Subject: GIF compression support in ImageMagick - Re-Post Posted by Lince.Lawrence on Thu, 04 Nov 2004 06:26:38 GMT

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friends

As in this message. How can I enable LZW in ImageMagick? Where should I alter the default option as advocated in the Quoted mail "--enable-lzw (configuration switch)"

Currrently I am using ImageMagick to convert EPS to GIF by punchin in the following command sequence in the command line:

convert -antialias -transparent white -colors 16 -compress LZW eqn10.eps eqn10.gif

The output should come around 4K, while using the above command I get a comparitively huge file of 20K. So I think the command "-compress LZW" is not executed correctly (may be due to the disabled LZW option)

Kindly pour-in your valuable comments.

Thanks, Lince M Lawrence

Yes, this is related (marginally) to IDL.

In the discussion on the lack of GIF support in IDL 5.4 a month or two ago,

I said that ImageMagick (http://www.imagemagick.org/) was a good tool for

creating GIFs. Although I have used ImageMagick for years I don't create

GIFs very often. And I failed to notice that some time recently the following comment has appeared in the README:

--enable-lzw (configuration switch)

Unisys reportedly claims a patent on the algorithm supporting LZW compression (e.g. used by GIF and TIFF). To avoid possibly infringing on

this patent, support for LZW is disabled by default. With LZW support, GIF

files written by ImageMagick will be much larger than expected

**

This explains the enormous increase in size when I converted some files from PNG to GIF the other day!

So ImageMagick is not a good tool for creating GIFs (unless you go to some

trouble to enable LZW compression) and IDL is not the only organisation abandoning GIF because of patent issues.

All the more reason to BURN ALL GIFS, I say.

BTW, ImageMagick can still *read* compressed GIFs.

Mark Hadfield m.hadfield@niwa.cri.nz http://katipo.niwa.cri.nz/~hadfield National Institute for Water and Atmospheric Research

Subject: Re: GIF compression support in ImageMagick - Re-Post Posted by Mark Hadfield on Tue, 09 Nov 2004 20:42:34 GMT View Forum Message <> Reply to Message

Lince M Lawrence wrote:

>

> I will explain...

>

- > We do "convert -antialias -transparent white -trim -depth 16 -colors
- > 16 \$1 \$2" and we get... (in Image Magic)
- > Image: si1.gif
- > Format: GIF (CompuServe graphics interchange format)
- > Geometry: 7x7
- > Class: PseudoClass
- > Type: grayscale with transparency
- > Depth: 8 bits-per-pixel component
- > Colors: 16
- > [snip]

>

- > But.. we want...
- > Image: si1finished.gif

- Format: GIF (CompuServe graphics interchange format) >
- Geometry: 9x7 >
- Class: PseudoClass >
- Type: palette with transparency
- Depth: 8 bits-per-pixel component >
- > Colors: 16
- 0: (0, 0, 0) opaque >
- 1: (8224, 8224, 8224) #202020 >
- 2: (24415,24415,24415) #5f5f5f >
- 3: (42148,42148,42148) #a4a4a4 >
- > 4: (53970,53970,53970) #d2d2d2
- 5: (59110,59110,59110) #e6e6e6
- 6: (63479,63479,63479) grey97 >
- 7: (65535,65535,65535) white >
- 8: (32896,32896,32896) #808080 >
- > 9: (65535, 0, 0) red
- 10: (0.65535, 0) #00ff00 >
- 11: (65535,65535, 0) yellow >
- 12: (0, 0,65535) blue >
- 13: (65535, 0,65535) #ff00ff >
- 14: (0,65535,65535) cyan >
- 15: (65535,65535,65535) white >
- > [snip]

>

- > This result is obtained by another batch process in GraphicConverter
- > after the comand-line batch in Magic. Will I get this in a single
- > step? What change should I make in the command.

I'm sure you *can* get the image parameters you want in ImageMagick. I'm no IM expert, however, so I'm not sure how. You may be better off asking this question on the ImageMagick "Users" mailing list. See

mailto:magick-users@imagemagick.org http://www.imagemagick.org/www/magick-list.html

One thing that occurs to me: why did you set "-depth 16" above? This appears to have persuaded IM to create a gray-scale image.

I just went through the exercise of saving an EPS file (test.eps) from IDL then converting it to GIF format with

convert -verbose -antialias -transparent white -colors 16 test.eps test16.gif

(For some reason I need the -verbose option here. Without it, IM opens the Ghostscript interpreter but does not run it. Odd.)

This creates a reasonable-looking, if coarse, 16-colour GIF--see outpt

below my signature from

identify -verbose test16.gif

Or do you want a specific set of 16 colours? I'm sure this can be done too, but I don't know how.

Mark Hadfield "Ka puwaha te tai nei, Hoea tatou"

m.hadfield@niwa.co.nz

National Institute for Water and Atmospheric Research (NIWA)

Image: test16.gif

Format: GIF (CompuServe graphics interchange format)

Geometry: 387x344 Class: PseudoClass Colorspace: RGB Type: PaletteMatte

Depth: 8 bits

Endianess: Undefined

Channel depth: Red: 8-bits Green: 8-bits Blue: 8-bits Opacity: 1-bits Channel statistics:

Red: Min: 3 Max: 255

Mean: 160.822

Standard deviation: 110.361

Green: Min: 4 Max: 255 Mean: 179.791

Standard deviation: 94.0356

Blue: Min: 3 Max: 255

Mean: 175.115

Standard deviation: 100.59

Opacity: Min: 0 Max: 255 Mean: 130.553

Standard deviation: 127,464

Colors: 16

- 0: (44, 15, 50, 0) #2C0F3200 1: (4, 4,162, 0) #0404A200 2: (4, 23,223, 0) #0417DF00 3: (3, 97,162, 0) #0361A200 4: (17, 72,197, 0) #1148C500 5: (3,161,100, 0) #03A16400 6: (18,227, 21, 0) #12E31500 7: (99,164, 3, 0) #63A40300 8: (35,199, 47, 0) #23C72F00 9: (164,103, 4, 0) #A4670400 10: (227, 22, 4, 0) #E3160400 11: (172, 24, 8, 0) #AC180800 12: (255,255,255, 0) grey100 13: (208,208,208, 0) #D0D0D000 14: (173,173,173, 0) grey68 15: (77,137, 73, 0) #4D894900
- Histogram:

4088: (44, 15, 50, 0) #2C0F3200
3623: (4, 4,162, 0) #0404A200
8943: (4, 23,223, 0) #0417DF00
5643: (3, 97,162, 0) #0361A200
4040: (17, 72,197, 0) #1148C500
6851: (3,161,100, 0) #03A16400
7489: (18,227, 21, 0) #12E31500
3466: (35,199, 47, 0) #23C72F00
5424: (99,164, 3, 0) #63A40300
406: (77,137, 73, 0) #4D894900
3156: (172, 24, 8, 0) #AC180800
4675: (164,103, 4, 0) #A4670400
5461: (227, 22, 4, 0) #E3160400
994: (173,173,173, 0) grey68
711: (208,208,208, 0) #D0D0D000

68158: (255,255,255,255) #FFFFFFF

Rendering-intent: Undefined

Resolution: 72x72 Units: Undefined Filesize: 15kb Interlace: None

Background Color: grey100 Border Color: #DFDFDF00

Matte Color: grey74

Page geometry: 387x344+0+0

Dispose: Undefined Compression: LZW Orientation: Undefined

comment: Image generated by AFPL Ghostscript (device=pnmraw)

signature:

3f0fad2b87d2cf9f9a0dba6186899f0cc91c7d0b3e8472282d3e25ae94b3 43bb

Tainted: False User Time: 0.000u Elapsed Time: 0:01