

What is Contour Nesting?

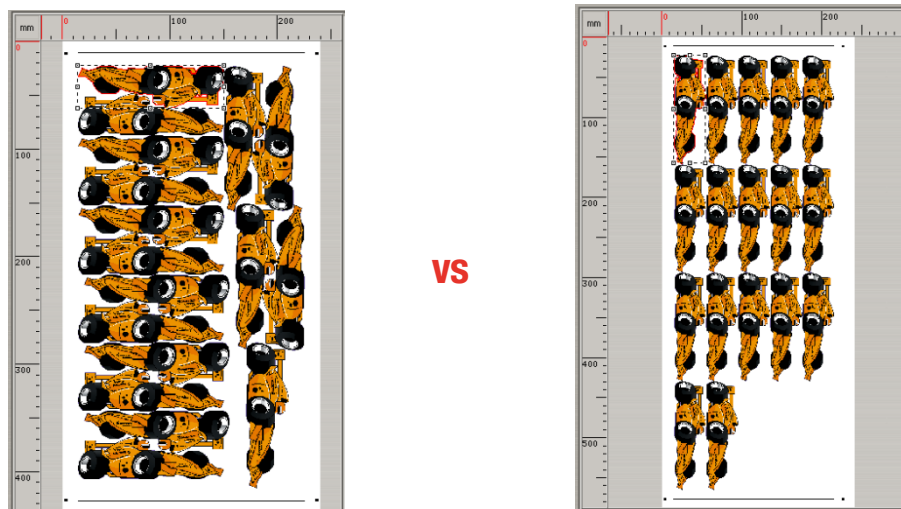
Contour Nesting is a new option of **Caldera's Visual and Grand** ranges. It is dedicated to cut and allows you to take into account the object's real shape inside the image so the element can be optimally placed to save media.

The purchase of a specific key is required to use this option.

How does it work?

An image is always created in a rectangle, even for PNG files without background or with transparent background. Using **Contour Nesting**, **Caldera** can now find the exterior cut contour and use it to redefine the image. This makes it possible to nest the images by taking into account their real shape and not place them as rectangular bricks. To make this nest, Caldera's algorithm tests, for every image, its available positions including margins, and selects the best combination of images to save media. The image rotation can be $\pm 90^\circ$ or 180° to search the best nesting layout possible.

Please note that median angles are not allowed as testing has shown the final benefit is less important than the loss of time caused by the tests made for these additional angles.



*With and without **Contour Nesting**; we note that with the option the roll size is 430mm against 580mm without. The gain is about 25% for this example.*

What is bleed area management?

Caldera does not print an images' background when they are nested with the **Contour Nesting** option but you can manage the bleed area by using the *Bleed* option. Bleed area is a standard printing option that adds pixels around the image contour to ensure that the cut will be done inside the printed area and will not go over the media and show a thin, white unprinted piece of media for example.

There are three bleed area methods that can be associated to **Contour Nesting**:

- Using the background: we use the document's background to fill the additional layer. If there is no background, nothing will be added or created.
- Pixel duplication from the image border: the color of the pixel located at the border of the image is used to fill the additional layer on the other side of the contour.



- Mirrored pixel duplication: a symmetry is applied using the contour as the axis of symmetry to fill the pixels of the additional layer. It is used with gradients like the image below to avoid visual breaks between the image and its bleed area. You can compare it with the second method that uses only one color to fill the layer.



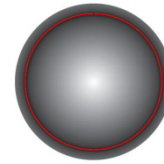
Original image



Using the background



Pixel duplication from the image border

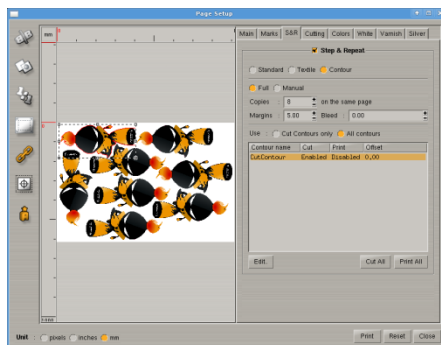


Mirrored pixel duplication

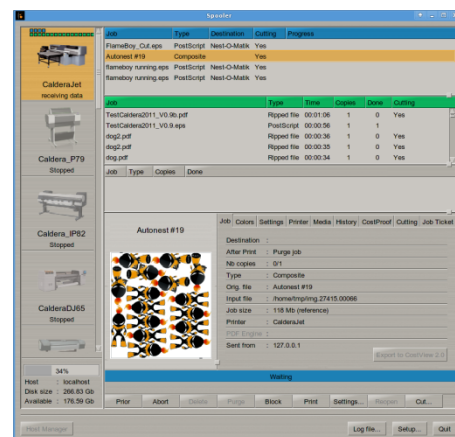
In Caldera version 9.20, only the first method, using the image background, is available. The two other methods will be deployed in future releases.

How to use Contour Nesting in Caldera?

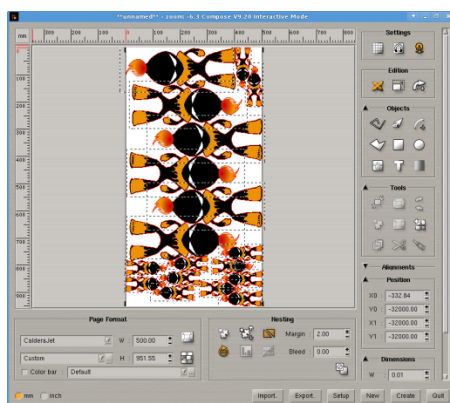
Contour Nesting is used in every situation where the regular **Nesting** is:



In the print module, you can use **Contour Nesting** instead the standard **Step&Repeat** to repeat your image and take into account its real shape.



You can use this option with **Nest-O-Matik** to nest several images: just activate **Contour** in the print module before the nest.



Finally, in **Compose**, you will find a new button that will automatically place your images according to their real shapes:



You can then create your composition or save it for later.