GfxComment

COLLABORATORS

	TITLE : GfxComment		
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REVISION HISTORY

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GfxComment

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```
                             GfxComment  -  Version 0.8

                 © 1998 by Robert Kersbergen

        This program is public domain. Distribute freely.



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```

1.2 Why does GfxComment exist?

                          What does GfxComment do?

GfxComment is able to scan a directory, pick out three types of picture
formats that are widely used on the World Wide Web, find out their width,
height and number of colours and attach that information to that file as a
file comment.

                          OK, but why?

I maintain the website of my girlfriend and I was getting tired of having
to load a picture viewer or (even worse!) ADPro to find out the dimensions
of a picture so I could put in the width= and height= tags in an HTML-file.

Now all I have to do is run GfxComment and I can see by it's file comment
what it's width and height is. As some sort of added bonus I've also
attached all sorts of other information that might be useful so it can be
used by people who would like to know a bit more about a picture than just
it's dimensions.

             Which picture formats does GfxComment recognize?

Currently GfxComment supports the following formats:

· ILBM (IFF-ILBM)
· PNG
· GIF (GIF87a, GIF89a)
· JPG (Baseline, Progressive,
                all 13 of them!
)

      What information will it fetch from each picture format?

ILBM: Width, Height, No. of Colours.
PNG : Width, Height, No. of Colours, Interlace-modus.
GIF : Width, Height, No. of Colours, Interlace-modus, Type (GIF87a/89a).
JPG : Width, Height, Type of JPEG (Progressive, Baseline)

Note: GfxComment will mention that JPEG pictures have 16M colours. And
instead of telling you the number of colours, it can also tell you the
number of bitplanes in a picture.

                    Great! What do I need to use it?

```
                          Read on!
```

1.3 What do you need to use GfxComment?

```
                              What are the requirements to run GfxComment?
```

In order to run GfxComment you need the following:

· An Amiga with AmigaOS 2.x or higher (I think)
· Pictures to scan
· Understand the
                disclaimer
                · GfxComment (duh!)

```
        That's it? How do I install it?
```

```
        Read on!
```

1.4 It might work, it might crash, it might set your Amiga on fire

```
                        DISCLAIMER
```

Although great care has been taken in order to make this program as stable
and safe as possible, I can not be held responsible for whatever it may
cause.   It might work but it might also set fire to your house or do
nothing at all. Realise that before using it! :)

```
                    COPYRIGHT NOTICE
```

GfxComment and its source are hereby put into public domain. Do with them
whatever you like.

1.5 How to install GfxComment - nothing to it

```
                            How do I install GfxComment?
```

Simple, there is only one executable (GfxComment). As it's a CLI-only
program I suggest you copy it to your C: directory. Alternatively, put it
wherever you want.

GfxComment requires no external libraries, no MUI, no BGUI, nothing!

```
                Really? So how do I use it?
```

```
                    Read on!
```

1.6 How to use GfxComment

```
                              How do I use GfxComment?
```

GfxComment works from the CLI (shell) only! So there is no icon for you to
start it from Workbench. You need to open a shell and there you can
execute it. Make sure you've got a stack of at least 8000 bytes (most
shells open with this but if you're not sure, enter 'stack 8000' in your
shell).

GfxComment is able to either investigate one file or check all files in a
given directory. Directories can be scanned recursively as well. You can
set up a filter when scanning a directory, so if you just want to comment
PNG-files, you can have GfxComment scan for all filenames that end on PNG.

```
                    So how do I use it?
```

The GfxComment usage template looks like this (AmigaDOS style):

```
   L=LOCATION,P=PATTERN,A=ALL/S,V=VERBOSE/S,NW=NOWRITE,
   BP=BITPLANES/S,H=HELP/S:
```

L=LOCATION

   Sets the location GfxComment will scan. Alternatively, you can enter a
   complete path with filename. In that case just that one file will be
   commented.

P=PATTERN

   Allows you to setup a filter when scanning a directory. You can use
   AmigaDOS wildcards here. Suppose you've got a directory full of
   different files.   It can be rather time consuming if GfxComment had to
   open all those files to see if it's one of the supported filetypes.
   It's quicker to set a filter and rule out files that are not relevant.
   For instance, you can have GfxComment scanning for GIF-files with the
   following pattern: #?.GIF.

A=ALL

   Use this if you're scanning an entire directory. With this switch you
   turn on recursive directory scanning.

V=VERBOSE

   Shows a lot of information while scanning and commenting files. See

```
                this
                 for example output.
```

NW=NOWRITE

This will force GfxComment to not set the file comment. This way GfxComment can be used to scan your hard disk and perhaps create an index file with it.

BP=BITPLANES

By default, GfxComment will show you the number of colours. But if you really must, GfxComment can also tell you the number of bitplanes instead. This will be used for both on screen (with the VERBOSE switch) and for the file comment.

H=HELP

Shows help information.

Can you show me how to use it?

Sure, here are some examples:

GfxComment Work:Internet/Homepages/Images #?.GIF

Scans the directory Work:Internet/Homepages/Images for files that end on .GIF and comments them. You will be informed about how many files there were found.

GfxComment Work:Internet/Homepages/Images/NewStuff.PNG

Opens the NewStuff.PNG file and check if it's a supported filetype. If so, it will retrieve the picture info and attach it to the file.

GfxComment Work:Internet/Homepages/Images/NewStuff.PNG BITPLANES

Same as the previous one but this time the file comment will hold the number of bitplanes of the picture.

GfxComment Work: ALL VERBOSE

Scans the entire Work: partition (including all directories) for files. All files will be checked and commented if possible. While GfxComment does its job, you will be informed on screen about the progress. (Note: instead of typing the entire keywords, you can suffice with respectively A and V).

GfxComment Work:Scans #?.JPG ALL VERBOSE

Scans the directory 'Work:Scans' for all .JPG files and comments them. If directories exist in the Work:Scans/ directory, they will be scanned to. Again, progress will be shown on screen.

GfxComment Work: ALL VERBOSE NOWRITE

Scans the entire Work: partition for pictures and shows you on screen what it has found. But the NOWRITE flag prevents GfxComment from setting the file comment of the found files.

GfxComment >RAM:MyPictures.TXT Work: ALL VERBOSE NOWRITE

Same   as   above,   but   now   the   output   will   be   send to a file called
'MyPictures.txt' in your RAM: drive.

                    Cool! So what does the future hold?

                        Read on!

1.7 Example output of GfxComment

Here is some example output of GfxComment:

8.Data-N-More:Projects/GfxComment> GfxComment TMP: VERBOSE

GfxComment 0.8 (25.7.98) Adds graphic's info to files as a file comment.
Copyright ® 1998 Robert Kersbergen (e-mail: klr@quadrant.xs4all.nl).
This program is public domain. Distribute freely.

Now scanning directory "TMP:"...
  1.   ILBM - 133x 2 - 16M colours - bar-rainbow.ilbm
  2. GIF89a - 141x 15 - 256 colours - Non-Interlaced - border-bottom.gif.
  3. GIF89a -   5x472 - 256 colours - Non-Interlaced - border-left.gif.
  4. GIF89a -   5x473 - 256 colours - Non-Interlaced - border-right.gif.
  5. GIF89a - 141x 14 - 256 colours - Non-Interlaced - border-top.gif.
  6.   ILBM - 135x307 - 16M colours - bbar-test2.iff
  7.   ILBM - 95x 48 - 16M colours - klr-button-top.iff
  8.   ILBM - 56x 48 - 16M colours - klr-button-up.iff
  9.   ILBM - 42x 48 - 16M colours - klr-button-next.iff
 10.   JPG - 350x262 - 16M colours - Type: Baseline - screenshot-ds.jpg.
 11.   JPG - 350x262 - 16M colours - Type: Baseline - screenshot-wb.jpg.
 12.   ILBM - 135x307 - 16M colours - bbar-test3.iff
 13.   JPG - 320x240 - 16M colours - Type: Progressive - jpgprogre.jpg.
 14.   JPG - 135x307 - 16M colours - Type: Baseline - bbar-test.jpg.
 15. GIF87a - 135x307 - 256 colours - Non-Interlaced - bbar-test.gif.
 16.   JPG - 350x262 - 16M colours - Type: Baseline - screenshot-browser.jpg.
 17.   JPG - 891x624 - 16M colours - Type: Baseline - rips014.jpg.
 18.   PNG - 131x135 - 256 colours - Non-Interlaced - ayp-robert.png.
 19.   PNG - 131x135 - 256 colours -   Interlaced - ayp-robert-i.png.
 20.   ILBM - 556x604 - 16M colours - screenshot_wb.ilbm
 21. GIF87a - 131x135 - 256 colours - Non-Interlaced - ayp.gif.
 22.   ILBM - 131x135 - 16M colours - ayp.iff
 23. GIF87a - 131x135 - 256 colours - Non-Interlaced - ayp-robert.gif.
 24.   ILBM - 135x307 - 16M colours - bbar-test.iff
 25.   ILBM - 140x 35 - 16M colours - klr-button-new.iff
 26.   ILBM - 140x500 - 16M colours - border-rainbow.ilbm
 27.   ILBM - 616x 8 - 16M colours - ruler.ilbm
 28.   JPG - 574x800 - 16M colours - Type: Baseline - rips049.jpg.
 29.   JPG - 598x845 - 16M colours - Type: Baseline - rips050.jpg.

Found 7 GIF files.
Found 8 JPG files.
Found 2 PNG files.
Found 12 ILBM files.

```
Found 29 files in total.
```

1.8 All 13 types of JPEG

You mention 13 types of JPEG! I didn't know there were that many?

Oh, but there are. The following types are recognized by GfxComment:

```
 1. Baseline
 2. Extended sequential
 3. Progressive
 4. Lossless
 5. Differential sequential
 6. Differential progressive
 7. Differential lossless
 8. Extended sequential, arithmetic coding
 9. Progressive, arithmetic coding
10. Lossless, arithmetic coding
11. Differential sequential, arithmetic coding
12. Differential progressive, arithmetic coding
13. Differential lossless, arithmetic coding
```

The most common one is number 1, baseline. This is your average JPEG that
can be read with almost any program.   Not too long ago the first
progressive JPEGs were found and the latest thing are lossless JPEGs.

GfxComment will show you what type a JPEG is, like this:

```
  7.    JPG - 320x240 - 16M colours - Type: Progressive - jpgprogre.jpg.
 10.    JPG - 320x247 - 16M colours - Type: Baseline - amiga_wb2.jpg.
```

1.9 What does the future hold?

                          What will GfxComment do in the future?

I want to implement the following functions in GfxComment:

· Anim-Gif Support   To tell you how many frames there are in one.

(There were more but I implemented those functions already :))

Stuff I want to change in GfxComment (techno-babble):

· Recursive directory reading. There is now a maximum of 64 directories
  that can be scanned. I want to get rid of this maximum.

· Directory reading is now done with dfind() and dnext(). I would like to
  change it to the AmigaDOS equivalents: MatchFirst() and MatchNext() from
  the dos.library.

· Get rid of startup-code (startup.c), this will make the executable a lot
  smaller, but I will have to make my own printf();

· Better CTRL-C handling (there is none right now). Currently you could
  end up in the directory that GfxComment was scanning even though your
  shell says otherwise. This is sort of a (sssst!) known bug..

If you have got any suggestions, please feel free to
                    contact me!

1.10 Who made this masterpiece?

          So who is the genius that made this program?

This program has been put together by Robert Kersbergen. I am a 26 year
old guy that lives in The Netherlands. Born in Amsterdam, living in a town
called Hoorn. For a living I am a Sales Consultant at a very big ISP (the
biggest for the professional market world-wide).

If you want to contact me, use this address:

                klr@quadrant.xs4all.nl

If you would like to see what my girlfriend is upto, visit my (her)
homepage at this address:

                http://www.xs4all.nl/~klr

I know, I know, shameless plug but this is my guide, so bite me!

                  And how did you do it?

It's done in C, compiled with SAS/C 6.57. You can find the source in the
archive, I hope you can use it. I had a lot of trouble trying to find
information about the several picture formats. While I was coding
GfxComment I often wish I would have an example of how to read a GIF or
even a JPEG. So that's why I'm publishing my sources as well.

                  And what is your setup?

A4000/040@25 MHz, 26MB of memory, 6.5GB of space. I look at an Iiyama
Vision Master 17" monitor and dial in using a USR Courier V.Everything. To
enhance the picture a bit I've got a Cybervision64/3D.

              You are making me say this, aren't you?

Yes, your will is my command. I can make you ask me anything I want.

                        Oh yeah?

Yeah :-).

(OK, enough of the jokes, please! Ed.)

1.11 Credit where credit is due

                    Credits where credits are due!

· First of all, I would like to thank Andreas Kleinert for pointing me in
  the right direction. Without him I would have probably given up trying
  to read GIF files. So Andreas, thanks a lot!

· I would like to thank Jay Miner for creating such a wonderful machine.
  I don't think the world will ever see such a gorgeous OS. So cunningly
  put together it makes the most out of what's possible. Maybe not to
  current standards but I can't live without AmigaOS.

· I would like to thank CU Amiga and Amiga Format for keeping me motivated
  to keep on developing for the Amiga. Without their enthousiam I might
  have given up on the Amiga already. But thanks to them I know what a
  close community the Amiga community really is. I know, it sounds all
  soggy and pethatic, but it's true *snif*. C'mere, I wanna hug you ;).

· Er, I'm out of people actually. I could tell you about my pet gerbill
  and how he reacts to viagra, but I won't.

1.12 Programmer's Help

                    Programmer's help? Huh?

When I was trying to get this program working I ran into several problems.
The first one was trying to find the specifications of the several picture
formats I wanted to support. So here are some useful URL's:

General File Format FAQ:

    http://www.faqs.org/faqs/graphics/fileformats-faq/index.html

IFF Specifications:

    http://www-edu.gel.usherb.ca/codc01/IFFSPECS.ZIP

    Also, the Developer CD-Rom from CBM is very useful!

JPEG:

    ftp://rtfm.mit.edu:21/pub/usenet/news.answers/jpeg-faq/part1
    ftp://rtfm.mit.edu:21/pub/usenet/news.answers/jpeg-faq/part2

I honestly can't remember where I found the GIF89a specifications. If you
want it, just contact me and I'll send it to you.

                    What else can you do to help me?

While struggling with the specifications I wished there was some example
code somewhere that I could use as a reference. So by making my source
code public I'm hoping you will find just that. If you do, please e-mail
me and tell me, that would definately make my day :-).

                    Anything else you would like to say?

Well, yeah.   In the sources directory you will find the sources as I used
them to compile this version. I have not included the protos.h files. To
create them (with SAS/C) do the following:

1.> sc GfxComment.C gprotos noicons

And do that for every file. Then just type 'smake' and the program will be
compiled.

                    How can I ever thank you?

Oh, just send me an e-mail, that will do.

1.13 History of GfxComment

25/7/98 - Version 0.8

· Added IFF-ILBM support.
· Maximum numbers of recursive directories set at 64.

23/7/98 - Version 0.7

· Added NOWRITE option.
· Added BITPLANES option.

12/7/98 - Version 0.6

· Small grammatical change.

6/7/98 - Version 0.6

· Added JPEG support.

4/7/98 - Version 0.5

· Added PNG support.
· Changed name from GifComment to GfxComment.

29/6/98 - Version 0.4

· All initial features implemented.

27/6/98 - Version 0.1

· Started coding GifComment.