Itsagif
Manual

This is a very brief manual for itsagif. A larger manual may be found online at http://www.cafe.net/peda/iag/man.html.

The program begins with a splash screen. You can dismiss the splash screen by pressing a key or button; itsagif then asks for a PICT file to open. After a file is chosen, itsagif will display an image preview and a control window, both of which are named after the chosen file. Opening a file named "Example" will result in the following control window:

(images have been removed to conserve space - the online manual includes example images)

We will now go over each element of the control window, from top to bottom.

Source Controls

The source controls display information about the source image.

Size: 199x204 (159K)

This control displays the size of the original image. Our example image is 199 pixels wide and 204 pixels high. When placing the GIF file in some HTML the size should be included. For our example, the appropriate HTML would be
"<img src="Example.gif" width=199 height=204>".

The memory requirements are listed after the image dimensions. Our example image uses 159K when stored as a 24-bit image without any compression.

2254 colours

This control displays the number of colours present in the original image; our example image has 2254 distinct colours.

Destination Controls

The destination controls determine how the image is converted into a GIF image.

Size: 199x205 (71.9K)

This control displays the size of the produced image; the dimensions of the produced image match those of the original image. However, the produced image will be a 71.9K GIF file. The GIF file will be identical to the preview image if you are previewing the image with a 24-bit video card. If you are previewing the image with a 1,2,4,8, or 16-bit video card the produced GIF file will be as good or better than the preview image.

The remaining destination controls impact the quality and memory requirements of the produced GIF file. After changing any of the controls, itsagif will automatically recompute the preview image and memory requirements. While computing the memory requirements itsagif may display lower estimates of the size (for example ">36K"...">44K"...

...">60K"..."71.9K").

2254 colours
  This control displays the number of colours used in the produced image.
  You may specify the number of colours by entering a value into this
  control. Using fewer colours will usually reduce the size of the produced
  GIF file.

9 passes
  This control displays the number of passes needed to render the image.
  Each pass can paint at most 256 colours. You may specify the number
  of passes by entering a value into this control. Using fewer passes will
  usually reduce the size of the produced GIF file.

First pass: 256 colours
  This control displays the number of colours used to paint the first pass.
  Using a small number of colours on the first pass allows viewers to get a
  quick preview of image. To see what the image will look like after the
  first pass, set this control as desired and subsequently specify that one
  pass is to be used to render the image (using the # of passes control
  described above). You will also see the memory size of the first pass;
  14,400 baud modems transfer approximately 1K per second.

Later passes: 255 colours
  This control displays the number of colours used to paint all passes
  after the first pass.

Background (FFFFFF)
  This control displays a small swatch of colour that represents the
  image's intended background colour along with the HTML description
  of that colour. Clicking on the colour allows you to choose a new colour;
  option-clicking gives you finer control over the colour chosen. Our
  example image has a white background (the default) which is specified
  in HTML as "bgcolor=#FFFFFF" in the body tag, as follows:
  "<body bgcolor=#FFFFFF>". Itsagif will display the background colour
  around the preview image as well as over portions of the image that
  have been marked as transparent.

Transparency
  When this control is checked, portions of the image are transparent. To
  specify a transparent colour, move the pointer over the desired colour
  on the preview image and click once. Click over other colours to specify
  multiple transparency colours. Clicking over a transparent region causes
  the underlying colour to become opaque again. the delete key removes
  the most recently added transparency colour.

  Unchecking this control will disable transparency.

Interlace first pass
  When this control is checked, the first pass of the image will be stored
  in an interlaced manner. Interlacing the first pass allows viewers to
  get a very quick idea of what the image will look like as it is being
  downloaded. Interlacing usually increases the memory size, although
  only slightly.

Interlace later passes

When this control is checked, all passes after the first pass are interlaced. Most browsers will present the image to the viewer in less time if later passes are not interlaced.

Use global colour table
When this control is checked, a single colour table is used for all passes, instead of one colour table per pass. Images with a global colour table are compatible wuth more (older) browsers and utilities. Multiple passes may still be used to provide sharp previews.

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Be warned that itsagif requires *alot* of memory for larger continuous-tone images, as it keeps both the original and preview image in memory at 24-bits. Furthermore, additional structures are used to maintain exact knowledge about every colour in the image. Large continuous-tone images take a *long* time to load, as these structures are built up as the image is loaded. The algorithms may be improved in the future, if there is enough demand - the program was written mainly out of interest and to demonstrate that GIF files can contain more than 256 colours.

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