Vectorizing images

Welcome to CorelDRAW®, a comprehensive vector-based drawing and graphic-design program for the graphics professional.

In this tutorial, you will trace a bitmap image to convert it to a vector image. Bitmaps are composed of pixels; they are useful if you want to achieve a photographic quality image with complex color gradients or bitmap effects. Vector images, on the other hand, are composed of lines and curves, which are easy to manipulate as individual objects. In this project, you will vectorize a logo, converting it from a bitmap to a vector image, and then you will replace the text of the logo without affecting the rest of the image.

What you will learn

In this tutorial, you will learn how to

- import images
- trace bitmaps
- draw shapes
- ungroup objects
- delete objects
- type text on a path
- use the **Pick** tool
- use the **Ellipse** tool
- use the **Text** tool
- use the **Smart fill** tool
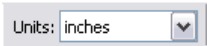- use the **Object manager** docker

Tracing the bitmap

First, you will import the bitmap into CorelDRAW. Then, you will trace the bitmap using the Corel® PowerTRACE feature.

When you use the PowerTRACE feature to trace a bitmap, you can preview and adjust the results. The PowerTRACE feature offers several preset styles. Each preset style is a collection of settings that are appropriate for the specific type of bitmap you want to trace (for example, line art or a high-quality photo image). In this case, you will use the Detailed Logo preset style, but you will make some adjustments to the preset style to achieve optimum results.

To import the bitmap

1   Click **File** menu ▸ **New** to create a new document.

2   On the property bar, make sure that the units of measurement are inches `Units: inches` .

3   In the **Paper width and height** boxes on the property bar, type **5"** for the width and **5"** for the height, and press **Enter**.

4   Click **File** menu ▸ **Import**.

5   Choose the folder **Program files\Corel\CorelDRAW Graphics Suite 13\Languages\EN\Tutorials\ Sample files**.

6   Choose the filename **logo.tif**.

7   Click **Import**.

8   Press **Enter** to center the graphic on the page.
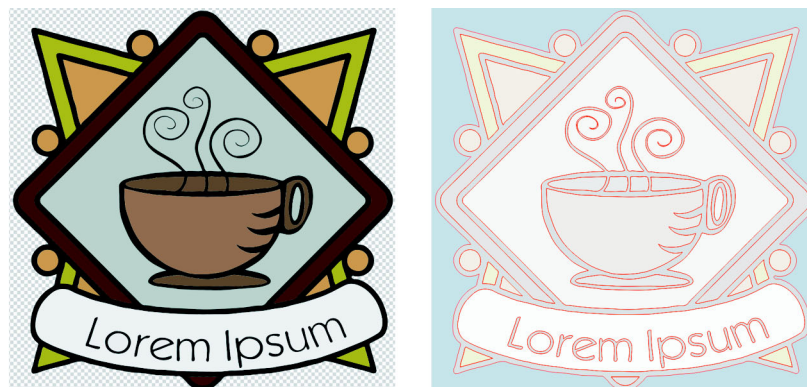
To trace the bitmap

1   Click **Bitmap** menu ▸ **Trace bitmap** ▸ **Detailed logo**.

2   Choose the following settings:
   - **Type of image**: **Detailed logo**
   - **Smoothing**: **25**
   - **Detail**: set at default
   - **Color mode**: **RGB**
   - **Delete original image**: checked
   - **Remove background**: checked
   - **Automatically choose color**: selected
   - **Remove color from entire image**: not checked

   The **Before and after** preview setting lets you view the original bitmap and the traced image side by side.

You can view the traced image in a larger window, or view the outline over the image by selecting **Large preview** or **Wireframe overlay** from the **Preview** drop-down list in the upper-left corner of the window. The image below shows the wireframe preview.

3 When you are done adjusting the settings, click **OK**.

Replacing the text

If you are not satisfied with the traced text, or if you want to change the text or its background, you can replace the text and the text background without affecting the rest of the image.

The traced logo is a group of individual objects. To edit them separately, you will first ungroup the objects that make up the logo. Then, you will delete the text and the text background objects, and replace them with new objects. To make the text slightly curved, you will create a path and type the text along the path.

To delete individual objects

1 Open the **Object manager** docker.

If the **Object manager** docker is open but hidden behind another docker, click the **Object manager** tab to display it. If the **Object manager** docker is not open, click **Window** menu ▶ **Dockers** ▶ **Object manager**.

2 Make sure the image is selected.

3 Click **Arrange** menu ▶ **Ungroup** to ungroup the objects.

The individual, ungrouped objects are displayed in the **Object manager** docker. All the objects are selected.

4 Click outside the image to deselect all the objects.

5 Marquee-select the text and the text background.

To marquee-select the objects, drag diagonally with the **Pick** tool to enclose the objects in a marquee box with a dotted outline.

6 Press the **Delete** key.

To create the text background

1 In the toolbox, click the **Smart fill** tool 🖌.

2 In the **Fill options** area on the property bar, choose a color from the **Fill color** picker �▾.

You will use this color for the new text background. In the example below, white was chosen for the new background.

3 Click in the image where the text background used to be to create a new background object.
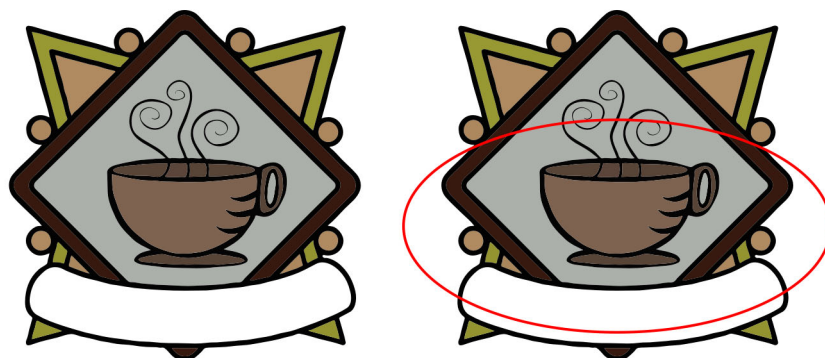
To create the text

1 In the toolbox, click the **Ellipse** tool 🔘.

2 Click and drag in the image to create an ellipse, as shown below.

In the example below, the ellipse is colored red for illustration purposes. The ellipse color is black by default.

3 If you want to adjust the size of the ellipse, drag one of the square selection handles.

4 If you want to adjust the position of the ellipse, click the **Pick** tool 🔲 in the toolbox, and drag the ellipse to a new position.

5 In the toolbox, click the **Text** tool 🅰.

6 Point to the outside edge of the ellipse. When the pointer changes to the letter A with a curve below it 🅰, click and type the text you want.

You can type new text for the logo, or retype the old text. In this example, the same text was used.
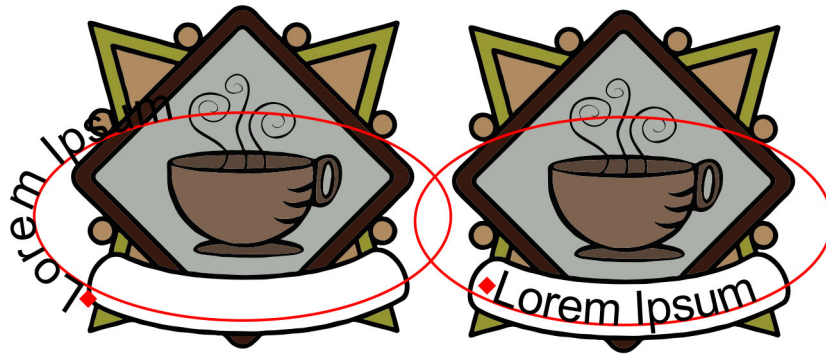
7 Click the **Pick** tool.

The text is now selected as an object. A red diamond appears at the beginning of the text; it controls the position of the text along the path.

8 Choose a font and a font size on the property bar.

9 On the property bar, click the **Mirror horizontally** and **Mirror vertically** buttons Mirror Text: .

Because the text was created along the outside of the path, mirroring the text vertically creates a mirror image of the text on the inside of the path. Mirroring the text horizontally then recovers the text to its original form, reversing the mirror effect while keeping the text on the inside of the path. The order in which you click the two buttons does not affect the final result.

10 Drag the red diamond to position the text.

11 Select the ellipse and right-click the **No color** swatch in the color palette.

This makes the ellipse invisible, while keeping it available for future editing of the text.

Your traced logo is now complete.

From here ...

You can explore CorelDRAW on your own, or you can learn more by completing other CorelTUTOR™ tutorials.

For more information about the topics and tools discussed in this tutorial, refer to the Help. To access CorelDRAW Help, click **Help** menu ▶ **Help topics**.