
Subject: Converting 24bit images to 8 bit
Posted by [gdc11](#) on Wed, 10 Mar 1993 14:08:51 GMT
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I have an application using PV-wave in which I'm using ray-tracing to render some objects which intersect. I am trying to produce colour images and therefore render each red, green and blue component of the image separately. The problem comes in trying to reduce the resulting 24bit image to a 8bit image so that I can display it.

PV-wave includes a general purpose routine to set up a 8bit colourmap for use with 24bit images. However, it does this by restricting the no. of red and green shades to 8 (2^3) and blue shades to 4 (2^2). It doesn't scan the image to see which colours are actually used and the resulting image is somewhat disappointing.

Can anyone help me out with a better algorithm to convert the 24bit images to 8bit? The obvious first step is to scan the red, green and blue images to actually see what colours are required. This will undoubtedly produce more than 256 colours and the not-so-obvious next step is how to reduce the no. of colours required.

If anyone can help out with some algorithms or point me in the direction of some reference material I would be extremely grateful.

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