JPEG-Box

COLLABORATORS

	TITLE : JPEG-Box		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		August 8, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

JPEG-Box

1.1 JPEG-Box_Documentation

JPEG-Box V4.13 (13.6.1999)

– SHAREWARE –

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A PerSuaSiVe SoftWorX PRODUCT.

Needs Kickstart V2.04. Kickstart release 3.x compatible.
GUI created with StormWizard 2.0

Actively supports PowerPC (TM) via powerUP (TM)
and ppc.library (or -emulation V0.6b+)

<Commercial> BTW: What is SViewII ? </Commercial>

REGISTER NOW

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68020-68060, PPC

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                                         _
                  _ //
              Only \X/ Amiga makes it possible.


                        Please visit:

                      WWW Support Site
                 http://www.ar-kleinert.de (AWeb-II)

             Simon Edward's Image Engineer WWW Site
            http://www.amigaworld.com/support/imageengineer/
            (Image Processing program produced by Simon Edwards)
```

1.2 copyright

The program JPEG-Box in this version and its documentation files are
(C)opyright 1998-99 by Andreas R. Kleinert. All rights reserved.

The right of using this program is granted to you by paying the
SHAREWARE-fee of 25 DEM (15 U$) [email shipment], respectively
30 DEM (20 US) [snail mail shipment] or equivalent (e.g. in Euro)
to the author.

You will receive a personal KEYFILE.
See registration form for details.

JPEG-Box makes use of SuperView-Library, which is
(C)opyright 1993-99 by Andreas R. Kleinert and comes separately.
It has its own distribution and usage conditions. Read carefully.

This software is based in part on the work of the Independent JPEG Group.

Some of the mentioned names or products above may be copyrighted by
companies or trademarks of companies.

Should any of the listed terms and clauses within this document not be
valid in conjunction with the law of certain countries this does not
affect the validity of the other clauses.

1.3 disclaimer

The author takes no responsibility for any results of the use of this
program.
This software is provided "AS IS" and there is no warranty of any kind,
so that you use this software at your own risk.

The author reserves the right to discontinue development of the program.

1.4   distribution

Registered users which paid the SHAREWARE-fee get the rights described
on the registration form.

The REGISTERED version of JPEG-Box MUST NOT be redistributed.
The Distribution of Keyfiles is FORBIDDEN.

The following only applies to the unregistered evaluation (EL)
version of JPEG-Box:

The program JPEG-Box in this version is freely distributable (SHAREWARE).
You may copy it, if the copyright notice is left intact and
all of its parts are included in the distribution.
This program must not be included in commercial packages or commercial
program collections without my written permission.
This program must not be sold in any way, but it is allowed to take
a nominal fee including the costs for copying.

This program may be put on public domain disks or included in public
domain disk libraries.
Special permission hereby goes to Fred Fish's AmigaLib-Disks and
the german series (in alphabetical order):
AmigaSzene, BerndsPD, FRANZ, GPD, SaarAG, TAIFUN and TIME.

This program may also be distributed via electronic mail and may be
put into mailboxes as long as the redistribution conditions are
respected in all points.

By using or distributing this program you automatically agree to
all of the above conditions and terms.

1.5   PowerPC (powerUP) support

JPEG-Box includes a PPC native JPEG *saver* module – which is really
extremely fast – that can only be utilized fromout the registered
version ("JPEG-Box.svm" – respectively "JPEG-Box.dll" – won't be loaded
and used unless you've registered JPEG-Box and installed your personal
keyfile).

Besides that, there are several PPC modules available for use
with SuperView-Libray, which JPEG-Box utilizes for *loading*
graphics. More detailed information on these PPC modules (PPC-Lib
and WOS versions) can be found in the documentation to

SuperView-Library V23+

Where to obtain PPC modules from ?

The PPC plugin modules basically already are part of Picture Manager
professional V5.5 (or any upgrade from earlier versions).

Additionally, the (non-exclusive) PPC modules also can be ordered by
registered (as well as newly registering) users of SuperView/SViewNG/SViewII.
or ImageEngineer.

For details, please see the registration form coming with SViewII.

1.6 purpose

JPEG-Box is a program that has been designed to write JPEG (JFIF) files
for WWW usage as easily as possible.

It can read any file format SuperView-Library does support and
can make a JPEG file out of it (see USAGE section for details):

 - support of external Fileformat-Libraries (SVObjects):

        - IFF-ACBM   - Windows,OS/2 BMP   - PNM (PBM,PGM,PPM)
        - IFF-ILBM   - JPEG (JFIF v6)   - IMG (GEM Graphics)
        - IFF-DEEP   - PhotoCD   - WPG (WP Bitmaps)
        - IFF-FAXX   - TIFF   - MacPaint MAC
        - IFF-PBM   - PCX   - EPS (Header/PS)
        - IFF-RGB8   - Atari Degas   - C64 (Koala, Doodle)
        - IFF-RGBN   - Spectrum ZX   - TIM
        - IFF-RGFX   - XWD   - FBM
        - IFF-YUVN   - Windows Icon   - CDR-Previews
        - QRT/POV Raytrace - Mac PICT-2   - SGI
        - SVG   - Targa   - Pictor/PCPaint
        - SunRaster   - UtahRLE   - PNG
        - CVP (passphoto)   - Amiga Icons (WB/Magic/New)

        as well as all OS3-Datatypes
        and 24 Bit DataTypes (picture.datatype V43).

        Many formats with 24 Bit-Support.
        Reads XPK- and PP20-packed data via Unpack.svobject.

        Writes C-Sourcecode in chunky/RGB notation.

        Together with external third party programs also the
        following file formats seamlessly can be embedded:

          File Format   needs program   also needs support for
          ----
        - AMF   MetaView   (ILBM)
        - DXF/AutoCAD (tm)   MetaView   (ILBM)
        - FIG   AmiFIG   (Postscript)
                         or: MetaView   (ILBM)
        - CGM   GPlot   (Postscript)

```
                              or:   MetaView         (ILBM)
         - IFF-DR2D            MetaView         (ILBM)
         - IFF-DRSD            MetaView         (ILBM)
         - Limbo               Limbo 4.0        (PNM)
         - Postscript (TM)     Ghostscript      -
         - WPG-Vector          MetaView         (ILBM)
         - WMF                 MetaView         (ILBM)


    - support of external periphal devices (DEVICE-access SVObjects):

         - Scanner (scanner.device of ScanQuix)
```

1.7 installation

Even if you use the supplied Installer-Script, you should read the following
notes. If you do not own the standard Installer-Program you should read
them even more carefully and follow the instructions given.

Note: Should after starting the installer script appear an error message
      "Can't find program 'Installer'" (or similar), you have to enter
      the correct path to your Installer program via the Workbench menu
      Icon/Information.
      Please do also not forget, to obtain and install SuperView-Library !

If you own a KeyFile, place it to "S:", or place it elsewhere and change
the environment variable "KEYPATH" to the corresponding directory.

The SuperView-Library has to be obtained and installed seperately, anyway !

    Needed Workbench Resources

HardDisk-Users won't perhaps have to install any additional Workbench
Resources to their HardDisk.
Disk-Users will have to copy the following libraries into their
"LIBS:"-Directory, if these not already do residate in ROM (may depend
on the version of the operating system):

```
  - gadtools.library    V37+      (V39 versions recommended;
  - asl.library         V37+       it's really time to upgrade
  - utility.library     V37+       to OS 3.1)
  - workbench.library   V37+
  - icon.library        V37+
```

Users of OS V2.04 or greater should also install the following
libraries:

```
  - amigaguide.library  V34+
    (please avoid using V34 - it's known to cause problems)
```

    Other needed Resources

You will also have to copy the following libraries to your
"LIBS:"-Directory (plus SVObjects, SVDrivers and SVOperators):

```
  - superview.library           V22+
```

```
– superviewsupport.library   V13+
```

GUI has been designed with StormWizard 2.0, so this program needs
"wizard.library" V37+ (you can find a copy on Aminet under
"biz/haage/WizardLibrary.lha").

For PowerPC support (optional modules) the following libraries
are needed:

```
– ppc.library                V45+  (V46+ recommended)
```

1.8   updatenote

```
General
~~~~~~~
```
Although the JPEG-Box archive does contain most of the needed parts,
you might wish to get updates sometimes.

The newest version usually can be found on Aminet under
Aminet:gfx/conv/JPEG-Box.LHA

SuperView-Library can be found under
Aminet:gfx/misc/SvII-#?.lha

1.9   usage

The GUI is quite self-explaining:

You can load SuperView-Library supported formats from:

```
– disk
– clipboard
– specific devices (Scanner, etc.)
```

and save these as JPEG (JFIF) files with the following options:

```
– progression on/off
– compression 0..100  (attention: "0" means BIGGEST compression !)
```

The GUI will display some useful information about the work being done,
there are also some useful menu entries.

It's also possible to view the JPEG compression source and destination
files in a window on workbench. This way there's a preview possible.

That's it :-)

1.10   evaluationrestr

This is the evaluation version of JPEG-Box, which is SHAREWARE.

  - it ticks down a 30 seconds counter in the "annoy" requester at startup
  - the PPC native JPEG save module ("JPEG-Box.svm" or "JPEG-Box.dll")
    can't be utilized

1.11 history

V4.13 (13.6.99):

  - "ask overwrite" now does work as it should
    (-> Kimme Utsi)
  - "add extension" actually was "replace extension";
    now also adds an extension, if there wasn't one before
    (-> Kimme Utsi)
  - fixed problem, when WS.EXE was in a PROGDIR: with
    ending with a colon (device, assign)
    [-> the colon wasn't handled as it should have been]
    or with a white space [-> wasn't handled at all]
  - suppressing WS.EXE's CLI output now (oops)
    (-> Kimme Utsi)

V4.12 (1.6.99):

  - maintenance release

  - please use at least V41.101 of wizard.library.
    You should find a copy coming with demo versions
    of various programs under ftp.haage-partner.com

  - the recommended alternative for WarpOS (WOS) users
    is, to upgrade to WarpOS V4.0 and install the
    latest ppc.library emulation by Frank Wille
    (V0.6d or higher, V0.6 will not suffice), then
    run the PPC datatype in emulation mode (see prefs).

    The latest ppc.library emulation for WOS can be found on
    Frank Wille's homepage under http://home.owl.de/~frank/

  - if you need to create/optimized PNG (PiNG) graphics
    for WWW uses or other purposes, please have a look
    at our PNG-Box tool, which has been designed
    especially for this purpose (Aminet:gfx/conv/PNG-Box.lha)

  - credit card online registration via RegNet now
    is possible. Some special Offers have been
    set up for you, some of wich are derived from the usual
    Discount list.
    Or go to http://www.ar-kleinert.de to the Amiga Software Area
    (RegNet page) and order with only one click! Please have a look!

  - please note our new WWW domain www.ar-kleinert.de

V4.10 (1.4.99):

```
    - now at least does require SuperView-Library V23+
    - uses new ppc launching system of above mentioned version
    - .elf module renamed to .svm
    - added WOS PPC module (.dll)

V4.00 (19.3.99):

    - it's now possible to view the JPEG compression source and
      destination files in a window on workbench. This way
      there's now a preview function available.

V3.26 (2.3.99):

    - small changes
    - updated docs

V3.25 (1.1.99):

    - updated docs, new year maintenance, etc.

V3.23 (28.11.98):

    - now asks before overwriting existing files (optional)
    - removed old logfile code
    - adjusted version requirements
    - reworked docs
    - bumped version to illustrate equality to PNG-Box'
      state of development

V1.02 (16.11.98):

    - PPC I/O speedup

V1.01 (17.10.98):

    - gadget text mentioned wrong extension (.png instead of .jpg)
    - added modified GUI, with nicer JPEG 'icons'
      (-> graphics composed and added by Georg Rottlaender)
    - made sure, that the progress bar ends at 100% always when saving
      (in 68k mode, sometimes 97% or something like this was possible)
      (-> Jon Peterson)
    - updated docs

V1.00 (2.10.98):

    - first release
```

1.12 correspondence

```
  ** General PerSuaSiVe SoftWorX WWW Support Site is http://wdo.de/ark/
  ** - actually redirected to http://www.ar-kleinert.de


      _____
  |        You may reach me the following way.             |
```

```
|      Send bug-reports, money or whatever to:              |
|----------------------------------------------------------|
|          * SuperView Development & Registration *         |
|            * DRAFU Development & Registration *           |
|        * Image Engineer Registration Site Europe *        |
|                                                          |
|                                                          |
|                 PerSuaSiVe SoftWorX                       |
|                                                          |
|                 Andreas R. Kleinert                      |
|                 Sandstrasse 1                            |
|                 D-57072 Siegen                           |
|                 Germany, Europe                          |
|                                                          |
|                 Phone:  +49-271-22869 also FAX + AM       |
|                                                          |
|                 Weekdays after 18.00h.                   |
|                                                          |
|         When calling via phone you may leave a message,  |
|         if I'm not available - but don't expect me       |
|         calling back to USA, Australia, ... since         |
|         german phone rates are HIGHLY expensive.          |
|_____|
```

EMail:

        Please send binaries via ARK@News.wwbnet.de, and keep
        them smaller than 16 KB - otherwise ask before.
        Please think twice before sending them - my postbox
        is not unlimited in size.

        * Do not send binaries via Fido or Fido-Gates ! *

            - Fido   Andreas Kleinert 2:2457/350.18
            - Usenet
              >>>   info@ar-kleinert.de
                     Andreas_Kleinert@gmx.de
                     Andreas_Kleinert@t-online.de
                     ARK@News.wwbnet.de

            - If nothing else works, try one of these public
              Fido-Usenet gateways:

                In Germany:
                  Andreas_Kleinert@p18.f350.n2457.z2.fido.sub.org

                From USA or elsewhere:
                  Andreas_Kleinert@p18.f350.n2457.z2.fidonet.org

When reporting any bugs, please don't forget to include a detailed
description of the bug and tell me, if it is reproduceable or not.
Please also mention the version number of JPEG-Box you used and describe
your system configuration (Amiga model 500/.../4000T-060, Kickstart/OS,
RAM, HardDisk, special configurations).

1.13   Making use of 680x0 CPUs

Basically, this program does run with a plain 68000 CPU.

However, if you do own an 68020/030+68881/882 FPU or
68040/060+FPU, or maybe a dual processor board with PPC,
you may wish to make use of the extra horse power.

There are certain configuration options, special libraries
and/or patches available, so you perhaps should investigate
into that issue a little bit deeper – but carefully.


```
PPC Support
===========
```
1. With CyberStorm PPC cards, it may make sense to make use
   of the "SetFastAvec" and "Set60nsMode" (SetMemMode) tools,
   which should speed up the system performance somewhat,
   i.e. by addressing your RAM with 60ns instead of 70ns
   access time. Newer versions allow to do these settings
   fromout the card's bootmenu. If you get random crashes,
   step back to 70ns.

2. Make sure, that you have a lot of RAM on the accelerator,
   so that the PPC isn't forced to make accesses to the slow
   motherboard RAM. If you get random crashes, make sure
   you followed the installation instructions, and did
   not configure SIMMs of different vendors for a 64 bit
   access bank.

3. This program does make use of "ppc.library". So:
   Make sure, that you a) don't have "powerpc.library" installed
   or b) have a version of "powerpc.library" installed, which
   does not conflict with "ppc.library" (V7 is said to work
   together with ppc.library). Don't install ppc.library
   without having a PPC board plugged in. Always make use
   of the newest 68040/68060.library plus ppc.library – as
   available under ftp.phase5.de or Aminet.

   (There's BTW now indirect support for powerpc.library V14
    as well, so you can decide. It should work to run the
    PPC-Library versions under Frank Wille's ppc.library
    emulation for WOS.)

4. Read the corresponding FAQ pages for more information on
   PPC support and configuration – especially note, that
   a keyfile is required for fully functional PPC support
   within this datatype.


```
68020/030+68881/882 FPU and 68040/060+FPU Support
=================================================
```
Usually, Amiga OS' mathieee-Libraries do automatically manage the
coprocessor support, but for some reasons, these libraries are not
used with this datatype:

```
- they can't be shared between processes
- they are not actually optimized for 68040/060+FPU as with OS 3.1
```

Unfortunately, the used FFP libraries don't support an FPU at all.

But there are certain patches available on Aminet, to speed
up FPU support in general, add FPU support for the FFP libraries
or in general allow more efficient use of the 040/060 CPUs,
e.g. by avoiding unnecessary emulation of missing instructions
through 68040/68060.library.

Make sure, that those patches don't conflict with certain
versions of the 680x0 libraries or even are part of these
already. If you've carefully read the docs you may wish
to check out the following solutions:

1. Fix bugs within the math libraries

   This one has nothing to do with the FFP libraries, but
   since there's also a bug in mathieeesingbas.library (which
   resides in ROM), you should install a patch for that:

   a) best solution is a newer SetPatch Version V43.x
      (available from ftp.amiga.de somewhere in "/pub/")

   b) if SetPatch V43 does not work with your OS version,
      you should try for example "SetMathPatch"
      (coming e.g. with GhostScript – see Aminet:gfx/show)

   Those patches may conflict with some math library
   replacements – it seems to be logically, that a
   completely rewritten replacement library of course
   does not need to be patched any further. At least
   not for the same bugs...

2. Patching the math#? libraries for better (or introducing)
   FPU support:

      a) – FMath V40.6 Aminet:util/libs/FMath406.LHA
         – FFPPatch   Aminet:util/boot/ffppatch.lha

      b) – HSMathLibs   Aminet:util/libs/HSMathLibs_040.lha
                        Aminet:util/libs/HSMathLibs_060.lha

      c)   various other patches from the "util" area of Aminet

   With the 68040/68060.libraries of p5, according to their
   docs, further patches of the math libraries are not
   recommended – however may work nevertheless.

3. General 040/060 speedup

   For automatic speedup on 68020+ systems, this datatype
   makes use of utility.library.

   This one has nothing to do with the FPU, but if you do
   own a 060 and OS 3.0 you should perhaps consider to install

```
        "Mult64Patch", which claims to implement the 64 bit integer
        functions UMult64/SMult64 of utility.library V39+ (which have
        to be software emulated on the 060) two times faster than
        the patches done by 68060.library and four times faster than
        the trap emulation. A speed test program is included.

        That program can be found under Aminet:util/boot/Mult64Patch.lha
        - however, it may already be obsolete for newer versions
        of your 68060.library. Do the speed check, then decide.

    4. Better performance on 680x0 and PPC

        Here, the following tools work quite fine on a 040/PPC board
        (taken in this oder from s:startup-sequence):

         C:FastExec >NIL: <NIL: NOEXEC FASTSSP FASTVBR FASTEXP FASTMEM FASTINT  ←↩
             REBOOT
         C:SetPatch QUIET
         C:QuickRom >NIL: <NIL:
         Run >NIL: <NIL: C:CpuBlit

        FastExec V2.9   (Aminet)          -> various speedups
        SetPatch V43.6b (www.amiga.de)   -> OS patches
        QuickRom V36.08 (Aminet)          -> ROM to RAM
        CpuBlit98       (Aminet)          -> let the CPU do blitting

        This all runs fine in 60ns mode, together with SetFastAvec,
        PPCInstall and CyberGraphX V3.
```

1.14 thanks

```
Thanks go to (in order of appearance ;-)
========================================

  (some of these people did register, others did make
   suggestions/bug reports - how about you ?)

- Roman Patzner (RomIcons)     - Georg Rottlaender


Credits go to Georg Rottlaender <Georg.Rottlaender@home.ivm.de>
for improving my original PNG-Box Wizard GUI and making it more
user-friendly, plus for some changes to the JPEG-Box GUI.


Beta Testers:

 - Georg Rottlaender              - Jon Peterson
```