loaders

COLLABORATORS			
	TITLE : loaders		
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Contents

Chapter 1

loaders

1.1 PPT I/O Modules

```
                This documentation is a short  description  of  the  different ↩
                     file
types PPT recognizes. Click on the name below to get to the point.

[ (*) = Documention not yet complete ]


             C-code

             IFF ILBM

             Targa

             JFIF/JPEG

             Compuserve GIF

             PNG
                     PNM/PGM/PPM/PBM

             Datatypes

             YUVN
                PPT saves the I/O modules in the PROGDIR:modules subdirectory. ↩
                     Any
modules ending with ".iomod" taken to be an I/O module.

NB: V2 used a completely another style of I/O module that  ended  in
".loader".  If you happen to have these around, delete them. They're
no use to anyone anymore and PPT wouldn't even load them even if you
tried.
```

1.2 datatypes.iomod

```
REXX TEMPLATE
    LOAD:
    SAVE: N/A

LOAD FORMATS SUPPORTED
    All picture datatypes you've cobbled your hard drive with.

SAVE FORMATS SUPPORTED
    None.

EXTENSIONS SUPPORTED
    None.

DESCRIPTION
    This IO module will use the new OS3.0 datatypes.library in order  to
    load  images.  You  can  find  new datatypes in Aminet, in directory
    util/dtype.

    Note that the current version of picture datatype is not equipped to
    handle more than 256 color images and thus all images you get have a
    maximum of 256 colors, even if the original image had  more  colors.
    This  shortcoming has been corrected with CyberGfx picture.datatype,
    but so far PPT does not understand it.

NOTES
    The priority of this IO module is -100, so that it  won't  be  tried
    until  all  other  image loaders have failed to recognize the image.
    That way your own JPEG datatypes, for example, won't come into  play
    before PPT's internal JPEG IO module.

BUGS
    Does not support the DTM_WRITE method.  Is there really a need?

SEE ALSO{@ub}
    Any good PD archive for a plethora of useful and useless datatypes.
```

1.3 Compuserve GIF

```
                REXX TEMPLATE
    LOAD:
    SAVE: INTERLACED/S,TRANSPARENT/N

    INTERLACED - saves an interlaced file.
    TRANSPARENT - set the given color to be transparent. Color 0 is
        always the background color.

LOAD FORMATS SUPPORTED
    GIF87, GIF89a.  Interlaced images are supported.  Transparent GIFs
    are supported from v1.1 onwards.

SAVE FORMATS SUPPORTED
    GIF87, GIF89a.  Interlaced images are supported.
    Transparent GIFs are supported.
```

```
EXTENSIONS SUPPORTED
    None.

DESCRIPTION
    GIF is a very popular format in the PC environment and since it  has
    been adopted as the standard for WWW, it has become extremely widely
    known. Unfortunately, UNISYS owns the patent for the  LZW  algorithm
    used in packing the image in the GIF file and decided that they wish
    their piece of the action and now you must pay money if you use  GIF
    in a commercial or shareware program.

    GIF will hopefully be superseded by
                PNG
                 in the near future.

NOTES
    This module can be spread freely in any case.
    GIF animations will produce a warning, but you can load the first
    image in, though.  This will have to do until I finish the animation
    support... ;->

BUGS

SEE ALSO{@ub}

                PNG
                ,
                PNG
                ,
                PNG
                , ...
```

1.4 Amiga IFF ILBM

```
                REXX TEMPLATE
    LOAD:
    SAVE:

LOAD FORMATS SUPPORTED
    Color: 1-8 bitplanes, 24 bitplanes.
    HAM6, HAM8, Extra Half-Brite.
    Both compressed and uncompressed images.

SAVE FORMATS SUPPORTED
    Color: 1-8 bitplanes, 24 bitplanes.
    HAM6, HAM8, Extra Half-Brite.
    Only compressed images are supported.

EXTENSIONS SUPPORTED
    Save: Annotation,Author.
    Load: Annotation,Author.

DESCRIPTION
    The IFF ILBM format has been the most popular format  in  the  Amiga
```

community. Every graphics package supports it and it is the only format that can save Amiga-specific images like Extra-Halfbrite, HAM and HAM8 (short for Hold And Modify). Also, the OS gives a good support for reading and writing IFF file formats, since the iffparse.library has been standard from version 2.0 onwards.

However, the compression used by the ILBM algorithm is not very efficient and thus it looses in any competition for image size. For a much better compression algorithm, use
PNG
.

Of course, if you must save a HAM/HAM8 or ExtraHalfBrite image, only ILBM gives you the possibility to save Amiga viewmodes.

NOTES

BUGS

SEE ALSO{@ub}

1.5 Joint Photographic Experts Group

REXX TEMPLATE
LOAD:
SAVE: COMPRESSIONLEVEL/N,PROGRESSIVE/S

COMPRESSIONLEVEL - JPEG compression level. Must be between 0 and 100, the default is 75.

PROGRESSIVE - When this switch is on, a progressive JPEG file will be saved.

LOAD FORMATS SUPPORTED
8 bit and 24 bit JFIF files. Progressive files are supported.

SAVE FORMATS SUPPORTED
8 bit and 24 bit JFIF files. Progressive files are supported.

EXTENSIONS SUPPORTED
None.

DESCRIPTION
JPEG is a
lossy
image format, which is intended for real-world images. It is a very popular format since it produces very small files with no visible degradation.

However, I do not recommend that you use JPEG for computer-generated files, because the result may be quite bad.

NOTES
This loader needs to have a JPEGTMP: assign set up before using. If

```
    the  JPEG  file  proves  to  be  too large (for example, progressive
    JPEGs) to be written or read in one go,  a  temporary  file  may  be
    created.

BUGS

SEE ALSO{@ub}

                PNG
```

1.6 Portable Network Graphics

```
                REXX TEMPLATE
    LOAD:
    SAVE:

LOAD FORMATS SUPPORTED
    8, 24 and 32 bit images.  Interlacing is not supported at the moment.

SAVE FORMATS SUPPORTED
    8 and 24 bit images.

EXTENSIONS SUPPORTED
    None.

DESCRIPTION
    PNG is the new standard, designed to replace
                GIF
                 by the folks on
    the 'Net.  It offers a very good compression using the patent-free
    GZIP algorithm and it supports a variety of data formats.  Also,
    the compression is NOT
                lossy
                , so no information is lost in this
    format.

    I heartily recommend using this format unless you have real-world
    images and wish to use
                JPEG
                 for them.

NOTES

BUGS

SEE ALSO{@ub}

                JPEG
```

1.7 Portable Bitmap Format

```
REXX TEMPLATE
    LOAD:
    SAVE:

LOAD FORMATS SUPPORTED
    P2,P3,P5 and P6

SAVE FORMATS SUPPORTED
    P5 and P6

DESCRIPTION
    PPM is a format used by the NetPBM package. It  features  a  simple,
    non-compressed   format  that  can  handle  bitmaps,  grayscale  and
    truecolor images alike, both in ASCII and binary formats.

NOTES

BUGS

SEE ALSO{@ub}
```

1.8 TrueVision Targa

```
REXX TEMPLATE
    LOAD:
    SAVE: COMPRESS/S

    COMPRESS - if this option is specified, the Targa file is compressed
        using a simple run-length encoding.

LOAD FORMATS SUPPORTED
    8, 15, 16, 24 and 32 bit, colormapped and non-colormapped formats.
    Interleaved images are supported when loading.

SAVE FORMATS SUPPORTED
    8 and 24 bit non-colormapped.

EXTENSIONS SUPPORTED
    None.

DESCRIPTION
    Targa is an old image format which is usually quite portable  across
    machines. It is quite popular among PC-folks and is used by programs
    that do not wish to support very many image formats, as Targa is  an
    extremely simple format.

NOTES

BUGS

SEE ALSO{@ub}
```

1.9 C-code

```
REXX TEMPLATE
    LOAD: <NA>
    SAVE:

LOAD FORMATS SUPPORTED
    None.

SAVE FORMATS SUPPORTED
    8 and 24 bit, with optional alpha channel.

EXTENSIONS SUPPORTED
    ANNO.

DESCRIPTION
    This simple saver module writes out the image  in  a  simple  format
    that can be compiled and included in a C-program.

    The image file consists of several variables:

    UWORD XX_height : height of the image
    UWORD XX_width  : width  of the image
    UWORD XX_components : # of components in the image

    UBYTE XX_data[] : an array containing the image data.

    If the image is a colormapped image, the following variables also
    exist:

    UWORD XX_colors : # of colors in the image
    UBYTE XX_alpha  : 0, if there is no alpha channel information
    UBYTE XX_cmap[] : An array containing the color map.  If
        XX_alpha!=0, then each array element contains 4 values, in
        the ARGB order, otherwise just simple RGB values.

    In the above descriptions, XX is replaced by the image name (with
    any punctuation marks removed).

NOTES

BUGS

SEE ALSO{@ub}
```

1.10 Vlab YUVN

```
REXX TEMPLATE
    LOAD:
    SAVE: <NA>

LOAD FORMATS SUPPORTED
    Vlab YUVN.  Alpha channel extensions are not currently supported.
```

SAVE FORMATS SUPPORTED

EXTENSIONS SUPPORTED
    ANNO, AUTH. (loading only)

DESCRIPTION
    The YUVN image format is a rare format used (as far as I know) only
    by the VLab digitizing software by MacroSystem GmbH.

    Since the format is uncompressed, this is an inefficient method
    of storing information, and this is why I chose not to support saving
    YUV. However, if you need it, drop me some mail and I'll try to
    support saving YUVN images in the next release.

NOTES

BUGS
    Since I don't have very many YUV pictures, so I wasn't able to test
    this loader module thoroughly. If you have a spare VLab scanner,
    try to test the module as much as you can. Even better, send me
    some YUV images that have been saved with a variety of options.

SEE ALSO{@ub}

1.11 Lossy image compression

    Lossy image compression means that in order to achieve greater
    compression level, some of the information in the original image is
    discarded. This degradation of the image is usually not visible to
    the eye, since the eye can be fooled into thinking no degradation
    has happened. However, if the image is compressed too much, then
    you're gonna see some so-called artifacts in the resulting image.

1.12 "

REXX TEMPLATE
    LOAD:
    SAVE:

LOAD FORMATS SUPPORTED

SAVE FORMATS SUPPORTED

EXTENSIONS SUPPORTED

DESCRIPTION

NOTES

BUGS

SEE ALSO{@ub}