options in CUT-Server

On the right side of CUT-Server, there are options for rotating, mirroring, adding copies, copy gaps and cut job settings.

Cut-Only options will appear when a SVG file is loaded and highlighted in CUT-Server.

Rotation lists options in 90 degree increments. Because there is no mark detection needed for Cut-Only, all rotation options are available for all cutters.

Mirror Cut Paths takes the cut data and flips it around the vertical axis. Enable this option and the cut data becomes mirrored.

Scale allows the user to adjust the size of the of the cut job. Disproportionate scaling can be done by breaking the chain icon next to *Width* and *Height*. Scaling an image applies to all copies in the cut nest preview.

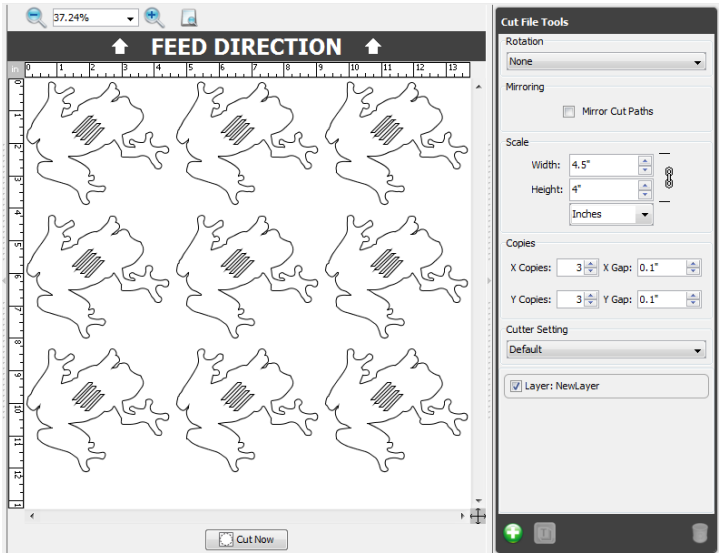

Figure 4: X and Y Copies set to 3 with 1/10th inch gap

The user has the ability to specify copies using *X Copies* and *Y Copies*. Next to Copies is the *X Gap* and *Y Gap*. This option increases the distance between each repeated copy.

Below Copies is Cutter Settings and Layers. The options available will vary based on what cutter is being used.

After configuring the Cut-Only job, click *Cut Now* to send the job to the plotter. The plotter will start to cut from its determined base point.