How to convert a JPEG image into SVG format using ImageMagick?

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imagemagick

edited Sep 26 '12 at 20:26
Kurt Pfeifle
23.9k 5 56 108

asked Jul 15 '09 at 16:55
jasonb

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3 Answers

You'll actually need some software or code to vectorize your image in between, as jpg is a raster format, while SVG is a vector format. I don't think imagemagick alone can do that for you.

Here is an online application built on top of Autotrace, ImageMagick and other components that does what you want.

answered Jul 15 '09 at 16:57
schnaader
25.9k 2 46 81

3 +1: Turning a bunch of lines into a large matrix of pixels can be done fairly dumbly. Doing the reverse requires some fairly serious smarts. – T.E.D. Jul 15 '09 at 17:32

That's kind of nifty. – Snarfblam Jul 15 '09 at 18:01

add comment

you'll need to use potrace and convert to a bitmap first.

```
$convert input.jpg output.ppm
$potrace -s output.ppm -o svgout.svg
```

edited Sep 26 '12 at 18:49
kapa
41.4k 12 72 114

answered Sep 26 '12 at 18:45
iamashm
81 1 1

add comment

Actually, with a complete installation of a recent version of ImageMagick it should be as easy as:

```
convert  some.jpeg  some.svg
```

Of course, ImageMagick cannot do it all by itself -- it uses *delegates* (helper programs) to handle SVG input or output. (This has been pointed out by other answers already.)

To see a (partial) list of all delegates (and their respective commands), run

```
convert  -list delegate
```

To see the config file where all the delegate secrets hide, see

```
convert  -list delegate | grep delegates.xml
```

To see a (partial) list of SVG handling delegates, run

```
convert  -list delegate | grep -i svg
```

However, ImageMagick likes to put some of its external helper utilities into 'stealth' mode and doesn't necessarily reveal their presence when using above commands.

Just look into the `delegates.xml` file itself. On my system it's:

```
grep -i svg /opt/local/etc/ImageMagick/delegates.xml | grep -i --color stealth

  <delegate decode="autotrace" stealth="True" \
            command="&quot;/opt/local/bin/convert&quot; &quot;%i&quot; \
            &quot;pnm:%u&quot;\n\
            &quot;/opt/local/bin/autotrace&quot; \
           -input-format pnm \
           -output-format svg \
           -output-file &quot;%o&quot; &quot;%u&quot;"/>

  <delegate decode="svg:decode" stealth="True" \
            command="&quot;/opt/local/bin/inkscape&quot; &quot;%s&quot; \
            --export-png=&quot;%s&quot; \
            --export-dpi=&quot;%s&quot; \
            --export-background=&quot;%s&quot; \
            --export-background-opacity=&quot;%s&quot; \
            &gt; &quot;%s&quot; 2&gt;&amp;1"/>
```

As you may see, on *my* system the ImageMagick installation automatically uses (amongst others)...

- ... `inkscape` to convert SVG to PNG;
- ... `autotrace` to convert PNM to SVG;

Of course, one could argue the benefits of rather using `autotrace` directly -- but that would require to manually convert the whatever-input-format to PNM first. So for this preliminary step you'd probably use ImageMagick anyway...

answered Sep 26 '12 at 19:20

Kurt Pfeifle
23.9k 5 56 108

add comment