



Advanced Graphics


in Serif DrawPlus X5

AutoTrace

By the end of this task I should know how to...

- 1) convert a photograph into a vector graphic
- 2) edit the vector graphic by removing/colouring shapes
- 3) export the finished graphic with a transparent background.

Introduction

DrawPlus has many great facilities but one of the best is  AutoTrace .

This facility allows users to convert any photograph (made up of pixels) into a vector graphic (made up of shapes).

Once a graphic is converted in this way...

- it can be resized with no loss of quality
- areas of the graphic can easily be removed
- each individual shape can be re-coloured



Original Photograph

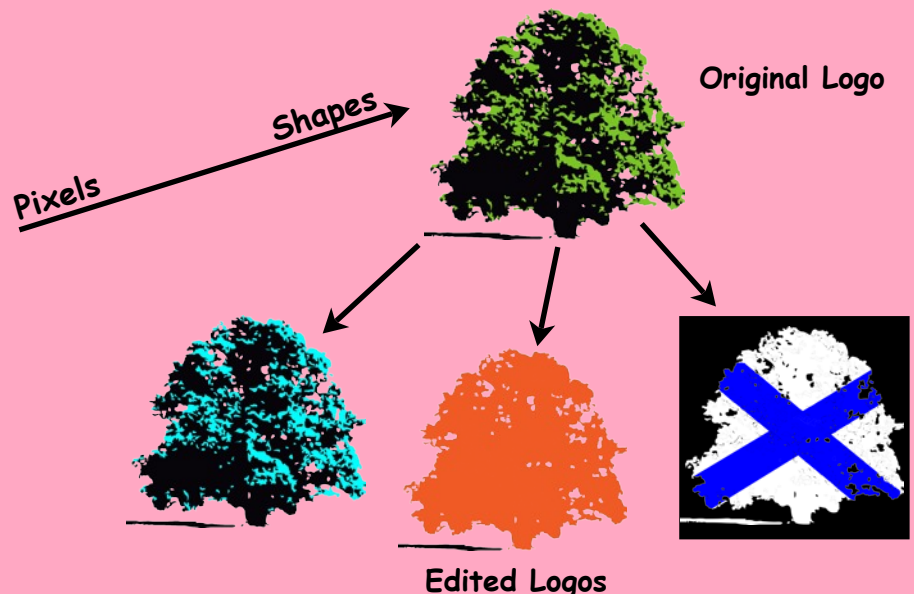


Logo Created
Using Autotrace

This worksheet will teach you how to take the tree photograph shown below, convert it into a small logo and then edit it.



Bit-mapped Photograph

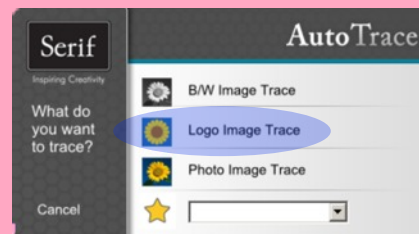


Converting a Bit-mapped Photograph to a Vector Logo

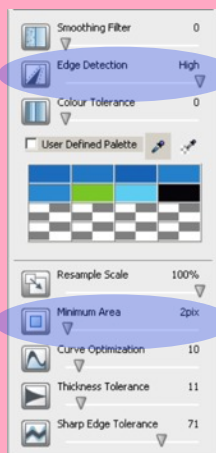
Open the DrawPlus file called "Trees".

Click on the tree photograph and select  AutoTrace .

There are three types of AutoTrace.
Click on Logo Image Trace.



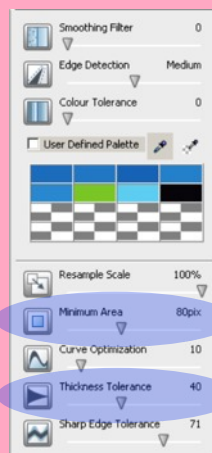
AutoTrace analyses areas of similar colour in bit-mapped pictures (like photographs) and converts them into shapes. The area size, line thickness, accuracy can be changed using the setting on the right. Examples, showing the effect of changing settings, are shown below.



Example 1

High Edge Detection
Low Minimum Area of 2pix

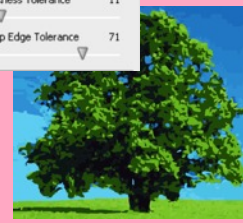
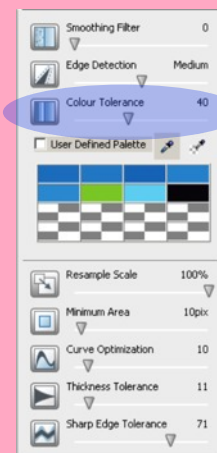
This gives lots of detail in the logo as the photo is converted in lots of tiny shapes.



Example 2

High Minimum Area of 80pix
High Thickness Tolerance of 40

This gives larger shapes with a lot less detail than the first example. Note that fewer shapes means it is easier to edit.

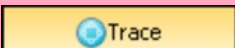



Example 3

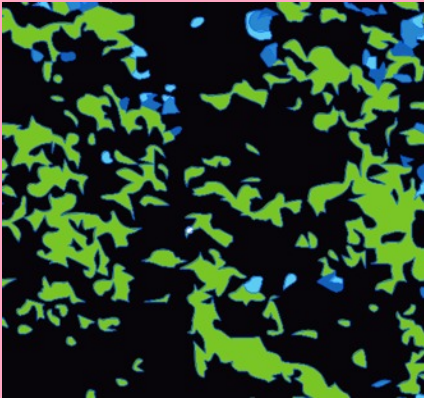
High Colour Tolerance of 40

This changes the way colours are blended together. You will see that there are more shades of green and blue in this example.


In this example we will leave the original settings untouched. (If you have changed any settings, click on reset.)

Click on the  button and then click on  .

Editing the Vector Logo (deleting shapes)



A vector graphic is made up from lots of shapes.


To edit these shapes we must first ungroup the Logo. Click the **Ungroup**  icon below the tree.

If you zoom in on the logo you will get a better view of what the vector graphic looks like. Each part of the tree, grass and sky is made up from lots of green, blue and black shapes or areas.

To remove the sky from the logo we want to delete all the blue shapes.

The long way to do this is to click on each blue area and then press the delete key. If you try this for a few of the the blue shapes you will see that it would take about 10 or 15 minutes to delete the blue shapes one at a time.

A faster way to select all the blue colour is to use the Layers tab. It's helpful if the Layer window is as large as possible so use the small white arrows to *collapse* the other options.

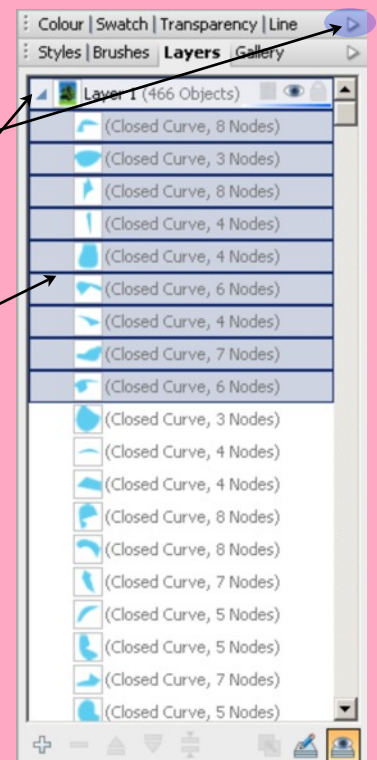
Click on the  symbol to display all the shapes in the tree.

You will see that information about each shape is shown in the layer window. To select more than one shape, hold down the Ctrl key and click the mouse on each shape, one at a time.

Try selecting 9 of the blue shapes. The shapes can be deleted by right clicking on the highlighted shapes and selecting delete from the menu. Practice this a few times, removing larger numbers of blue shapes each time.

Now try deleting all the remaining blue area. This may take a while as the tree is a complicated graphic with lots of individual shapes. If you are successful your tree should now look like this.

Finally, delete the grass by clicking on it and pressing delete.



Editing the Vector Logo (colouring shapes)

A similar technique can be used to change the colour of lots of shapes.

Use the Layer tab to select all the green shapes. When you have them all highlighted, you can then change the fill colour of all the shapes at once.

Try - Interesting effects can be created by repeating the same shape or pattern.

The example shown was created by grouping the tree back together, copying and pasting to create other trees and then colouring each tree differently.



Try - This task used this specific tree photo because it worked well in Autotrace.

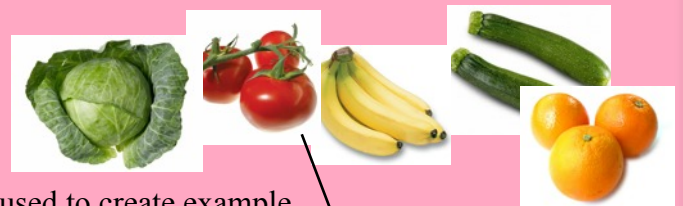
Try searching for your own photographs on the Internet. Copy and paste then into DrawPlus and experiment with how you can edit them using AutoTrace.

Try - Think of how you could create a company logo like the example shown below.



Steps used to create example....

1. Autotrace used on car graphic
2. Background carefully removed
3. Motion Blur applied to back of car
4. Curved Text added above car



Steps used to create example....

1. Autotrace used on each of the five graphics
2. White Background removed from each graphic
3. Star Shape added in front of fruit and veg
4. Text added in front of star
5. Transparent circle added to back

