RGFX-DT

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	TITLE : RGFX-DT	

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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

RGFX-DT

1.1 main

Welcome to the IFF-RGFX Datatype 44.0

Written by Achim Stegemann © 1997-99.

1.2 copyright

The RGFX preferences uses
MUI

by Stefan Stuntz.

1.3 mui

MUI - MagicUserInterface

MUI is a system to generate and maintain graphical user interfaces. With the aid of a preferences program, the user of an application has the ability to customize the outfit according to his personal taste.

MUI is distributed as shareware. To obtain a complete package containing lots of examples and more information about registration please look for a file called "muiXXusr.lha" (XX means the latest version number) on your local bulletin boards or on public domain disks.

If you want to register directly, feel free to send

DM 30.- or US$ 20.-

to

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1.4 introduction

Since its beginning of the Amiga in 1986, the IFF-ILBM graphic format became the standard format on the Amiga platform.
But with todays progress in multimedia and compression technique, the ILBM format is no more up-to-date.

Here is a table, that compares advantages and disadvantages.

Disadvantges of other graphic formats:
* The compression technique of GIF is no more free.
* PNG produces well compressed files, but it is quit slow to decompress.
* ILBM can't handle chunky bitmaps used with graphic cards (truecolor modes) and its compression rate is very poor.
* JPEG produces very well compressed files, but compression technique is lossy.

Advantages of the RGFX format:
* Uses XPK compression. With this you can produce very small files (e.g. XPK-GZIP often produces files smaller than GIF or PNG), or very fast unpacking files.
* Can handle planar, chunky and truecolor bitmaps.
* Deals with AGA, CyberGraphX and Picasso96 screen modes.

* Full IFF chunk support. Add your own chunks to RGFX files. The datatype won't
  complain about it.
* RGFX is well prepared for the future by using the expandable IFF technique.
  There might be new chunks in the future.
* Very useful for lossless packing of 24-bit picture.
  Currently, I don't know any lossy XPK packer, but if there exists one, RGFX ↩
     might
  become a competitor to JPEG on the Amiga !

1.5 datatype

Minimum requirements:
* OS 3.5
* xpkmaster.library V5

That's all folks !!

1.6 prefs

Minimum requirements:
* OS 3.5
* MUI 3.8

Currently I only support MUI for the preferences.
If you don't have MUI, you also can adjust the preferences very easy.

The ENV-variable 'Datatypes/rgfx.prefs' contains the parameter as a DOS-argument
with the template 'XPK/A,XPKMODE/A/N,PASSWORD'.
You can change the settings anytime either by using the 'SetEnv'-command or by
using a text editor.

1.7 converter

Minimum requirements:
* OS 3.5
* xpkmaster.library V5

With this utility, you can convert any image you have a datatype for, to the new
IFF-RGFX format.
It is CLI-only !!

Template: DT2RGFX FROM/A,TO/A,XPK/A/K,MODE/K/N,PW=PASSWORD/K,VERBOSE/S

FROM: The filename of the source image.
TO: The destination filename.
XPK: The ID of an XPK-Packer. For example XPK NUKE.
          I recommend to use GZIP which has best compression ratio but is still ↩
             fast.
MODE: The XPK-Packingmode (0 - 100).

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          Default is 100 (best compression).
PASSWORD: The password to be used for encryption when using an encryption modules.
VERBOSE:  Verbose mode.
          Print some information while converting.
```

1.8 developer

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My Amiga system:
* Amiga 4000 with Cyberstorm MK-III 060 at 50 MHz.
* OS 3.5.
* Cybervision 64 with 2 MB VideoRAM.
* 2 MB ChipRAM, 40 MB FastRAM
* Two IDE-Harddrives (1,2 GB and 700 MB)
* Phillips CDRW400
* MUI 3.8
* XPK 5.2


All programs have been written with Maxon C++ 3.00.4.
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1.9 problems

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I don't know anything about the behaviour of this datatype on P96 systems as P96 ↩
    does
not work on my Amiga. Though it works perfect with CGX, I suppose it will also run
on P96 well as P96 emulates the CGX software.

I once was reported, that the datatype sometimes wants to show pictures in HAM ↩
    mode,
although the HAM mode wasn't set.
I myself don't have any problems with the datatype, so I think this is an ↩
    individual problem.

True is, that HAM pictures are often displayed incorrect with CGX, but correct ↩
    with AGA.
I suppose, this is a problem of the CGX emulation and not of the datatype, as ↩
    other datatypes
show the same misbehaviour !

Do not rely on the CGX screenmode in the RSCM chunk as these modes can differ from
Amiga to Amiga !
The only bits you can rely on are the HAM und EHB-bits set in the AGA field of the ↩
     RSCM chunk.

Currently the P96 screenmode in the RSCM chunk is always set to $FFFFFFFF (= ↩
    INVALID_MODEID).

There is a bug trying to save the datatype picture with the DTM_WRITE method and ↩
    IFF_RAW flag
set. Do not save remapped bitmaps as this will result in corrupt output !!
This is not my fault as PDTA_Bitmap should point to the original bitmap and not to ↩
     the
```

remapped bitmap.
If you use datatypes.library V45, then you will now the little utility DTConvert. ↩
   As DTConvert
does not use picture.datatype V43, you cannot convert truecolor pictures to RGFX. ↩
   But using
up to 256 color images will work.
Anyway, to convert datatype pictures to RGFX, please ONLY use the DT2RGFX ↩
   converter, as
this utility can handle them all !

1.10 history

13-Nov-99 V44.0
   * First public release.

1.11 author

If you have any comments, critics, bug reports or anything else, feel free to ↩
   contact me.

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