

SuperView-Library ii

COLLABORATORS					
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Chapter 1

SuperView-Library

1.1 SuperView Library Documentation

```
superview.library V17.5
```

'Pathfinder' Release

- Mars mission started on Independence Day, July 4th

- Freeware (Licenseware) - product-specific Licenseware

Any usage from and by other programs without an explicite license is strictly forbidden (see "Distribution"). Ask for licenses.

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A PerSuaSiVe SoftWorX PRODUCT.

This program has been written under OS V3.1 and is therefore fully compatible. It needs OS V2.04+.

Actively supports PowerPC (TM) via powerUP (TM).

Release Date: 20.7.1997

If you at first don't succeed, call it a public beta version...

Legal

Copyrights and legal stuff

Disclaimer

Distribution

Usage

Short: Purpose and Abilities

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Requirements

Installation

68020-060 support

Making use of fast CPUs

PowerPC (powerUP) support

What can be expected ?

Contact

How to contact the author

Archive

History

SVObject Descriptions/History

Device SVObject Descriptions/History

SVDriver Descriptions/History

SVOperator Descriptions/History

Support-Library Description/History

Various Topics

Supporting Software

Known bugs and workarounds

Notes and Hints

Possible future enhancements ...

Credits and even more legal stuff

Thanks and Greetings

SuperView in the Press

Bibliography

More Projects

ControlPad Preferences

Preferences

ControlPad Fileformat

CPInfo Fileformat

ControlPad enlistment

External Links in this Directory

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About Power-Brei (German Disk Magazine)
German ReadMe File

 $_{\rm }$ // Only $\X/$ Amiga makes it possible!

Please visit:

SuperView WWW Sites
http://home.t-online.de/home/Andreas_Kleinert/
http://www.amigaworld.com/support/sview/

Simon Edward's Image Engineer WWW Site
 http://yallara.cs.rmit.edu.au/~sbe/
(Image Processing program produced by Simon Edwards)

Die CHAOS-Theorie:

"Dabei geht es zum Beispiel darum, den verdammten Schmetterling zu finden, dessen Flügelschläge die vielen Stürme in letzter Zeit verursacht haben." (Terry Pratchett in "Total verhext")

In English means something like:

The CHAOS theory:

"Like finding that bloody butterfly whose flapping wings cause all these storms we've been having lately and getting it to stop." (see "Witches Abroad" by Terry Pratchett)

Ahm...well:

...and thanks for all the fish.

1.2 Copyright

The superview.library and the distributed files - e.g. the documentation files - are (C)opyright 1993-97 by Andreas R. Kleinert. All rights reserved.

(For some files there may additional or substitutive Copyrights take place, which then are stated locally within the documentation or via local reference to "Credits".)

The following usage and license conditions are announced for all parts of the distribution, which means SVObjects, SVDrivers, SVOperators and all other files.

When refering to the whole program package as such, it is called

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"SuperView-Library".

The usage and distribution of SuperView-Library takes place under the concept of product-specific Freeware (Licenseware).

For more details on distribution rules and developers restrictions, you have to see paragraph "Distribution".

Please note:

- * 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.
- * Some of the mentioned names or products within this or other documents may be copyrighted by companies or trademarks of companies or persons.
- * This software is based in part on the work of the Independent JPEG Group (concerning JPEG.svobject).
- * The "xpkmaster.library" (part of the useful Xpk package, which can be found on Aminet) is developed under the concept of the GNU license by its authors (c/o Dirk Stöcker, stoecker@rcs.urz.tu-dresden.de). This freely distributable Library is needed by SVG.svobject and Unpack.svobject to read and decode XPK-packed files.

GIF is obsolete - you neither should use nor support it any longer. If you are doing WWW design, use PNG and JPEG instead. It's important!

This software was translated with the help of ATO, the Amiga Translators' Organization. ATO is a non-profit organization that translates for the Amiga community!

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

Distribution in Common

The Library must not be distributed isolated, detached from any specific program package, whose author has licensed the library.

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If the licensed library is included within the licensing program's program distribution, the distribution conditions of this program take place as long as these do not explicitly contradict to the disposals described in the following text.

Licensed programs are not restricted to have any special legal copying conditions, so the Library may appear together with any form of Software, like e.g. Freeware, Shareware or commercial programs, perhaps with exception of "pure" Public Domain.

Restrictions

~~~~~~~~~~~~~

The program SuperView-Library in this version is product-specific Freeware (Licenseware), which at first means, that a single distribution of the Library is as well forbidden as an unauthorized distribution together with programs of non-licensees.

Also, the Library MUST not:

- be included into other program's distributions without my explicitely written permission
- be copied as a single package without being directly related to a specific program
- without a license be copied and also not be used directly or - via any tricks - indirectly

#### Licensing

~~~~~~~

There is no way of automatic licensing via "agree-to-the-above-terms". Any license has to be given in written, non-electronic form. Interim-licenses may be promised via phone, email, etc but have to be confirmed in paper form.

The only one, who is authorized to write and send licenses or promise licensing is the author of SuperView-Library, which is Andreas R. Kleinert.

If you want to license the library, please send me the following information:

STATUS - what's the status of your planned or actually existing program ?

Main categories are Freeware, Shareware, Commercial.

WHO - what's your (or your companies') name, address and
 phone number, maybe also email address?

WHAT - what kind is your program of ?

Not any programmer of any kind of program will get a licence.

I am not going to support programs, which may concern

my vital interests by being direct competitors of

other programs where I am involved as a participator,

depending on the success of the programs. [;-)]

On the other hand there are various ways to synchronize

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programming efforts and to come to a solution, which is acceptable for both sides.

PLANS - according to the type of your program you might also tell me something about your plans for future versions of the program as long as it does concern a fundamental change in the program's concept and function (competitor)

SAMPLE - would be nice to see a copy of the previous, beta or final version of the program

PAYMENT - are you gonna pay for the licence ?

Freeware authors will not have to pay anything, if they get a license. Shareware authors might. Commercial programs will perhaps.

Tell me what you think, then we'll talk about it. Fees aren't expensive in my opinion.

After Licensing

Each license is specific to the licensee and his wishes.

Common to all licensees is the following:

- The Right to use the unmodified library within the program or program-group it has been licensed for
- Access to not publicly documented functions
- The Right to distribute the library together with your program
- The Right to integrate the library into the concept of your program as long as no basic parts have to be changed
- The Obligation to respect the distribution conditions and to add a ReadMe file and documentation remark reflecting this to the program
- The Obligation to send me a copy of the final, registered or register-able version of the program using SuperView-Library

If there are more questions, please don't regret to ask me, because just asking doesn't cost you anything.

I may as well tell you, which programming languages currently are directly supported (C of course always).

1.5 Abilities, Purposes and much more

The "SuperView-Library" consists of many functions and sub- \hookleftarrow libraries,

which allow quick and easy displaying, saving, converting and processing of various picture formats, like IFF-ILBM, JPEG, PCX, Targa, PCD TIFF, PNG, BMP, \dots (more than 43 altogether).

It has been designed for the purpose to display and process any

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common type of bitmap graphics as fast and as comfortable as possible on almost any Amiga hardware configuration.

External Loader-/Saver-Libraries (SVObjects), Graphic Card Drivers (SVDrivers) and various Operators (SVOperators) allow easy but flexible configuration, usage and expansion.

Programming documentation is available for license-takers, only.

Feature Overview

Recognized file graphic formats

Supported graphic cards and display adapters

Supported input/output devices

Available image processing operators

1.6 Making use of 680x0 CPUs

This program works WITHOUT any FPU, BUT...

If you do own an 68020/030+68881/882 FPU or 68040/060+FPU you may wish to make use of these.

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 mathtrans.library does not support an FPU at all.

But there's a solution: it is strongly suggested, to use some of the available math-library replacements and/or patches from Aminet.

1. FMath by Martin Berndt, for example does replace all of

them:

- mathieeedoubbas.library
- mathieeedoubtrans.librarymathieeesingtrans.library
- mathtrans.library

It is strongly recommended to install V40.6 or a newer version from Aminet (Aminet:util/libs/FMath406.LHA).

2. FFPpatch by Jess Sosnoski additionally patches some functions of mathffp.library to use 68881/2 instructions. It currently makes use of some mathtrans.library functions

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for FFP/IEEE conversion and thus does require FMath as well. (There's a 'ffptest' program included, so that you can test, whether it improves speed or makes it worse.)

It is strongly recommended to install V1.2beta or a newer version from Aminet (Aminet:util/boot/ffppatch.lha).

- 3. 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:
 - best solution is a newer SetPatch Version V43.x
 (available from ftp.amiga.de somewhere in "/pub/")
 - if SetPatch V43 does not work with your OS version, you should try for example "SetMathPatch" (coming e.g. with GhostScript)

If you do own a CyberStorm 060 board, just ignore what I said before and follow the instructions given in the 68060-Library documentation.

1.7 PowerPC (powerUP) support

Concept

The most time-consuming routines of certain modules of SuperView-Library have been ported to native PowerPC code and perhaps will profit a lot from the presence of an installed powerUP system.

These "native modules" are located in a new subdirectory of LIBS: called "svppc/", with subdirectories for each of SuperView-Library's module types.

If any "native modules" are present, these will be used whenever applicable. Should none of these modules be available, then this does not matter, since the plain 68k code (which may be optimized for a certain 68k CPU, though) will be used instead (fallback option).

Note, that SuperView-Library's native modules won't replace any of the existing libraries or modules as such - they only do supply specialized routines in native code for certain tasks.

When running any PowerPC code, you should have made sure, that there's enough RAM on the powerUP board available — at least in an A4000 the RAM interface from the CPU card (e.g. A3640) to the mainboard is so slow, that even a 68040 could not access Fast RAM with full speed, so possibly a PowerPC would suffer from the same problem.

You should take care, that there's still enough "fast" Fast RAM available, even if all the libraries and code have been loaded: usually the graphics are loaded at last – a 1024×768 graphics in 24 Bit will just take 2.4 MB and in a dithered version again around 790 K.

If there's enough "fast" Fast RAM available, you can expect high speed

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increases with most basic operations, especially when internal representation conversions do take place.

(See the documentation of the single modules for further information. PowerUP support usually is marked separately, on top of the module documentation.)

Availability

NONE OF THE PPC MODULES ARE FREEWARE - THEY WON'T APPEAR ON AMINET.

More than 25 modules are made available in a special powerUP PPC plugin module package, which e.g. can be bought by registered SuperView/SViewNG users or will be included with some commercial programs.

Also, there will follow some PPC modules, which will only be available for exclusive shipment with some commercial programs (as also are the concerned SV modules).

This is high end software, and it's development must be financed - so you have to pay for it to help ensuring further development.

1.8 Installation and Configuration

Installation Options: Overview

- A. Automatized Installer-based Installation
 - 1. Installer procedure
- B. Customized Installation
 - 1. Main installation procedure
 - 2. Setting Up Standard Configuration
 - 3. Plugging in 680x0 modules
 - 4. Plugging in PackerSupport
 - 5. Plugging in SQ-Operators
 - 6. Using VMEM: (Needed)
 - 7. Plugging in Ghostscript/Postscript (TM)
 - 8. Reading GPlot (CGM), AmiFIG (FIG),
 AMF/WMF/DR2D/DXF/WPG-Vector (MetaView)
 - 9. Plugging in powerUP (TM) PPC modules
- C. To Be Checked Also
 - 1. Datatypes-Support
 - 2. Other Libraries
 - 3. Additional settings
 - 4. Preferences

A. Automatized Installer-based Installation

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1. Installer procedure

Depending on the selected skill mode (novice, intermediate, expert) you will at least be asked for some of the following:

- your basic graphics engine (ECS, AGA, various GfxCards)
- a place to install the libraries to instead of LIBS:
- a place to install the catalogs to instead of SYS:locale/catalogs
- a path to assign VMEM: to (s:user-startup will be modified)
- whether SVPrefs should be copied to SYS:Prefs
- whether to install the PackerSupport stuff
- whether to immediately also install the SQ-Operators
- questions about (existing) GhostScript/MetaView installations

B. Customized Installation

1. Main installation procedure

Copy "superview.library" and "superviewsupport.library" to your LIBS: directory, the SVObjects to "LIBS:svobjects/", the SVDrivers to "LIBS:svdrivers/" and the SVOperators to "LIBS:svoperators/"!

(PowerPC modules must be stored in "LIBS:svppc/" plus subdirectories - see paragraph 9.)

Be aware, that library names are case-sensitive and wrongly spelled libraries won't be recognized, though.

Installation of the libraries can be done to any directory, so that these may be installed separate from the system libraries. Adding the SuperView-Library to the system would then be managed via

Assign LIBS: [PATH] ADD

somewhere in the User-Startup.

2. Setting Up Standard Configuration

Docs/Sample_Configs contains basic configuration settings for ENVARC: and ENV: which have to be copied there to allow the library system running without problems. env_AGA contains plain AGA configuration and so on - see Installer script for more information.

3. Plugging in 680x0 modules

Owners of 68020-68060 systems should copy the turbo versions of some of the modules over the 68000 installation. Simply type "Copy libs/68030 to LIBS: all" or similar.

4. Plugging in PackerSupport

PackerSupport/libs/svobjects does contain the support module

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for XPK (includes PowerPacker PP20) compressed data. Optionally copy this to LIBS:svobjects and the config from env to ENVARC: (and ENV: as well, of course)

5. Plugging in SQ-Operators

Steve Quartly's great additional svoperators can be found within "SQ-Operators/". Just install those separately, as already done for PackerSupport before.

6. Using VMEM: (Needed)

Addionally, you should create an assignment called "VMEM:", which is intended to contain virtual memory image files or other temporary data, which may be created either by superviewsupport-library (vmem_XXXXXXXX), JPEG.svobject (jpeg_XXX) or other modules. It does not always make sense, to place this directory somewhere at a Ram-Disk, because most programs will perhaps only try to place files there, after they already checked, that there's no more memory available (so even your Ram-Disk would not grant more space).

It is suggested to place this Assign on a fast harddisk or partition, with a high AddBuffers value.

7. Plugging in Ghostscript/Postscript (TM)

If you have Ghostscript installed, you may want to use it for reading Postscript (TM) files - if not, you may consider to install it for such uses.

See

GhostScript.svobject description for more information.

 Reading GPlot (CGM), AmifIG (FIG), AMF/WMF/DR2D/DXF/WPG-Vector (MetaView)

THE / WIE / BREB/ BIE / WE'S VESSEL (HEEGVIEW)

See

GPlot.svobject

AmiFIG.svobject
and

MetaView.svobject descriptions for more information

on installation.

Please note, that GPlot and AmiFIG both do require Postscript support, which means: a fully working Ghostscript installation.

9. Plugging in powerUP (TM) PPC modules

These have to be placed to "LIBS:svppc/" into the same directories as their counterparts, thus "LIBS:svpcc/svobjects/" and so on.

C. To Be Checked Also

1. Datatypes-Support

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"datatypes.library" V39+ is only needed, if OS3-DataTypes are wished to be supported - not available for OS2 users. For 24 Bit datatype support also picture.datatype V43 is needed to be installed (with ECS/AGA this one also needs a version of cyberncg.library, which had been removed from newer pic-dt 43 distributions - alternatively use the pic-dt 43, which is coming with the Picasso96 RTG system and which works with ECS/AGA without any other requirements).

2. Other Libraries

Please take care, which libraries also additionally may be needed by single SVObjects/SVDrivers/SVOperators.

3. Additional Settings

Directory Caching: ~~~~~~~~~~~~~~~~

Buffer values (set via C:AddBuffers) for the used drives should at least be around 25, sometimes more may be quite useful.

Stacksize:

~~~~~~~~~

If you don't set this one to a reasonable value, the system might crash when using some specific modules (e.g. Dither24Bit). It is strongly recommended to use values >= 32768 bytes with any programs using the library.

#### 4. Preferences

For modifying any specific ControlPad settings, you should use SVPrefs (optionally copied to SYS: Prefs during Installer-based installation).

Nevertheless sometimes modules do not come with the required .cpinfo files, so it would become necessary to edit ControlPad files directly at their locations ENV: SuperView-Library and ENVARC: SuperView-Library, maybe by using the descriptions inside the doc-file "ControlPads".

# 1.9 Overview of currently available SVObjects

Available SVObjects and/or supported file formats (mostly  $\leftrightarrow$ included) :

SVObject

Type Read-Support

Write-Support

AMF

EXT -> MetaView 1.x (not available)

BMP (Win, OS/2)/RIFF

EXT max 8/24bit files max 8/24bit files SuperView-Library 13 / 176

```
C64 (Koala, Doodle)
   EXT max 4bit files
                            (not yet available)
CDR (Corel Preview)
   EXT (various)
                            (not available)
CGM
                                  (not available)
                 EXT -> GPlot
Degas (Atari)
        EXT max 4bit files (not available)
DXF
                 EXT -> MetaView 2.x (not available)
*
EPS(F)-Header
        EXT (various)
                                 only from 24bit sources
FBM (*nix)
          EXT max 8/24bit files max 8/24bit files
FIG
                 EXT -> AmiFIG
                                         (not available)
Icon (W*nd*ws)
       EXT 16 Color Icons (not available)
IFF-ACBM
             EXT max 8bit files max 8bit files
IFF-DEEP
             EXT 24bit files
                                     only 24bit files
IFF-DR2D
             EXT -> MetaView 2.x
                                     (not available)
IFF-FAXX
            EXT 1bit files
                                     (not available)
IFF-ILBM
FastILBM24
EXT max 8/24bit files max 8/24bit files
IFF-PBM
             EXT 8bit files
                                      8bit files
IFF-RGB8
            EXT 24bit files
                                     only 24bit files
IFF-YUVN
             EXT 24bit files
                                     only 24bit files
IMG (GEM/V*nt*ra)
     EXT max 8bit files (not yet available)
```

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JPEG (JFIF)

EXT max 8/24bit files always as 24bit files

Limbo

\* EXT -> Limbo (24 Bit via Limbo)

MAC (MacPaint)

EXT max 1bit files (not yet available)

PCD (PhotoCD)

EXT 24bit files (not available)

PCX upto V3.0

EXT max 8/24bit files max 8/24bit files

PICT-2 (Mac)

EXT always as 24bit files (not available)

Pictor/PCPaint/PIC

EXT max 8bit files (not yet available)

PNG (Network Gfx)

EXT max 8/24bit files max 8/24bit files

PNM (\*nix)

EXT max 8/24bit files max 8/24bit files

Postscript/PDF

\* EXT -> Ghostscript (not available)

ORT/POV

EXT 24bit files 24bit files

SGI

EXT max 8/24bit files only 24bit files

SunRaster (RAS)

EXT max 8/24bit files max 8/24bit files

SVG Graphics

EXT max 8/24bit files max 8/24bit files

Tarqa

EXT max 8/24bit files max 8/24bit files

TIFF (V5.0)

EXT max 8/24bit files max 8/24bit files

Utah RLE

EXT 24bit files 24bit files

WMF

\* EXT -> MetaView 1.x (not available)

WPG (WP-Draw BitMap)

EXT max 8bit files (not yet available)

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```
WPG (WP-Draw Drawing)
               * EXT -> MetaView 2.x (not available)
              DataTypes
                             INT all Pictures/DTs
                                                         (not available)
  * SVObjects marked with an Asterisk will only work, when
    the mentioned external programs (usually freely distributable
    software from AmiNet) also have been installed and set up as needed.
    (If not set up, these may be disabled via controlpad STATUS=DISABLED.)
 There's also an Unpack.svobject in the PackerSupport-Directory,
 which allows reading of packed files without explicitely unpacking
 these before (supports XPK and PP20).
 It is as well possible to save graphics as
              C-Sourcecode
   GIF is obsolete - you neither should use nor support it any longer. If
   you are doing WWW design, use PNG and JPEG instead. It's important !
  If you need to handle GIF graphics (e.g for conversion to PNG), just
  install one of the available GIF datatypes - and reading will work.
Planned SVObjects (no guarantee !) :
   - XBM
   - TIM
   - MTV
   - Rendition
   - various raw formats
   - more Atari formats
      (if I get my hands on some pictures ->
             send
               some, if PD !)
   - and more
      (you may
              send
              me gfx's and/or descriptions, if PD)
  Please ask before sending graphics via email.
```

## 1.10 Overview of currently available Device SVObjects

```
Available SVObjects:
Type
```

SVObject

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Printer
supports printer.device and TurboPrint 3.x-5.x EXPORT

Scanner
supports scanner.device of ScanQuix IMPORT

# 1.11 Overview of currently available SVDrivers

Overview: Supported and Non-supported Graphics Cards

| Card Name           | Kin | d of | Suppo | rt  |  |
|---------------------|-----|------|-------|-----|--|
| 1600GX              | _   |      |       |     |  |
| A2410 TIGA          | CG  | EGS  |       |     |  |
| CyberVision64       | CG  |      | P96   |     |  |
| CyberVision64/3D    | CG  |      |       |     |  |
| DCTV                | _   |      |       |     |  |
| Domino              | CG  | EGS  | P96   |     |  |
| DraCo Altais        | CG  |      |       |     |  |
| Firecracker         | _   |      |       |     |  |
| GDA-1               | _   |      |       |     |  |
| Graffity            | _   |      |       |     |  |
| GVP 110/24          |     | EGS  |       |     |  |
| GVP IV 24           |     | EGS  |       |     |  |
| Colormaster         |     | EGS  |       |     |  |
| Inferno (Wildfire)  | CG  |      |       |     |  |
| Merlin              | CG  |      | P96   | NAT |  |
| OMniBus             |     |      | P96   |     |  |
| OpalVision          |     |      |       | NAT |  |
| Picasso II          | CG  |      | P96   |     |  |
| Picasso II+         | CG  |      | P96   | NAT |  |
| Picasso IV          | CG  |      | P96   |     |  |
| Piccolo             |     | EGS  |       |     |  |
| Piccolo SD64        | CG  | EGS  | P96   |     |  |
| Rain*ow II (R-II)   |     | EGS  |       |     |  |
| Rain*ow III (R-III) |     | EGS  |       |     |  |
| Retina Z2           |     | EGS  |       | NAT |  |
| Retina Z3 BLT       | CG  |      |       | NAT |  |
| Spectrum            | CG  |      | P96   |     |  |
| Visiona             |     | EGS  |       |     |  |

As you can see, any reasonable graphics card for the Amiga is supported via one or more SVDrivers for emulation software, available for these. Only some strange RGB-Port adaptors or rare framebuffers are not supported.

# Shortcut Explanation

\_\_\_\_\_

CG = CyberGraphX or CyberGraphX-Clone available (CyberGraphics.svdriver)

EGS = EGS available (with EGSPlus this means: CG, too)

P96 = Picasso96 SVDriver available

NAT = native emulation software and SVDriver available, as long as not already covered by the other mentions

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- = nothing known about any emulation software

Available SVDrivers (mostly included) :

SVDriver Requirements BITPLANE ONEPLANE

OCS/ECS

OCS/ECS\* and OS V2.04+ (V37+) (system) 8/24bit

AGA

AGA\* and OS V3.x+ (V39+) (system) 8/24bit

CyberGraphX

CyberGraphX\*\* RTG System 8bit 8/24bit

EGS 7

EGS Emulation Software V7 8bit 8/24bit

Merlin

Merlin\*\*\* Card Software 8bit 8/24bit

OpalVision

OpalVision Card Software 8bit 8/24bit

Picasso96

Picasso96 RTG System 8bit 8/24bit

Picasso

PicassoEmu\*\* (Picasso II(+)/IV) 8bit 8/24bit

Retina

RetinaEmu (Retina Z2/Z3) 8bit 8/24bit

- \* ECS- and AGA.svdriver will both work with graphic cards, if they are configured with "BITMAPCOPY=RTG" and the GfxCard software does supply a Workbench Emulation and/or Screen Promotion. If you own a graphics card, without having an appropriate SVDriver for it, always try using AGA.svdriver at first. For handling 24 Bit, extra settings should be done (dithering, etc.)
- \*\* The APIs of these RTG/emulation systems have been "cloned" by other systems, also. Drivers possibly may work with these as well, since they are not relying on any undocumented features except maybe concerning specific system-friendly workarounds for specific bugs. If there is a "native" driver for these systems, you should not use the "cloned" API driver if not stated differently or unavoidable.
- \*\*\* With ProBench V3, use the CyberGraphX SVDriver instead.

  The native API seems to have become incompatible to its predecessors in some ways.

[ API = Application Programmers Interface ]

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# 1.12 Overview of currently available SVOperators

```
Available SVOperators (mostly included) :
SVOperator
             24BitToHAM
                       dithers 24 bit RGB to HAM6/HAM8
             AnyTo24Bit
                       converts input to 24 bit
             CallPNM
                          Call preset external PNM operator
             Crop
                             "crops" boxes of any size from 8/24 bit graphics
             Dither24Bit
                      dithers 24 bit RGB to 2..256 Colors
             ExtractBlue
                      extracts Blue values from (upto) 256 Colors or 24 bit
             ExtractGrayScales
                converts (upto) 256 Colors or 24 bit to Gray
             ExtractGreen
                     extracts Green values from (upto) 256 Colors or 24 bit
             ExtractRed
                       extracts Red values from (upto) 256 Colors or 24 bit
             HilbertDither256
```

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```
dithers to Black & White
           LeftToRight
                    turns left to right ...
           OptimizePalette
                reduces depth by filtering unused or redundant colors
           PaletteDither
                  dithers (optionally in parts) to a user-supplied palette
           Rotate
                         rotates by 90/180/270 degrees ...
           RotateFree
                     rotates freely by 0..360 degrees about a given point
           Scale50
                        scales to half/double size
           TopToBottom
                    turns top to bottom ...
           XOR
                            nice effects ...
Just for information:
 - this distribution also includes a bunch of image processing
   operators by
           Steve Quartly
            (SQOperators) like
    SQBentley.svoperator
                                     SQBlur.svoperator
    SQContrast.svoperator
                                     SQDeep_Press.svoperator
    SQDiffuse.svoperator
                                     SQEmboss.svoperator
    SQHighPass.svoperator
                                     SQMosaic.svoperator
    SQMotion_Blur.svoperator
                                     SQOilPaint.svoperator
    SQSharpen.svoperator
                                     SQSlicing.svoperator
    SQThreshold.svoperator
                                     SQTiling.svoperator
 - buyers of the commercial program
           Picture Manager professional
                   (short: PMPro) will also get some additional operators, \leftrightarrow
                      which
   are not freely distributable (exclusively shipped with PMPro):
   Antique.svoperator
                                     Brightness.svoperator
    Complement.svoperator
                                     Contrast.svoperator
                                     DitherFix24.svoperator
    Convolve.svoperator
   EdgeDetect.svoperator
                                     Gamma.svoperator
   Mosaic.svoperator
                                     RGBAdjust.svoperator
    ScaleFree.svoperator
                                     AutoBorder.svoperator
    (refering to Release V4.x - may differ from version to version)
```

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Planned SVOperators (no guarantee !) :

- some more operators for common image processing
- and more

# 1.13 Software supporting SuperView-Library

o The following programs do own a license for SuperView-Library:

| Program   | Description                                                        | Status    |    |
|-----------|--------------------------------------------------------------------|-----------|----|
|           | SuperView THE image viewer and converter for anyone                | SW        |    |
|           | SqOpal  THE image viewer and processor for Opal                    | Vision    | SW |
|           | SuperLoader THE loader module for OpalPaint                        | FW        |    |
|           | <pre>ImageEngineer THE image processing program for anyone</pre>   | SW        |    |
|           | PictureManager<br>THE image database program for professionals     | COM       |    |
|           | DRAFU THE function plotting program                                |           | SW |
| ArtEffect | GenesisPro Editor<br>Game Level Editor<br>SuperView-Library Plugin | FW<br>COM |    |

o The following small programs have been written by me and do also support SuperView-Library in some way :

| Program    | Description, Author                   | Status |
|------------|---------------------------------------|--------|
| SimpleView | SuperView-Library Example Program     | <br>FW |
| MicroView  | SuperView-Library Example Program     | FW     |
| KFracPlus  | fractal generator (saves via library) | FW     |
| PNG-Box    | conversion "any to PNG" for WWW uses  | SW     |

# 1.14 superviewnote

SuperView is a program that has been designed for the purpose, to display any kind of graphic as fast and as comfortable as possible.

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Fast means not only fast in reading and displaying but also in calling and using the program.

Highest possible flexibility is implemented via the external Driver-System, consisting of the SuperView-Library, the SVObjects, SVDrivers and SVOperators.

These intentions resulted in a bundle of features and options you have access to when using SuperView and installing it to your System:

- licensed "SuperView-Library" (see directory SuperViewLibrary)
- intensive use of many special OS V2.04+ and OS V2.1+ capabilities
- support of many OS V3.x+ and AGA graphics features,
  - as e.g. support of interleaved BitMaps
- support of all SVObjects, SVDrivers and SVOperators of SuperView-Library
- "Screen-Grabbing"
- Commodity (optional)
- ARexx-Ports (optional)
- AppIcon (optional)
- AppMenu (optional)
- AppWindow (optional)
- Clipboard reading and writing
- Support of Devices, like e.g. Scanners
- Localization for OS V2.1+ (not all texts yet)
- AmigaGuide OnLine-Help for OS V2.04+ (asynchroneous & localized with 2.1+)
- detailed configuration via Config-File, Cli-Options and Workbench-Tooltypes
- Graphical User Interface (GUI) for Workbench-Users (optional)
- conversion of the supported File-Formats
- information about the displayed graphics via Requester, selectable via GUI-Menu
- and more

It is Shareware and can be found on AmiNet under gfx/show (for example gfx/show/SView.lha). It's direct successor is called SViewNG and can be downloaded as gfx/show/SViewNG.lha

SuperView/SViewNG WWW pages:

http://home.t-online.de/home/Andreas\_Kleinert/

http://www.amigaworld.com/support/sview/

### 1.15 sqopalnote

SqOpal is an Image Processing, display and manipulation package especially for the OpalVision 24 bit Graphics and FrameBuffer hardware.

It has been written by Steve Quartly and Paul Huxham and optionally uses  $\mbox{SuperView-Library.}$ 

It is Shareware and can be found on AmiNet under gfx/show (for example gfx/show/SqOpal20.lha).

Steve Quartly: steveq@mafeking.scouts.org.au

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Paul Huxham: paulh@perth.DIALix.oz.au

# 1.16 superloadernote

SuperLoader is a Loader Module for OpalPaint (OpalPaint comes with the OpalVision 24 bit Graphics and FrameBuffer hardware).

It has been written by Steve Quartly and Paul Huxham and uses SuperView-Library.

It is Freeware and can be found on AmiNet under gfx/board (for example gfx/board/SuperLoader11.lha).

Steve Quartly: steveq@mafeking.scouts.org.au Paul Huxham: paulh@perth.DIALix.oz.au

# 1.17 imageengineernote

Image Engineer is a shareware image processing application for any Amiga with 68020 and OS 2.x or greater.

Image Engineer can be used for tasks varying from converting images between different file formats, rendering 24 bit images down to standard Amiga screen modes, enhancing badly scanned images, applying special effects even up to advanced image composition.

What you can use it for is basically limited by what you can think of.

Registration is only 35 US dollar (45 AUS dollar, 55 DEM). Registration sites are in Australia (Simon Edwards) and Germany (Andreas R. Kleinert).

Registered users will be sent a personal keyfile which will unlock all of Image Engineer removing the limits on the image size, and the 'Register Now...' requesters.

This keyfile will also work for future versions. Keyfiles can be sent out via mail or Email.

IE can be found in (currently) two archives on AmiNet under gfx/edit (for example gfx/edit/ImEngV3.41p1.lha and /ImEngV3.41p2.lha).

Simon Edwards: sbe@yallara.cs.rmit.edu.au
IE WWW page: http://yallara.cs.rmit.edu.au/~sbe/

### 1.18 picmanagernote

Picture Manager Professional V4 (PMPro) is an excellent commercial image catalogization program with a large number of features for creation and handling of thumbnail tables.

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It is a powerful database and allows loading, processing and displaying images via SuperView-Library and includes an automatic conversion function for catalogs of images, which allows to convert between all file formats SuperView-Library does support ... AND MORE ...

It even can directly scan LHA and LZX archives for images.

- The ENGLISH version of Jürgen Schäfer's Picture Manager can be obtained from

Blittersoft
6 Drakes Mews
Crownhill Industry
Milton Keynes MK8

Milton Keynes, MK8 OER Voice: +44-(0)1908-261466 United Kingdom Fax: +44-(0)1908-261488

Or from any distributor. The official pricing as of August 1997 has been  $49.95~\mathrm{UK}$  pounds (no guarantee). Ask them for it.

Blittersoft also are the distributors of many other Amiga hard and software products, among them Village Tronic and phase5.

Blittersoft WWW page: http://blittersoft.wildnet.co.uk/pmpro.htm Blittersoft: sales@blittersoft.com

- The GERMAN version of Jürgen Schäfer's Picture Manager can be obtained from

IrseeSoft SPCS
Meinrad-Spieß-Platz 2

D-87660 Irsee Voice: +49-(0)8341-74327Germany Fax: +49-(0)8341-12042

Or from any distributor. The official pricing as of May 1997 has been 129 DEM (no guarantee). Ask them for it.

IrseeSoft also are the manufacturers of the TurboPrint V5 high quality printer driver enhancement system.

A CD-ROM containing catalogues of more than 25000 graphics from Amiga CD-ROMs as well as a full version of PM 2.0 and demo versions (german) of PMPro 4 and TurboPrint 5 is available for 29 DEM (no guarantee). It's the first one of a new CD-ROM series – the second one just has been released and does contain graphic catalogues for Aminet 1-16 and Aminet Set 1-4 CD-ROMs.

IrseeSoft WWW page: http://home.t-online.de/home/IrseeSoft/
IrseeSoft: IrseeSoft@t-online.de

### 1.19 drafunote

DRAFU plus is a function plotter, which optionally supports SuperView-Library for saving the drawings from single windows.

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It includes the following features:

- freely defineable function terms  $(x^?, \sin, \cos, \tan, ...)$  (function parser by Dipl.Ing. Ulrich Degens)
- unlimited number of sizeable windows on the screen
- unlimited number of functions per window (presented as a list)
- upto 256 colors on the screen (AGA):
  - freely selectable draw color for each function
  - freely selectable background, drawing and axis color for each window
- loading and saving of function lists
- flexible axis' description (decimal, logarithmically, scientific)
- single/double axis description
- saving windows drawings in any of the graphics file formats
  SuperView-Library does support (optionally, library is not needed)
- hardcopy function

AND MUCH MORE

DRAFU can be found on AmiNet under misc/math (for example misc/math/DRAFU.lha).

Author: me ;-)

DRAFU WWW page: http://www.amigaworld.com/support/drafu/

# 1.20 genesisnote

GenesisPro is a 3D Level Editor, that is usable for Dungeonmaster style and Wolfenstein 3D style/DOOM style games (it does not feature not-rectangular walls, but it DOES feature floors of different height).

It has been written by Alex Grasso and Steffen Haeuser.

GPE is Freeware and can be found on AmiNet under game/demo (for example game/demo/GenesisPro.lha).

Steffen Haeuser: Fido 2:2487/3009.0, MagicSN@Birdland.es.bawue.de

### 1.21 And thanks for all the fish:

I perhaps have to thank many persons for supporting me with ideas,  $\operatorname{Bug-reports}$  and so on :

Thanks go to (in alphabetical order) :

- \* Jan van den Baard
  - ... for his great tool GadToolsBox, which I formerly used to design the GUI of SVPrefs.

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- \* Ian O'Connor
  - ... for the Designer, which I now do use for GUI creation.
- \* Simon "ImageEngineer" Edwards
  - ... for a lot of things concerning SuperView-Library :-)
- \* Gerd Frank
  - ... for Beta-Testing, Bug-Reports and for his many ideas and suggestions, concerning SuperView-Library and SuperView (also see notes there) !
    And last not least for the first draft of the Guide Documentation...;-)
- \* Roman Patzner
  - ... for the nice icons he designed for use with Martin Huttenloher's MagicWB (8 Colors minimum) and sent to me for inclusion with SuperView. With SuperView-Library only the InstallerScript-Icon is used yet (several times;-)
- \* Steve Quartly and Paul Huxham
  - ... for the various versions of OPAL.svdriver included with the library (Steve and Paul) and for Steve's SQ-Operators, included with his friendly permission.

    Steve also did "SuperLoader" and "SqOpal" together with Paul Huxham. THANKS!
- \* Jürgen Schäfer
  - $\dots$  for speficic Beta-Testing and related Bug-Reports, as well as several useful hints and suggestions on implementing new features to the library.
- \* Martin Schulze
  - ... for uploading SuperView onto the AmiNet and including it into the SaarAG series, so that it reached more people out there. Also for sending and receiving all those mails, which did not find their way through the labyrinth of Fido-Gateways;-)
- \* Detlef Winkler
  - $\dots$  for the new Icons for Doc- and AmigaGuide-files, included with the Library. He also designed some graphics and icons for use with SuperView and new drawer icons.
  - Additionally, he had a lot of ideas, suggestions and graphics for 24 bit IFF-ILBM, IFF-YUVN, IFF-DEEP and SGI support.
- \* to the translators

Italiano: Alessandro Basso (cralex@amiga.dei.unipd.it)

Luca Giolo (grifon@vega.unive.it)

Svenska: Patrik M Nydensten (ie96\_pny@isk.kth.se)

Torbjörn Aronsson (torbjorn.aronsson@mailbox.swipnet.se)

Norsk: Roger Hagensen (msi@sn.no)

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```
* and last NOT LEAST
 - all _registered_ users of SuperView for supporting Shareware !!
   *** COMMERCIAL BREAK - BEGIN ***
       ORDER YOUR KEYFILE NOW !
   *** COMMERCIAL BREAK - END
 - the people mentioned below (still in alphabetical order ;-) :
   Torbjörn Aronsson
                         for suggestions and bug reports
   Ralph
                         for writing the useful "Amiga Guru Book"
             Babel
                         and for competent statements in
                         DE.COMP.SYS.AMIGA.TECH
                         TuC / Co-Sysop Century
             Carbin
   Alex
            Dombrowski ADX-Datentechnik
   Rüdiger
   Thomas
             Dorn
                         Author of XiPaint (thx for 3.2 and 4.0)
   Sven
            Drieling
                         "Indy" - Creator of "Power-Brei" DiskMag
                         and the Oberon2-Language interfaces and modules
                         for technical discussions about EGS support
   Oliver
            Eichhorn
   Thomas Eigentler Programmer of MERLIN.svdriver (included)
   Thomas
           Fischbach did various online support for a long time
            Fish
                         AmigaLibDisks and Fish CD-ROMs
   Fred
            Gillarek Beta testing Picasso96.svdriver :-)
   Klaus
   Stefan
                         GPD-Disks
            Grad
            Holtorf
   Klaus
                      for detailed information on graphic file formats
   Ing.-büro Helfrich
                        for supplying the PiccoloSD64 Graphics Card
   Stefan Kremer
                         TuC / Sysop Century
                         Time PD-Disks (former aps-electronic)
   Alex
            Lange
                         Franz PD-Disks
   H.P.
            Lattka
   Andreas Manewaldt
                         Taifun PD-Disks
            Melzener
   Axel
                         Game Object Design
   Andreas Neumann
                         Creator of the PCQPascal-Language includes
                         and modules
   Patrik M Nydensten for lots of suggestions and bug reports
   Dr. Greg Perry
                         for help on IFF-FAXX implementation
   Michael Petrikowski Amiga Szene PD-Disks, SEP - Software-Entwicklung
            Rebmann
                         supplier of my ftn.neckar-alb.de domain
   Albi
                         thanks for the DP II (PC) PBM graphics
            Taha
   Frank
   Michael
                         Sysop of Micky's box - my current Fido Boss
            Trautes
   Michael Trautmann PC-Programmer, for information on Win icons
   Christian Wincziers
                         Sent me some PICT-2 graphics. Thanks !
   Florian Zeiler
                         Sending me the RetinaZ3 and PicassoII graphic
                         cards enabled me to write own Drivers for these.
 - some users, which e.g. reported bugs via mail, e-mail or telephone
   or did something else related to my programming work on the library
```

(only the ones, which have not already been listed above) :

Thomas Alexnat Baumeister Joachim Rudi Brand Digulla Aaron C. Davis Sprague (dsprague@mhv.net; MCP bug report) SuperView-Library 27 / 176

```
Michael
              Flad
   Grant
              Fribbens
   Thomas
              Gundlach
   Michael
              Gruber
   Richard
              Hartmann
                          (for reporting 060 problems)
   Mats
              Jansson
              Kilimann
                          (for reporting 060 problems)
   Michael
   Mika
              Lundell
                           MERLIN testing and so on. Thanks.
              Jansson
   Jim & Becky Maciorowski (thanks for the nice card :-)
   William Maddock
   Michel
              De Meerleer
              Mohr
   Neil
            Nydensten lots (tons ;-) of suggestions
   Patrik
   Patrick
             Ohly
   Andy
              Philpotts
   Dr. Heiko Pollmann
             Rotondo
   Fabio
   Jürgen
              Schneider
   Tommy
              Simonsen
   Klaus
              Stengel
   Reinhard Theling
   Henrik
             Tikanvaara
             Vernaglione
   Marco
   Marc-Tell Volkmann
             Wernly
   Fabien
   Tilo
              Winkler
                          (thanks for the strange TIFFs ;-)
   and more.
Maybe I forgot somebody to list here, but nobody's perfect...; -)
Please note: If you wrote to me and didn't get an answer,
            this need not necessarily mean, that I didn't
            answer - mails can get lost sometimes.
            Please tell me and ask again!
```

### 1.22 How to contact the author

SuperView WWW Sites
http://home.t-online.de/home/Andreas\_Kleinert/
http://www.amigaworld.com/support/sview/

```
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
```

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Andreas R. Kleinert

Sandstrasse 1

D-57072 Siegen

Germany, Europe

Any snail mail to the old address will still be routed.

Phone: +49-271-22869 also FAX + AM +49-271-22838

Weekdays after 17.00h.

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 only send binaries after you have asked me and I did confirm your request - my postbox is not unlimited in size.

- \* Do not send binaries via Fido or Fido-Gates! \*
  - Fido Andreas Kleinert 2:2457/350.18
  - Usenet

ARK@superview.ftn.neckar-alb.de (Fido-Gate)
Andreas\_Kleinert@t-online.de (T-Online)
ARK@News.wwbnet.de (Z-Netz)
ARK@amigaworld.com (AmigaWorld)

- 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. Also mention the version number of SuperView-Library (and e.g. SuperView) which caused the bug and describe your system configuration (Amiga model CDTV/CD-32/600(HD)/500(+)/1000/1500/1200(+/HD)/2000/2200/2500(UX/AT)/3000(+/T)/4000(/030/040/060/PPC)(T)/DraCo(/040/060)/4060L/5050T, Kickstart/OS Version, RAM, HardDisk, GfxCard, any special Hardware/Software)

Since there recently have been some problems: please don't forget to mention, whether your machine is accelerated in any way, or not (68020/.../060 plus 68881/882, PMMU or PowerUp/PPC).

Would be nice to know, whether it is going to run under UAE or any other Amiga or AmigaOS emulation, etc.

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# 1.23 The future of SuperView-Library...

The Future (or: The Undiscovered Zone ;-)

Well, ideas cannot be planned and creativity is not able to be calculated; -)

So I can only express, what I'm thinking about the future of the library: There are many things, which I want to implement, on the other hand there are things, which are just necessary to be implemented sooner or later. So much work has to be done (still).

I'll try to do this, but I hope that there's enough support from the Amiga programmers all over the world (via Inter/AmiNet, Fido, etc.) to help me to continue doing so.

This does not only mean fincancial support, but also additional programming efforts like third-party improvements on the library.

You may contact me for developer support - like already mentioned before.

- Andy

# 1.24 Known bugs and suggestions for workarounds

Harddisk MaxTransfer problem (workaround)

Problems with specific applications (workaround Crashes on 060 systems should no longer appear - if the library  $\hookleftarrow$  crashes

on specific modules at startup-time, please trace it back with SnoopDOS, delete that specific modules, and contact me for a bug-report.

Minor problems:

o C. Davis Sprague told me, that the combination superview.library and MCP with active NEWTOOLTYPES patch did cause crashing the library at startup time. So don't use that patch...

There seem to be more options in MCP, which may become 'critical'...

Whenever you encounter any problems: first try it again without any patches running!

o Do no mix libraries from Picasso96 and CyberGraphX - when again switching from P96 to CGfx with Picasso96API.library still being in LIBS: then your system will immediately crash with the next opening of that library.

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### 1.25 Harddisk MaxTransfer Problem

IDE-MaxTransfer Problem (in rare cases, SCSI concerned, too)

Since SuperView-Library usually holds very large buffers within memory, it also likes to read and write these completely from and to disk. This means, that the specific device drivers are confronted with quite large values of bytes to be read or written, which perhaps usually does not happen very often.

Sometimes the firmware of IDE-Harddrives, like shipped with the A4000/030-040 or A1200HD, does not support transfers of blocks larger than 64K (65535 Bytes) during one single write operation. Ususally the DOS splits larger writing calls to take care of this restriction. But since this is just a lack of performance and actually does not comply to the IDE/AT standard, the default value for this "MaxTransfer" is not 0xFFFF (64K) but 0xFFFFFF or 0xFFFFFFFF instead.

If any written graphics files are mysteriously damaged or will be read incorrectly (writing is more critical than reading), you should start your "HDToolBox" and select "Partition Drive" for the concerned HardDrive. After that activate "Advanced Options" and chose "Change". Modify the "MaxTransfer" field, so that it does reflect "0x00008000" (which is the safest value - "0x0001Fe00" or "0x0000FFFF" may work as well, but this would have to be explicitly tested).

After that leave all the windows by confirming "OK" and select "Save Changes to Drive" (no longer disabled) on the first window.

Please note that, if you don't have correct MaxTransfer value settings, this may cause damage to data on your harddisk. Either when reading/writing via SuperView-Library or with other programs.

## 1.26 Problems with specific applications

Here's a list of several programs, which either cause SuperView-Library to crash, or which may crash or fail unexpected (so that it might seem, as if SuperView-Library did crash or were the reason of the fault):

o Mixed Picasso96 and CyberGfx environment

Problem

Proprem

\_\_\_\_\_

Picasso96 users, which have the Picasso96.svdriver installed (that's default, unless you "exclude" it via SVPrefs or delete it), and do switch between P96 and CyberGfx, should not the following: without removing Picasso96API.library

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```
from Libs: when CyberGfx is running, any program that tries to open Picasso96API.library will make it crashing (since that library tries to create another, emulated instance of cybergraphics.library, which must fail).
```

Solution

\_\_\_\_\_

Either

- delete/exclude Picasso96.svdriver
- move all libraries, not only the monitor drivers, when switching between P96 and CyberGfx
- wait for a bugfix (Tobias Abt and Frank Mariak both have been informed)
- o EGS libraries V6 and V7 © VIONA Development

\_\_\_\_\_

Problem

\_\_\_\_\_

When flushing the EGS libraries, it seems that the libraries will cause recoverable alerts with OS 3.x.

Maybe on some systems real crashes will occur.

Don't know, whether the libraries are really the source, but it's likely.

Solution

\_\_\_\_\_

Don't flush ;-)

o DOpus5 (supposed to be fixed with Magellan release)

Problem

\_\_\_\_\_

Not a serious problem. DOpus5 does not seem to figure the correct version numbers from sv library files, when requested to do so.

Solution

-----

C: Version libraryname

o LX/020 1.03 © 1993 Xenomiga Technologie (Jonathan Forbes)

\_\_\_\_\_

Problem

-----

Obviously can't correctly extract large LZH/LHA archives.

o NewMode V3.3 (and below) © 1992-95 by Andreas Linnemann

Problem

\_\_\_\_

Has been reported to cause serious problems when running together with e.g. SuperView (when attaching a fixed ViewMode to the program).

Solution

\_\_\_\_\_

Already fixed for newer versions.

I, personally, would strongly recommend not to promote any SuperView

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Screens via NewMode, since now for almost any configuration there should be suitable SVDrivers - alternatively also a RTG-configuration for AGA.svdriver.

### o VMM (supposed to be fixed)

\_\_\_\_\_

Former versions of SuperView-Library did allocate all buffers with the MEMF\_PUBLIC flag set, which prevented e.g. VMM from storing these as virtual memory on disk.

As with current versions, the large image buffers - where it makes sense - are no longer prevented from being accessing by VMM. MEMF\_PUBLIC no longer is set for these.

Before - and with old modules - this could have been by-passed by setting the 10240 flag value within VMM's advanced options - but this should not be done any longer, since it may become dangerous under certain circumstances.

#### o SnoopDOS

-----

Problem

\_\_\_\_\_

Some external libraries (being opened by SV modules) seem not to be snoop'able without causing crashes, then.

Solution

\_\_\_\_\_

Turn off SnoopDOS.

# 1.27 History

Please note the version-dependencies :

superview.library SVObjects SVDrivers SVOperators

Version 15-17 Version 4 Version 2-3 Version 3

(superviewsupport.library V10)

V17.5 (20.7.1997) :

- SVObjects: - PCD: - (see there)

- ILBM: - hopefully fixed Draco problem (see there)

- MISC: - added updated italiano catalog, done by Alessandro Basso

- Docs: - fixed Ghostscript installation description

- added preliminary ATO credits

- described new P96/CGfx crash problem now under

"known bugs" (certain versions of Picasso96API.library, as opened by Picasso96.svdriver, may crash under the competiting CyberGfx environment, instead of silently

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```
exiting). Can't happen, if you only do use either one,
                  and never ever did switch between the two systems.
 - INFO:
                - english version of Picture Manager professional (PMPro V4)
                  now can be ordered from Blittersoft!
                  See section:
           Supporting Software
               V17.4 (4.7.1997) :
 - SVObjects: - JPEG: - (see there)
 - ALL modules: - this time really fixed the memory loss bug.
                  Bumped all versions.
V17.3 (25.6.1997) :
 - ALL SVObjects: - fixed "memory loss on LibInit failure" bug
 - ALL SVDrivers: - fixed "memory loss on LibInit failure" bug
 - ALL SVOperators: - fixed "memory loss on LibInit failure" bug
 - LIBRARY:
                    - fixed "memory loss on LibInit failure" bug
                    - superviewsupport.library V10.2: - (see there)
                    - added note about mathffp.library patch
 - Docs:
                      program 'ffppatch" (Aminet:util/boot/)
                    - fixed installer script bug (appeared when *deleting*
 - MISC:
                      installed SuperView-Library without deleting the \,\,\,\,\,\,\,\,\,
                         environment
                      settings, then re-installing)
                      (-> Sven Drieling, Michael Gruber)
V17.2 (16.6.1997) :
______
 - NEW:
                    - a lot more modules with ppc.library,
                      powerUP (TM) support.
                      SVObjects and SVOperators.
                      (not included)
 - SVObjects:
                    - PNG:
                                 (see there)
                    - ILBM:
                                 (see there)
 - DEVICE SObjects: - Printer: - added TurboPrint support
                                 (high quality 24 Bit printing)
                   - CyberGraphics: - (see there)
 - SVDrivers:
 - LIBRARY: - support-lib is at V10.1 now (already took place
             as with V17.1)
 - MISC:
            - updated docs
            - udated "known bugs/fixed bugs" section
            - added norwegian catalog, done by Roger Hagensen
```

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- SetPatch 43.6 is on ftp.amiga.de Get it!
- added note, why Graffiti adapter card won't be supported
- added note about Inferno (DKB Wildfire) card, which now is being supported by CyberGraphX (V3)
- Picasso96 plus Picasso96.svdriver users, which use P96 in parallel (switching monitor drivers from time to time) should watch out for a newer P96 version, which should fix a startup crash, which would have been caused by Picasso96.svdriver when trying to open Picasso96API.library. It has also been reported, that PPaint (early V7) had been affected by this (startup-crash, too). (-> Klaus Gillarek, Tobias Abt, Frank Mariak
  - Alexander Kneer, Torbjörn Aronsson)
- there was a bug in the installer script for the library: 680x0 optimized module versions would NEVER have been installed (since last 16.x rework of the installer script)
- if you once did install SuperView-Library, the script will suggest the same destination directories for any further updates again (locations for VMEM and alternative LIBS: will be remembered in "ENVARC: SuperView-Library/SVLIB\_WHERE" and ".../SVMEM WHERE")

# V17.1 (26.5.1997) :

- NEW feature(s): - now supports PPC via powerUP's ppc.library; parts of superviewsupport.library and special routines of others modules do make use of it

> - e.g.: - superviewsupport: (see there) - ILBM: (see there) - Dither24Bit: (see there) - BMP (see there) - PCD (see there) - PCX (see there) - GIF (not included) - 24BitToHAM (see there) - Dither24Bit (see there)

MORE MODULES WILL FOLLOW SOON !

(continuing development while you are reading this  $\leftarrow$ ; -)

For some modules, there are more than one PPC plugins available (e.g. for different ways of dithering). Also, there will follow some PPC modules, which will only be available for exclusive shipment with some commercial programs (as also are the concerned SV modules).

More than 20 modules are made available in a special powerUP PPC plugin module package, which won't appear on Aminet, but e.g. can be bought by registered SuperView/SViewNG users or will be included with some commercial programs. SuperView-Library 35 / 176

```
This is high end software, and it's development
                    must be financed - so you have to pay for it
                     to help ensuring further development.
 - LIBRARY:
                   - fixed bug in "Add" mode for SVObjects/Drivers/Operators;
                     either did not work or crash
                     (-> Marc-Tell Volkmann)
 - MISC:
                   - updated docs
                   - COB.wwbnet.de is closing its doors. Removed
                     any references to ARK@COB.wwbnet.de email
                     address and online support. I still have
                    at least 3 other email addresses in spare,
                    but I am simply fed up with updating these...
                   - added notes about new Ghostscript 4.03
                   - updated "SuperView in the press" text
V16.4 (3.4.1997) :
 - NEW SVObjects: - IFF-FAXX (GPFax):
                   Full file and clipboard support.
 - NEW SVDrivers: - Picasso96 (!! BETA !!)
 - SVObjects: - JPEG: setting "100%" did not work
 - SVDrivers: - PicassoII: (see there)
 - Support-Lib: V9.1 (see there)
 - MISC: - fixed some (rather old or even new) bugs in the docs
         - updated description of and requirements info for SVDrivers
         - in the installer script, there were two "setup choices"
          missing, namely "Merlin" and "other graphic cards"
         - added impressing overview of supported graphic cards
V16.3 (13.3.1997) :
 ._____
 - Drivers: - EGS7:
                             - fixed some bugs
                             - debugged with EGS 7.4, EGSPlus R9
            - CyberGraphics: - fixed some bugs
                             - debugged with EGS 7.4, EGSPlus R9,
                               EGSPlus' cybergraphics.library
 - LIBRARY: - information on "virtual gfxbuffers" more verbose now
V16.2 (28.2.1997) :
 - SVObjects: - PNG:
                            - fixed reader and updated information
                              as well
                             - no longer rejects JFIFs written by
                              Adobe Photoshop (TM)
              - Ghostscript: - better, more stable now
```

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```
- LIBRARY: - Datatypes info requester did produce various enforcer
                hits sometimes
                (-> Edwin H. Bielawski)
              - when a required library was missing (for example
                superviewsupport.library), an uninitialized semaphore
                would have caused an enforcer hit later on
                (-> Edwin H. Bielawski)
              - fixed V43 Datatype 8 Bit odd-width mungwall hit
                (have fixed this a thousand times at different places,
                 but appears again and again)
              - also with datatype loading (V39-43), internal 32 pixel
                alignment restrictions turned out to be adapted to the
                resulting gfxbuffer as well, which resulted in "empty"
                borders when importing picture (changed width).
                This one did affect PNG-Box in the very first place.
                (-> Edwin H. Bielawski)
 - MISC: - thanks to Ali Graham, who did mention the correct english
            version of the Terry Pratchett quote, for my quide file
            header :-)
V16.1 (18.2.1997) :
 - NEW SVObjects: - IFF-RGB8 (Turbo Silver, Imagine, ArtEffect).
                    Full file and clipboard support.
 - SVObjects:
                - PNG, ILBM, ACBM, Datatypes (39-43):
                     - transparency support
                - BMP: - fixed 1..4 bit writing, crashes
                - MetaView: - SVObject now reads IFF-DR2D, DXF
                              and WPG-Vector via MetaView as well.
                              Please note, that MetaView is Shareware
                              (by Henk Jonas)
                - Ghostscript: - output format now freely
                                 selectable, thus no longer
                                 only PNG
                               - should work with GS 2.6.1 now
 - SVDrivers:
                - PicassoII, EGS7, CyberGraphics:
                     - (see there)
 - LIBRARY:
                - bumped to V16
                - requests support-lib V8 now
                - gfxbuffers: (see support-lib)
 - SUPPORT-LIB: - bumped to V8
                - gfxbuffers bumped to V3: now transparency
                  information may optionally be carried, yet
                  only defined for 8 Bit graphics
 - MISC:
                - installer script now also allows to configure
                  MetaView.svobject directly (similar to Ghostscript)
```

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```
- Docs:
               - updated MetaView information (Shareware now)
                - updated Steve Quartly's eMail to
                 steveq@mafeking.scouts.org.au
                - superview.ftn.sub.org domain is replaced with
                 superview.ftn.neckar-alb.de as with 1 March 97
                - again a little grammar and spell checking on the docs
V15.13 (1.2.1997) :
 - removed anything which was in any way LZW related
   (GIF, TIFF-LZW)
V15.12 (30.01.1997) :
______
 - SVObjects: - PNG: - added transparency support
                    - compression can be set
                    - optionally progressive/interlaced
              - TIFF: - new libtiff 3.4 beta 024
                      - fixed long-standing bug
 - MISC: - new, additional WWW site available (AmigaWorld)
         - reworked and updated docs
         - added italiano translation texts to installer
          script (-> by Alessandro Basso)
         - updated included SVG-Specs
         - "style guided" installer script a little bit more
         - reworked installer script functionality
         - there might have been an experimental 68040 version
           of ILBM.svobject in a directory libs/68040/svobjects
          accidentally. It did not make sense (equal 68030).
 - Docs: - added much better (and working ;-) description on
          how to install and configure Ghostscript 3.53
         - added ScanQuix' homepage URL to Scanner.svobject docs
V15.11 (01.01.1997) :
 - SVObjects: SVG, Unpack, ILBM, GIF: (see there)
 - Prefs: (see there)
 - added new Xpk note
 - globally updated docs
V15.10 (26.12.1996) : (3rd party only)
______
 - ALL SVObjects, SVDrivers and SVOperators:
    - new startup-code
    - removed last assembler fragments
    - did code fine-tuning
    - etc.
 - SVObjects: - SVG: - see there
              - PNG: - new pnglib and zlib versions (see there)
 - SVDrivers: - CyberGraphics: splitted into 68000 and 020+ version
```

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```
- LIBRARY: - "ENV: SuperView-Library/Default.svdriver" variable
             now definitely obsolete ;-)
            - Datatype colormap routine did contain some
              redundant code. Removed...
            - added highly optimized 68020+ version of
              superview.library
            - fixed possible (old ?) bug in V39+ dt-routine
 - Support-Library: - (see there)
 - Programmers: - sample sources have been updated
 - Docs: - updated project list

    updated ScanQuix information (Scanner.svobject)

         - updated PMPro info
         - Simon's WWW page has a new URL
        - added some GIF notes to some locations in this guide file
         - added notes about cyberncg.library (pic-dt V43)
         - changed/fixed "MaxTransfer bug" section according to
           Ralph Babel's article in Amiga Magazin 1/97
V15.9 (06.12.1996) : (3rd party only)
- SVObjects: - PCD: (see there)
- SVOperators: - Dither24Bit: - removed some code

    now also recompiled

               - CallPNM:
               - added note about Picasso II+/IV and
- Docs:
                 Picasso96 emulation
               - some svoperator version information was missing
V15.8 (30.11.1996) :
______
- SVObjects: - removed CyberDataType.svobject, which has been
              merged with the main library
- LIBRARY:
   - support for V43 picture datatype(s) now has been completely
    rewritten and included into the main library instead
    of an external SVObject. It's now somewhat faster, better
    and more compatible with future picture.datatype releases.
    Please use at least picture.datatype V43.755 (the others
    already did expire, anyway).
    Delete old CyberDataType.svobject, if the installer script
    did not do that.
   - Installer script might have failed with Installer 43.x when
    neither english nor german had been set as locale language.
    Now english is default always and possibly will be overridden
    by german (and maybe more in the future)
     (-> Michel De Meerleer)
   - fixed (possible) Ctrl-C problem
V15.7 (21.11.1996) :
 - SVObjects, SVDrivers, SVOperators, LIBRARY, support-lib:
               - completely recompiled with SAS/C V6.57
 - SVObjects: - JPEG: (see there)
```

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```
- Known Bugs: - C. Davis Sprague told me, that
                 the combination superview.library and
                 MCP + NEWTOOLTYPES patch did cause
                 crashing the library at startup time.
                 So don't use that patch...
 - Docs:

    fixed and updated

 - AND MORE
V15.6 (22.10.1996) :
 - SVOperators: - Dither24Bit, PaletteDither:
                  - fixed two bugs in palette generation,
                     which strongly increases image quality
 - SVObjects: - PNG: added write support
               - JPEG: modified
 - Docs:
               - fixed spelling mistakes...
V15.5 (17.10.1996) :
 - NEW SVObjects: - MetaView:
          AMF and WMF
            (-> MetaView)
                               support has been added
 - SVDrivers: - ECS: - faster displaying with OS V37+ and SetPatch 43.x
             - AGA: - faster displaying with OS V39 and SetPatch 43.x
 - SVSupport: - added SetPatch V43.x recognition for
               C2P=OS functionality
             - updated
 - Docs:
V15.4 (28.9.1996) :
 - SVObjects: - JPEG: upgraded to V6a (although not really useful)
            - Targa: fixed file recognition
            - version had not been bumped
 - Docs:
            - V15.3 had been released 26 Sep 96, not 29 Sep 96 %-)
V15.3 (26.9.1996) :
 - MISC: slight changes in company name :->
V15.2 (19.9.1996) :
 - MISC:
                  - .cpinfo file of ECS and AGA now uses _SVOPERATOR
                     tag instead of plain string (now opens
                    Filerequester pointing to LIBS:svoperators)
 - SVObjects:
                  - Targa: (see there)
                   - GIF: writing transparent GIF89a files did not
                         work due to a *stupid* bug
                   - CyberDataType: was reported to cause crashes
                                    (see there)
```

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```
- ILBM, ACBM: (see there)
                   - Scanner: (see there)
                   - Limbo: minor fix (see there)
                   - MERLIN: (see there; still slightly buggy)
 - SVDrivers:
                   - Dither24Bit: added new dither mode: BURKES
 - SVOperators:
 - support-lib:
                   - (see there)
 - LIBRARY:
                   - rewrote Installerscript for Installer V43.2:
                      - behaves as usual with old installer
                      - now is localized for new Installer
                      - fixed some texts
                      - tries to handle 68060 now
                   - caching SysBase now (SAS/C's __USE_SYSBASE)
                   - again revised startup-code (slightly)
 - Docs:
                   - removed 060 bug section
                   - rewrote
V15.1 (29.8.1996) :
 - NEW SVObjects: - Printer: added DEVICE SVObject for common
           Printer
            support
                   - Degas: (see there)
 - SVObjects:
                   - ACBM: (see there)
                   - TIFF: fixed serious bug for most
                           <= 256 palette-color TIFFs
                   - BMP: fixed bug in writing BMP header (see there)
                   - DEEP: now supports reading 32 Bit RGBA
 - SVDrivers:
                   - MERLIN: (see there)
 - SVOperators:
                   - Dither24Bit, PaletteDither: - improved
                                                 - added BestPen mode
                                                 - new F/S dithering
                   - Dither24Bit: added new dither mode: ORDERED
                   - 24BitToHAM:
                                                 - reworked
 - Documentation: - rewrote "known bugs" section
                   - rewrote "online support sites" section
                   - updated note referring to VMM usage
                   - fixed a bunch of spelling mistakes and typos ;-)
 - Note:
                   - sorry, for V14.1 to 14.3 - I simply should have
                     done better testing on V14.1, but getting those
                     nasty Enforcer hits fixed just made me
                     euphoric and let me release SuperView V5.60
                     too soon ;-)
                   - added five new library functions for handling
 - Programmers:
                     filetype and subtype operations (e.g. getting
                     a file type name from a sub type value or
                     getting a sub type value from a sub type name,
                   - again revised/reworked/updated programmers docs
                     a little
```

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 added SVObject flags indicating DISK read and DISK write support (bit 11 and 12)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# 1.28 Printer.svobject

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Version : 4.5

Release Date : 24.06.1997

Description

~~~~~~~~~

Printer.svobject is an external library module for the superview.library.

It supports printing from any Screen (upto 256 Colors) or graphics buffer (upto 256 Colors or 24 Bit).

The standard printer.device of AmigaOS does not support printing of 24 Bit graphics (rastports) upto version 3.0. There are two ways to pass this by:

- either dithering to 256 colors before printing
 the 24 Bit graphics (still looks ugly with standard printer drivers)
- installing TurboPrint 3.x-5.x by IrseeSoft, which replaces printer.device greatly and besides improved 256 color printing also offers 24 Bit support

Printing without installed TurboPrint

Currently, all 24 Bit images will be dithered to 256 colors before printing (using the "Dither24Bit" operator).

Usually you get best results, when first applying "AnyTo24Bit" to a 256 color graphics and then call Printer.svobject from your application's DEVICE SVObject list.

Printing with TurboPrint being installed

When printing 24 Bit graphics, TurboPrint will automatically be used when available. You can do all the necessary settings fromout its "TurboPrefs" utility.

Credits

~~~~~

TurboPrint 5.x does support most of the available printers

and makes these useable with the Amiga. It improves AmigaOS' native printer drivers as well as adding 24 Bit capability to its printer.device.

In Germany, TurboPrint can be obtained directly from IrseeSoft, but they'll as well be able to tell you a distributor near you:

IrseeSoft SPCS http://home.t-online.de/home/IrseeSoft/
Meinrad-Spieß-Platz 2 IrseeSoft@t-online.de
D-87660 Irsee Voice: +49-(0)8341-74327
Germany Fax: +49-(0)8341-12042

Or from any distributor. The official pricing as of June 1997 has been 149 DEM (no guarantee). Ask them for it.

IrseeSoft also are the manufacturers of the Picture Manager professional image catalogization system.

A CD-ROM containing catalogues of more than 25000 graphics from Amiga CD-ROMs as well as a full version of PM 2.0 and demo versions (german) of PMPro 4 and TurboPrint 5 is available for 29 DEM (no guarantee). It's the first one of a new CD-ROM series - the second one just has been released and does contain graphic catalogues for Aminet 1-16 and Aminet Set 1-4 CD-ROMs.

```
ControlPad-Switches
: "ENV:SuperView-Library/Printer.controlpad"
ControlPad-Name
ControlPad-Commands : - DENSITY = < density value for printing quality>
                       ; Amiga's printer device does allow seven
                       ; modes of printing density (1-7)
                       ; (not with TurboPrint)
                       ; default is: 3
History
~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (01.06.1997) :
- added TurboPrint 3.x/4.x support: when printing 24 Bit graphics,
 TurboPrint will automatically be used when available, otherwise
 own 24 Bit dithering will be used and output will be passed to
 standard printer.device
V4.3 (22.12.1996) :
 - various things cleaned up
V4.2 (17.11.1996) :
```

- recompiled with SAS/C V6.57

V4.1 (15.08.1996) :

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- first version

# 1.29 Scanner.svobject

```
© 1996-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 : 4.6
Version
Release Date : 24.06.1997
Description
~~~~~~~~~~~
Scanner.svobject is an external library module for the superview.library.
It supports scanning images by using Andreas Günther's scanner.device,
as supplied with the ScanQuix software package.
Currently, all scanned images are imported as 24 Bit.
Credits
~~~~~~
ScanQuix currently supports: - Epson (GT-4000, GT-5000, GT-6000, GT-6500,
 GT-8000, GT-8500, GT-9000)
 SCSI, serial or parallel
 - HP
 (ScanJet 2c, 2cx, 3c, 4c, 4p)
 SCSI
 - Mustek (Paragon 600, 600 SP, 800 SP,
 1200 SP)
 SCST
 - Artek Viewstation
...and soon:
 - Tamarack-Artiscan
 - Microtek
It is available from:
RBM Computertechnik
Bernd Rudolf
 http://www.rbm.de/ScanQuix/
Kleinenberger Weg 2a
D-33100 Paderborn
 Phone: +49-5251-640646
Germany
 Fax: +49-5251-640655
As of January May, ScanQuix 3 was publicly offered for 179 DM.
For more information, please contact this company. For a special
"Artec&ScanQuix3" package you may contact AB Union under:
http://ourworld.compuserve.com/homepages/AB_Union/
ControlPad-Switches
ControlPad-Name : "ENV:SuperView-Library/Scanner.controlpad"
ControlPad-Commands : - PUBSCREEN_NAME = < PubScreenName >
 ; where the scanner drivers should open
 ; their windows (if not set or not available,
 ; the default Public Screen will be used).
```

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```
History
~~~~~~
V4.6 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.5 (22.12.1996) :
 - various things cleaned up
V4.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.3 (14.09.1996) :
 - fixed error string on open device failure
 - major bug: did not set svgfx_BufferSize
 - added controlpad for specifying a PubScreen name
V4.2 (18.08.1996) :
 - skipped
V4.1 (08.08.1996) :
 - first version
```

## 1.30 AmiFIG.svobject

```
© 1996-97 by Andreas R. Kleinert.
(Also see notes under "Credits".)
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
           : 4.5
Release Date : 24.06.1997
Description
AmiFIG.svobject is an external library module for the superview.library,
which needs any SVDriver with Bit-/Oneplane-Support, a working
GhostScript.svobject and an installed fig2dev executeable.
It supports importing AmiFIG/Xfig vector drawings as bitmapped graphics.
This is done by using fig2dev for conversion to Postscript (TM) files,
which then will be parsed using a working Ghostscript installation
with
              GhostScript.svobject
AmiFIG.svobject will create a temporary file, which then will be
parsed through superview.library again.
Reading:
```

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```
(Any FIG drawings as long as the resulting Postscript (TM) commands
 are readable for Ghostscript).
Configuration
~~~~~~~~~~~~~
This FIG support module has been tested with:
 - the AmiFIG 1.1 port from Aminet: AmiFIG is (C) 1996 Andreas Schmidt
AND NOT YET, because of missing fig2dev:
- the Xfig 1.9d amiga port from AmiNet, which has been done
 by Terje Pedersen (terjepe@login.eunet.no)
At first, you have to correctly install and configure Ghostscript
and
 GhostScript.svobject
After that you have to install AmiFIG/Xfig and either supply an AmigaDOS
search path to a directory, where the executable "fig2dev" is stored
(default), or explicitely specify path plus name of the program by
the controlpad entry AMIFIG_PATH (see below).
Where to DOWNLOAD from
Aminet:gfx/edit/Amifig#?.lha (#?=version and CPU)
ControlPad-Switches
~~~~~~~~~~~~~~~~~~
                    : "ENV:SuperView-Library/AmiFIG.controlpad"
ControlPad-Name
ControlPad-Commands : - AMIFIG_PATH=<fig2dev command path plus name>
                        ; how fig2dev is to be called
                        ; e.g. AMIFIG_PATH=Work: AmiFIG/fig2dev
                        ; default is: fig2dev
                      - STATUS=<ENABLED|DISABLED>
                        ; allows to disable this module - for example
                        ; to be able to use an other, program-specific
                        ; import-module for the same file format
History
~~~~~
V4.5 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
 - various things cleaned up
V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
```

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```
- now has new disk read/write flags set

V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- now correcly handles SVOCheckFile

V3.2 (23.07.1996) :
- added possibility to disable this module, if there's an other, program-specific svobject you would like to use instead (xFIG ?)
- changed file format extension from ".ps" to ".fig", although perhaps never of practical use (since not write-able)
- fixed error return mechanism for SVO_Show (accidentally correct ?)

V3.1 (07.06.1996) :
- first version
```

# 1.31 Degas.svobject

```
© 1996-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
 : 4.4
Release Date : 24.06.1997
Description
Degas.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It supports reading of Atari Degas files.
In detail these are :
Reading:
 - uncompressed Degas PI1 320x200, 16 colors
 - uncompressed Degas PI2 640x200, 4 colors
 - uncompressed Degas PI3 640x400, 2 colors
History
~~~~~
V4.4 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.3 (22.12.1996) :
 - various things cleaned up
V4.2 (17.11.1996) :
```

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```
- recompiled with SAS/C V6.57
 V4.1 (21.08.1996) :
   - first version
1.32 ILBM.svobject
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Supports powerUP (TM).
 Version : 4.12
 Release Date : 18.07.1997
 Description
  ~~~~~~~~~
 ILBM.svobject is an external library module for the superview.library,
 which needs any SVDriver with Bitplane-Support.
 It supports reading and writing of IFF-ILBM files.
 In detail these are :
 Reading :
 - IFF-ILBM uncompressed
 1..8/24 bit
 - IFF-ILBM CmpByteRun1 compressed 1..8/24 bit
 Writing:
 1..8/24 bit
 - IFF-ILBM uncompressed
 - IFF-ILBM CmpByteRun1 compressed 1..8/24 bit
 Reading/writing from/to ClipBoard is supported.
 ControlPad-Switches
 ControlPad-Name : "ENV:SuperView-Library/ILBM.controlpad"
 ControlPad-Commands : - ANIM_BODIES
 ; if set, ANIM files' ILBM-BODY chunk
 ; (first frame) will be extracted when
 ; such a file is encountered. Otherwise
 ; anim.datatype may do that task later.
 ; (not actually IFF-ILBM support: it's
 IFF-ANIM support)
 History
 V4.12 (18.07.1997) :
 - when loading 24 Bit IFF files, the gfxbuffer size might have
 been set to zero, which might have been the reason for
```

crashes on e.g. Draco computers. Hopefully fixed.

(-> Joachim Ott)

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```
V4.10 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.9 (07.06.1997) :
- optimized PPC CmpByteRun1 encoder
V4.8 (05.05.1997) :
- added powerUP (TM) module support for: - 24 Bit RGB to 24 Bit planar \leftrightarrow
 conversion
 - 24 Bit planar to 24 Bit RGB \,\leftarrow\,
 conversion
 - CmpyByteRun1 encoding
 - CmpyByteRun1 decoding
V4.7 (08.02.1997) :
- added GfxBuffer V3 support: - transparency may be read
 - transparency may be written
V4.6 (01.01.1997) :
- tried some improvements
V4.5 (22.12.1996) :
- various things cleaned up
V4.4 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.3 (16.09.1996) :
- version had not been bumped to V4.2
- now rejects palette files (no body, no gfx) already when file-checking
 (-> Jürgen Schäfer)
- generates grayscale palette for files without color table
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace !

```

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# 1.33 PBM.svobject

```
© 1996-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Supports powerUP (TM).
Version
 : 4.6
Release Date : 24.06.1997
Description
~~~~~~~~
PBM.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It supports reading and writing of IFF-PBM files, which originally
only were written by Deluxe Paint II for the PC, when saving
chunky 256 Color graphics.
In detail these are :
Reading:
 - IFF-PBM uncompressed
 - IFF-PBM CmpByteRun1 compressed 8 Bit
Writing:
                                         (less than 256 colors will be
 - IFF-PBM uncompressed
                                   8 Bit
 - IFF-PBM CmpByteRun1 compressed 8 Bit increased to 256 colors)
Reading/writing from/to ClipBoard is supported.
History
~~~~~
V4.6 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.5 (07.06.1997) :
 - added powerUP (TM) module support for: - CmpByteRun1 decoding (1 module)
 - CmpByteRun1 encoding (1 module)
V4.4 (22.12.1996) :
 - various things cleaned up
V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
 - now has new disk read/write flags set
V4.1 (06.08.1996) :
```

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```
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

V3.1 (05.07.1996) :
- first version
```

# 1.34 ACBM.svobject

```
© 1994-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 : 4.7
Version
Release Date : 24.06.1997
Description
~~~~~~~~~~~~
ACBM.svobject is an external library module for the superview.library,
which needs any SVDriver with Bitplane-Support.
It supports reading and writing of IFF-ACBM files.
In detail these are :
Reading:
 - IFF-ACBM uncompressed 1..8 Bit
Writing:
 - IFF-ACBM uncompressed 1..8 Bit
Reading/writing from/to ClipBoard is supported.
History
~~~~~
V4.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.6 (08.02.1997) :
 - added GfxBuffer V3 support: - transparency may be read
 - transparency may be written
V4.5 (22.12.1996) :
 - various things cleaned up
V4.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
```

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```
V4.3 (16.09.1996) :
- now rejects palette files (no body, no gfx) already when file-checking
 (-> Jürgen Schäfer)
 - generates grayscale palette for files without color table
 - ClipBoard file recognition checked for BODY instead of ABIT. Fixed.
V4.2 (29.08.1996) :
- now has new disk read/write flags set
- fixed word-alignment when reading and writing
 (this bug was even older than superview.library;-)
 side-effect: uses quite as much memory as IFF-ILBM, now
 - would not have returned an error, when detecting unknown
 compression types
 - would not have returned an error in a specific
 low-memory situation
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile

\star Older revision descriptions have been deleted to save diskspace !

```

## 1.35 Datatypes support

Loading Graphics via DataTypes under OS3

### In General

\_\_\_\_\_

The library generally also accesses OS3-Datatypes, if none of the installed SVObjects was able to identify a specific graphics file format.

Usually by default only Datatypes of class "picture" will be accepted.

This means, no Samples, Texts, AmigaGuide File or whatever else will be loaded and displayed via superview.library - by default.

But it is possible to enable these also - see configuration section for more information on how to change settings - so that for example introduction pictures of ANIMs may as well be loaded.

#### Specific Problems

-----

As you may have expected, it is as well possible to replace single SVObjects by the corresponding Datatypes in case you think that the Datatype does work better or more reliable.

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For temporarily enabling this, you would just have to "Remove" the SVObject and load the Datatype.

For permanently enabling this, you would have to delete the SVObject from "LIBS:svobjects".

But remember, that DTs in general cannot export 24 bit Data and are not able to save any graphics (other than as IFF-ILBM).

Ralph Schmidt's picture.datatype V43 does allow loading of 24 bit pictures by enhancing the datatype system with additional functionality. To be able using these features with SuperView, you need a working installation of picture.datatype V43 (with ECS/AGA you'll also need a version of cyberncg.library, which had been removed from newer pic-dt 43 distributions).

The picture.datatype V43 which is coming with the Picasso96 Workbench Emulation RTG Software should work as well - any problems with this one should be reported to its author in the first place, though.

This also applies to any other, future picture.datatype V43 clones.

## 1.36 PCX.svobject

2 .. 16

PCX V2.8a

```
© 1994-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Supports powerUP (TM).
Version
 : 4.6
Release Date : 24.06.1997
Description
~~~~~~~~~
PCX.svobject is an external library module for the superview.library,
which needs any SVDriver with Bit-/Oneplane-Support.
It supports reading and writing of PCX files.
In detail these are :
Reading:
   2-256 Colors, 24 bit. In detail:
    - PCX V2.5 upto 16 Colors (supports 4/8 color EGA/VGA palette)
    - PCX V2.8a upto 16 Colors (supports 4/8 color EGA/VGA palette)
    - PCX V2.8b upto 16 GrayScales
    - PCX V3.00 upto 256 Colors
    - PCX V2.5 - V3.00 with 24 bit Data (see Remarks !)
Writing:
 Depending on the Colordepth of the source the following is written:
                                                 Destination Colors
 Source Colors
                  Version
                               Type
```

planar bitmap

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```
32 .. 256
                PCX V3.00
                            chunky pixel
                                            (24 bit)
 (24 bit)
                PCX V3.00
                            RGB planar
For 2-256 Colors It is always tried, to write the files RLE-encoded,
but if encoding is ineffective (output data nearly as large or even
larger than input data), the files will be written unencoded.
24 bit files will currently only be written unencoded.
History
~~~~~~
V4.6 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.5 (17.05.1997) :
- added powerUP (TM) module support for: - ByteRun encoding (3 modules)
 - ByteRun decoding (3 modules)
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace!

```

## 1.37 SVG.svobject

```
© 1994-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
Release Date : 24.06.1997
Description
SVG.svobject is an external library module for the superview.library,
which needs any SVDriver with Bit-/Oneplane-Support.
```

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```
It supports reading and writing of SVG Graphics files, which is
SuperView-Library's own graphics file format with XPK support.
In detail these are :
Reading:
 - SVG ONEPLANE 8/24 bit
 BITPLANE 1..8 Bit
Writing:
 - SVG ONEPLANE 8/24 bit
 BITPLANE 1..8 Bit
ControlPad-Switches
~~~~~~~~~~~~~~~~~~
                    : "ENV:SuperView-Library/SVG.controlpad"
ControlPad-Name
ControlPad-Commands : - PACKMETHOD=<xxxx>
                        ; if this one is specified, it is tried to
                        ; pack the resulting file with the specified
                        ; XPK-Packer. If this fails, the file keeps
                        ; unpacked.
File Format Information
As "Aminet:util/dtype/akSVG43x.lha" there's a separate package available,
which consists of a "SVG.datatype" for applications not using
SuperView-Library,
              the description of the file format
               and
a conversion tool "AnyToSVG" (using Datatypes upto 24 Bit).
History
V4.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.6 (01.01.1997) :
 - added new note about Xpk
 - recompiled with new headers
 - added/fixed buffered I/O
 - and more
V4.5 (22.12.1996) :
 - various things cleaned up
V4.4 (08.12.1996) :
 - the progress indicator was broken (jumping from 0 to 50 and below ,-)
 - there were some unnecessary Seek() calls
 - removed some redundant variables
```

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```
V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.2 (15.09.1996) :
 - now has new disk read/write flags set
 - was missing in V15.1 (declared to have been written on 18.08.96)
V4.1 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 - made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile
V3.4 (21.12.1995) :
 - added REV. 2 of new, rock-solid startup code
V3.3 (10.12.1995) :
 - added new, rock-solid startup code
 - no longer causes crashes
 - changed some includes and so on
 - now opens "xpkmaster.library" just when needed and not when
   initializing module. This should have two effects:
     - if you want to save packed data, but there's no library,
       it will be saved unpacked instead
     - initialization time should be much shorter, so that possibly
       the crashes occuring on 060 systems should no longer occur
       (hopefully)
     - the xpk-libraries may be flushed from memory completely,
       when no longer actually being needed and used
     - opening the svobject does no longer depend on the presence
       of xpk- and or powerpacker-library (so unpacked files may as
       well be read/written on systems without these)
V3.2 (24.10.1995) :
 - recompiled with SAS/C V6.56
V3.1 (07.10.1995) :
 - upgraded to V3 specs
V2.1 (24.09.1995) :
 - replaced SVO.svobject by this one, which is smarter and works
   a little bit more transparent for the user. Needs VMEM: assignment.
```

## 1.38 The SVG Graphics File Format Specification

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\_\_\_\_\_

= The SVG Graphics File Format = - Version 1, draft version: 03.01.1997

#### File Format Information

Pictures in the "SVG Graphics File Format" consist of two parts: a header and an attached xpk-packed or unpacked data file. Both parts are put into one single file.

Construction (all fields in Motorola BYTE order):

| 0x00 | ID            | UBYTE[18]      | "SVG Graphics File" + 0-Byte       |
|------|---------------|----------------|------------------------------------|
| 0x12 | Version       | UWORD          | always 1 yet                       |
| 0x14 | GfxDataOffset | ULONG          | header length (depends on version) |
| 0x18 | LeftEdge      | ULONG          | as with e.g. ILBM                  |
| 0x1c | TopEdge       | ULONG          | • • •                              |
| 0x20 | Width         | ULONG          | •••                                |
| 0x24 | Height        | ULONG          | •••                                |
| 0x28 | ColorDepth    | ULONG          | used colors as x of 2^x            |
| 0x3c | ViewMode32    | ULONG          | 32 Bit Amiga ViewMode              |
| 0x40 | PixelBits     | UBYTE          | 1, 8, 24 (future: 16, 32)          |
| 0x41 | PixelPlanes   | UBYTE          | # of planes with PixelBits         |
| 0x42 | BytesPerLine  | ULONG          | bpl of a PixelPlane                |
| 0x46 | ColorMap      | UBYTE [256][3] | unused, if > 256 Colors (zero-ed)  |

After that either follows XPK compressed data or uncompressed data, which can be detected by the leading chars "XPK" or "PP20" for packed data at GfxDataOffset (relative to beginning of the file).

Please note, that with upto 256 colors (Colordepth <= 8) it has to be checked, whether the graphics actually is EHB or HAM. Use the Viewmode32 field for these assumptions when reading, and maybe OR with HAM\_KEY or EHB\_KEY when saving.

#### Note:

----

"Pixelbits" and Planes do allow a lot of combinations.

Actually used and supported by current software are only the following:

| Bits | Planes | Depth | Content                              |
|------|--------|-------|--------------------------------------|
|      |        |       |                                      |
| 1    | 18     | 18    | (unaligned Bitmaps with 2256 colors) |
| 8    | 1      | 18    | (chunky Bitmaps with 2256 colors)    |
| 2.4  | 1      | 24    | (24 Bit RGB Bitmaps with 8:8:8 RGB)  |

So 24 Bit Data should not be saved planewise, but as 24 Bit RGB instead.

If you ever should save any other data, please avoid any planar configurations and respect the following rules for RGB data chunks:

| Bits | Planes | Depth | Content                                |
|------|--------|-------|----------------------------------------|
|      |        |       |                                        |
| 16   | 1      | 15/16 | (15/16 Bit Bitmap with 5:5:5:1 RGB0/A) |

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Note, that an alpha channel can only be correctly identified, when "ColorDepth" is handled as an indicator, whether there actually is one, or not. Programs not supporting alpha channels should simply ignore the color depth and interpret "Bits=16 and Planes=1" as 5:5:5:0 RGB and "Bits=32 and Planes=1" as 8:8:8:0 RGB and so on...

Planar configuration actually only was thought for support of 2..256 color Bitmap contents. We all new, that actually 24 or more bitplanes are nearly unuseable and actually ugly to handle. So please respect the "Planes" variable only being valid for values

So please respect the "Planes" variable only being valid for values between 1..8 and only, if "Bits=1" has been set, also note, that with "Planes=1..8" you must set "ColorDepth=Planes", since other than with 8 Bit chunky there is no support of unused planes.

# 1.39 GPlot.svobject

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Version : 4.5

Release Date : 24.06.1997

#### Description

~~~~~~~~

GPlot.svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support, a working GhostScript.svobject and an installed GPlot executeable.

It supports importing CGM metafile vector drawings as bitmapped graphics. This is done by using gplot for conversion to Postscript (TM) files, which then will be parsed using a working Ghostscript installation with

GhostScript.svobject

•

GPlot.svobject will create a temporary file, which then will be parsed through superview.library again.

Reading :

(Any CGM drawings as long as the resulting Postscript (TM) commands are readable for Ghostscript - especially the Times-Roman font has to be available for Ghostscript).

Configuration

~~~~~~~~~~~

This CGM/GPlot support module has been tested with the GPlot 4.3b2a1 port from Aminet:gfx/conv. GPlot is (C) 1987 by the Pittsburgh Su Center, the original version had been done by Phil Andres, Amiga port by

Michael Cheng in 1996.

V4.2 (18.08.1996) :

At first, you have to correctly install and configure Ghostscript and

GhostScript.svobject

After that you have to install GPlot and either supply an AmigaDOS search path to a directory, where the executable "GPlot" is stored (default), or explicitly specify path plus name of the program by the controlpad entry GPLOT\_PATH (see below).

Please note, that the resulting Postscript (TM) files, which then will be passed through Ghostscript, definitely do contain a reference to the font "Times-Roman" (in Ghostscript's FONTMAP this is redirected to the font file ptmr.gsf, which has to be present in the font directory(ies) specified in the environment variable GS\_LIB). With the Ghostscript version I had for testing, the font support did not work, due to a bug (or configuration fault ;-) of Ghostscript.

So, please make sure, that this font is present - otherwise an error message like "file not found" may appear.

```
Where to DOWNLOAD from
Aminet:gfx/conv/gplot.lha
ControlPad-Switches
~~~~~~~~~~~~~~~~~~
 : "ENV:SuperView-Library/GPlot.controlpad"
ControlPad-Name
ControlPad-Commands : - GPLOT_PATH=<gplot command path plus name>
 ; how gplot is to be called
 ; e.g. GPLOT_PATH=Work:GPlot/GPlot
 ; default is: GPlot
 - STATUS=<ENABLED|DISABLED>
 ; allows to disable this module - for example
 ; to be able to use an other, program-specific
 ; import-module for the same file format
History
~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
```

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```
- now has new disk read/write flags set
 V4.1 (06.08.1996) :
   - now uses/requires semaphore system of superview.library V14+
  - now correcly handles SVOCheckFile
 V3.1 (16.07.1996) :
  - first version
1.40 BMP.svobject
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Supports powerUP (TM).
 Version
           : 4.8
 Release Date : 24.06.1997
 Description
 BMP.svobject is an external library module for the superview.library,
 which needs any SVDriver with Bit-/Oneplane-Support.
 It supports reading and writing of Windows (TM) and OS/2 (TM)
 BitMap files (BMP). Not all derivates might be supported, though.
 Extraction of Bitmaps from RIFF-BMP files (DIB) also is possible.
 In detail these are :
 Reading:
  - unencoded BMP "wallpapers" in 1, 4, 8, 24 bit colordepth.
  - RLE-encoded BMP "wallpapers" in 4, 8 Bit colordepth.
 Writing:
  Depending on the Colordepth of the source the following is written:
  Source Colors
                   Version
                                Type
                                                  Destination Colors
          2
                   BMP (misc)
                               packed chk. pix.
                                                        2
   4 .. 16
                   BMP (misc)
                                packed chk. pix.
                                                       16
   32 .. 256
                   BMP (misc)
                                chunky pixel
                                                      256
                                                   (24 bit)
   (24 bit)
                   BMP (misc)
                               RGB pixel
 History
 V4.8 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
```

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```
V4.7 (17.05.1997) :
 - added powerUP (TM) module support for: - BMP RLE decoding
                                                           (read)
                                       - BMP plain decoding (read)
                                       - BMP plain encoding (write)
- reading: fixed another length calculation problem
- writing: fixed problem with possibly unrecognized memory
           allocation failure (68k only)
V4.6 (13.02.1997) :
 - writing 1..4 Bit BMPs (2-16 colors) with a width, which did not
  result in a bytes per line value divideable by 4, would have resulted
  in wrongly calculated temporary buffer sizes, Mungwall hits, maybe
  Enforcer hits, maybe crashes. Now calculated correctly, separately
  for each: 1, 4, 8, 24 Bit colordepth.
   (-> Waldemar Scheu)
V4.5 (22.12.1996) :
- various things cleaned up
V4.4 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.3 (28.08.1996) :
 - now has new disk read/write flags set
- there was a bug in writing the BMP header, which caused
  any programs correctly examining the header (including SuperView)
  to distort the written bitmap because of a wrong offset
V4.2 (10.08.1996) :
 - V4.1 was broken
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 - made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile
*******************
* Older revision descriptions have been deleted to save diskspace!
******************
```

## 1.41 Winlcon.svobject

```
© 1994-97 by Andreas R. Kleinert. FREEWARE. All rights reserved. Only to be distributed with SuperView-Library. Version : 4.5
```

Release Date : 24.06.1997

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```
Description
WinIcon.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It supports reading of W*nd*ws V3.x (TM) Icon files.
In detail these are :
Reading:
- WinIcon files with _exactly_ 16 Colors
   (more than one Icon per file should work, but hasn't been tested yet.)
History
~~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile
V3.3 (09.06.1996) :
- added new, rock-solid startup code

* Older revision descriptions have been deleted to save diskspace!

```

# 1.42 FBM.svobject

```
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(Also see notes under "Credits".)

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Version : 4.5

Release Date : 24.06.1997
```

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```
Description
FBM.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It supports reading and writing of FBM (*nix) files.
In detail these are :
Reading:
 - FBM 8 Bit x 1 Plane: 2..256 Colors/256 Grayscales
- FBM 8 Bit x 3 Planes: 24 bit
Writing:
- FBM 8 Bit x 1 Plane: 2..256 Colors/256 Grayscales
- FBM 8 Bit x 3 Planes: 24 bit
Following to the specifications, a 2..128 color file takes as much
space as a 256 color file: always 8 Bits are written.
Only the colormap is sized differently for different colordepths.
History
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

\star Older revision descriptions have been deleted to save diskspace !

```

## 1.43 Limbo.svobject

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Version : 4.6

Release Date : 24.06.1997

\*\*\* THIS ONE IS REALLY EXPERIMENTAL - IT WORKS, BUT REQUIRES
A LOT OF MEMORY AND A FAST PROCESSOR.
DO NOT SAVE IMPORTANT DATA AS LIMBO/LMB. IT'S HIGHLY LOSSY! \*\*\*

### Description

~~~~~~~~

Limbo.svobject is an external library module for the superview.library, which needs any SVDriver with Oneplane-Support and an installed Limbo 4.0 executeable.

It supports importing Limbo 4.0 fractal-compressed bitmapped graphics. This is done by using Limbo for conversion of LMB files to temporary PNM files, which then will be parsed through superview.library again. Exporting is supported by creating temporary PNM files, which then will be converted to LMB files via Limbo. A VMEM: assignment is needed to be present to allow doing the

temporary file and directory management.

So it supports reading and writing of Limbo 4.0 files. In detail these are :

### Reading :

(Limbo 4.0 fractal-compressed files, as far as supported by the used Limbo program.)

### Writing:

(Any input will be converted to 24 Bit, which then will be converted to Limbo 4.0 fractal-compressed files, by the Limbo program.)

#### Configuration

~~~~~~~~~~~

This Limbo support module has been tested with the Limbo 4.0 port from Aminet:gfx/conv, which was based on a version developed by Carsten Frigaard, Jess Gade, Thomas Therp Hemmingsen and Torben Sand in 1993/94 on Aalborg University, Denmark.

At first you have to install Limbo by simply copying it into a directory where you like it to reside.

You also have to either supply an AmigaDOS search path to a directory, where the executable "Limbo.68000" is stored (default), or explicitely specify path plus name of the program by the controlpad entry LIMBO\_PATH (see below).

Where to DOWNLOAD from

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Aminet:gfx/conv/Limbo.lha ControlPad-Switches ~~~~~~~~~~~~~~~~~~ : "ENV:SuperView-Library/Limbo.controlpad" ControlPad-Name ControlPad-Commands : - LIMBO\_PATH=<Limbo command path plus name> ; how Limbo is to be called ; e.g. LIMBO\_PATH=Work:Limbo/Limbo.68030.881 ; default is: Limbo.68000 - STATUS=<ENABLED|DISABLED> ; to be able to use an other, program-specific ; import-module for the same file format ; DECODING settings ; \*\*\*\*\*\*\*\*\*\*\*\*\*\* - DECODE ITERATIONS=<number> ; option -i of Limbo 4.0 ; default is: 6 - EXPANSION\_LEVEL=<number> ; option -l of Limbo 4.0 ; default is: 0 - DECODE\_VERBOSE=<ON|OFF> ; Should decoding output be sent to stdio ? ; default is: OFF ; ENCODING settings ; \*\*\*\*\*\*\*\*\*\* - EXPANSION\_LEVEL=<number> ; option -1 of Limbo 4.0 ; default is: 0 - MIN\_RANGE\_BLOCKSIZE = < number > ; option -b of Limbo 4.0 ; default is: 4 - DOMAIN\_SLIDE\_BLOCKSIZE=<number> ; option -d of Limbo 4.0 ; default is: 8 - MIN COMPARE DOMAIN BLOCKS=<number> ; option -m of Limbo 4.0 ; default is: 4 - MAX\_COMPARE\_DOMAIN\_BLOCKS=<number> ; option -s of Limbo 4.0 ; default is: 10 - FEATURE\_SPACE\_DIMS=<number> ; option -f of Limbo 4.0 ; default is: 3 - GRID\_DIV\_RES=<number> ; option -r of Limbo 4.0 ; default is: 1000 - QUADTREE\_LEVEL=<number> ; option -n of Limbo 4.0 ; default is: 0 - TRESHOLD SPLIT=<number> ; option -Tm of Limbo 4.0 ; default is: 100

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```
- TRESHOLD CLASS=<number>
 ; option -Te of Limbo 4.0
 ; default is: 50
 - TRESHOLD_POST=<number>
 ; option -\text{Tp} of Limbo 4.0
 ; default is: -1
 - ENCODE_VERBOSE=<ON|OFF>
 ; Should encoding output be sent to stdio ?
 ; (recommended, since endocing is
 ; _extremely slow_)
 ; default is: ON
 History
  ~~~~~~
  V4.6 (24.06.1997) :
   - fixed "memory loss on LibInit failure" bug
  V4.5 (22.12.1996) :
   - various things cleaned up
  V4.4 (17.11.1996) :
   - recompiled with SAS/C V6.57
  V4.3 (16.09.1996) :
   - file information did not work (no requester)
   - V4.2 had V4.1 in the libid string
  V4.2 (18.08.1996) :
   - now has new disk read/write flags set
  V4.1 (06.08.1996) :
   - now uses/requires semaphore system of superview.library V14+
   - now correcty handles SVOCheckFile
  V3.1 (26.07.1996) :
   - first version. Still as experimental as Limbo itself.
1.44 PNM.svobject
  © 1994-97 by Andreas R. Kleinert.
  FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
  Version
              : 4.5
  Release Date : 24.06.1997
  Description
```

~~~~~~~~~~

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```
PNM.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It supports reading and writing of PNM (*nix) files.
In detail these are :
Reading :
All binary (non-ASCII) derivates of the PNM format will be read
 (P4/P5/P6), non-binary (ASCII) derivates are not supported (P1/P2/P3).
 - PBM (P4) Black & White
 - PGM (P5)
           256 Grayscales
 - PPM (P6)
            24 bit TrueColor
Writing:
 - PGM (P5)
            256 Grayscales
            24 bit Truecolor
 - PPM (P6)
   Writing graphics as binary 24 bit PPM data (P6) is the
   only way to prevent color information from getting lost.
ControlPad-Switches
ControlPad-Name
                 : "ENV:SuperView-Library/PNM.controlpad"
ControlPad-Commands : - SUPPRESS_HEADER
                        ; setting this keyword will suppress
                        ; writing the PNM header for P5/P6
                        ; files, which actually will generate
                        ; a RAW data file, which cannot be loaded
                        ; with superview.library again, but may be
                        ; used for different purposes
                        ; Default: (not set)
History
V4.5 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
 - various things cleaned up
V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
 - now has new disk read/write flags set
V4.1 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
```

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```
- made sure, that always correct svgfx_Version is set
  - now correcly handles SVOCheckFile
  ******************
  * Older revision descriptions have been deleted to save diskspace!
  *******************
1.45 PNG.svobject
 © 1996-97 by Andreas R. Kleinert.
  (Also see notes under "Credits".)
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
            : 4.12
 Version
 Release Date : 24.06.1997
 Description
 PNG.svobject is an external library module for the superview.library,
 which needs any SVDriver with Oneplane-Support.
 It supports reading of Portable Network Graphics (PNG - pronounce
 it "PiNG", if you like ;-) files.
 In detail these are :
 Reading:
  - 8 Bit color mapped files
  - any grayscaled images, 16 Bit derivates scaled down to 8 Bit
  - True color files (24/48 Bit, alpha channel ignored) as 24 bit
    (so 48 Bit 16:16:16 will be cut down to 24 Bit 8:8:8)
    So the following types of PNG images (all valid ones) should be
    imported in the described way:
      Bit depths
                  Interpretation
      1,2,4,8,16 pixels are grayscaled samples
      8,16
                  pixels are R,G,B triple samples
      1,2,4,8
                  pixels are palette indices
        (plus variations with - here ignored - alpha channel)
 Writing:
  - 8 Bit color mapped files
  - True color files (24 Bit)
 ControlPad-Switches
  ~~~~~~~~~~~~~~~~~
                 : "ENV:SuperView-Library/PNG.controlpad"
 ControlPad-Name
```

ControlPad-Commands : - PNG8_TRANSPARENCY=<ON|OFF>

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```
; whether 8 Bit PNGs should contain
                        ; transparency information
                        ; Default: OFF
                      - PNG8_TRANSPARENT_COLOR=<0..255>
                        ; Default color to be enabled and set
                        ; (graphics control extension block)
                        ; Default: 0
                      - Z_COMPRESSION=<0..9>
                        ; allows changes in compression/speed.
                        ; 0 results in uncompressed data, 9 compresses
                        ; best, but increases decompression time.
                        ; Default: 6
                      - SAVE_INTERLACED=<ON|OFF>
                        ; Save image as interlaced (progressive) ?
                        ; Default: OFF
History:
~~~~~~~
V4.12 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.11 (1.6.1997) :
 - fixed rare, possible memory loss problem (setjmp caused)
   in both, read and write, module parts
   (different context, though)
 - now using libpng 1.0 beta 6 - version 0.96
V4.10 (24.02.1997) :
 - V4.9 had been released as Aminet:gfx/show/SViewFix580.lha
 - ...but the new fix for 2..256 color graphics might have
   affected some grayscaled images (too dark)
V4.9 (23.02.1997) :
 - there were problems with 16 Bit grayscaled images
 - the 16 Bit bug was a side effect of a wrongly
  handled pixel depth check, thus perhaps it would
  have happened with other bit_depth 16 images as well
 - updated information on supported PNG files (depth types)
 - sometimes odd PixelBits might have been returned ?!
 - fixed reading of 2..128 color images (no longer imported
  as 256 color images)
 - now does recognize bit_depth / num_palette differences
   and consequently reduces color depth for 2..256 color
   pictures, when necessary
V4.8 (08.02.1997) :
 - fixed transparency support (did not work)
 - added GfxBuffer V3 support: - transparency may be read
                               - transparency may be written
 - controlpad transparency settings do supersede gfxbuffer
   transparency settings (when being turned on)
 - now using libpng 1.0 beta 4 - version 0.90
```

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```
V4.7 (16.01.1997) :
- PNG: added transparency support
 - compression can be set
- now optionally saves progressive files
V4.6 (29.12.1996) :
- used zlib V1.0.4
V4.5 (22.12.1996) :
- used zlib V1.0.3 and libpng 1.0 beta 3 - version 0.89
- added additional file type check
 - various things cleaned up
V4.4 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.3 (18.10.1996) :
- changed file format name to "PNG (PiNG)"
- added write support for 8/24 Bit
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile
********************
* Older revision descriptions have been deleted to save diskspace!
*******************
```

1.46 C64.svobject

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```
It supports reading of C64 Graphics files (Koala, Doodle).
In detail these are :
Reading:
Format
         Dimensions
                             Colors
Doodle
        320x200
                             2/16
Koala
        160x200 -> 320x200
                            4/16
History
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile
*******************
\star Older revision descriptions have been deleted to save diskspace!
******************
```

1.47 CDR.svobject

```
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Version : 4.5

Release Date : 24.06.1997

Description

CDR.svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support and BMP.svobject to be present.

It supports reading of the previews which may be part of CorelDraw
```

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```
.CDR files (e.g. with version 4) - these are related with plain
 Windows BMP files, so that CDR.svobject will extract the graphics data,
 create a temporary file, write it as a BMP file and then parse it
 through superview.library again.
  (See documentation of BMP.svobject for which
  BMP derivates currently are supported).
 Reading:
  (Any contained preview, as long as the specific contained BMP derivate
   is supported by superview.library).
 History
  ~~~~~~
 V4.5 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
 V4.4 (22.12.1996) :
  - various things cleaned up
 V4.3 (17.11.1996) :
  - recompiled with SAS/C V6.57
 V4.2 (18.08.1996) :
  - now has new disk read/write flags set
 V4.1 (06.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
  - made sure, that always correct svgfx_Version is set
  - now correcly handles SVOCheckFile
  ******************
  * Older revision descriptions have been deleted to save diskspace!
  ******************
1.48 IMG.svobject
```

```
© 1994-97 by Andreas R. Kleinert.
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Version
Release Date : 24.06.1997
Description
IMG.svobject is an external library module for the superview.library,
which needs any SVDriver with Bitplane-Support.
```

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```
It supports reading of IMG (GEM/Metafile) files.
In detail these are :
Reading:
- IMG (16 byte header) grayscaled (1..8 bits = 2..256 scales)
- IMG (18 byte header) grayscaled (1..8 bits = 2..256 scales)
History
~~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile
******************
* Older revision descriptions have been deleted to save diskspace!
******************
```

1.49 TIFF.svobject

```
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(Also see notes under "Credits".)

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Version : 4.7

Release Date : 24.06.1997

Description

TIFF. svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support.

It supports reading and writing of TIFF-files (V5.0).

In detail these are :

Reading :
```

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Compression types (as far as known):

uncompressedCCITT Group 3 Fax

- NeXT (2-bit RLE) - CCITT/3 1D (Huffman RLE)

Mac PackBits
 CCITTRLEW (word-aligned uncompressed)
 Thunderscan RLE
 JPEG (decompression not possible)

...and maybe more. LZW is not supported, though.

Bit depths:

| Pixelbits | Planes | => resulting Bit Depth |
|-----------|--------|-----------------------------|
| 1 |
1 | 1 |
| 1 | X | x (Mac Packbits only) |
| 4 | 3 | 12 (imported as 24 Bit) |
| 8 | 1 | 8 (256 colors or gray) |
| 8 | 3 | 24 |
| 8 | 4 | 24 (24 Bit + alpha Channel) |

Writing:

| Depth | written a | written as | | | | |
|---------------|-----------|------------|-------|----|---|--|
| | | | | | | |
| <= 256 colors | Motorola | (MM), | None, | 8, | 1 | |
| (24 bit) | Motorola | (MM), | None, | 8, | 3 | |

History

~~~~~

V4.7 (24.06.1997) :

- fixed "memory loss on LibInit failure" bug

V4.6 (01.02.1997) :

- safely removed/disabled LZW

V4.5 (16.01.1997) :

- now using libtiff V3.4 beta 024
- now optimizing for time, not size
- saved about 100K space because of new sources
- completely recompiled
- fixed long standing bug added workaround for strange bug in libtiff, replaced with own code. Colormaps of some uncompressed TIFFs now should be read correctly, preventing the images from looking distorted. (-> Norman Iscove)

### V4.4 (22.12.1996) :

- various things cleaned up

V4.3 (17.11.1996) :

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```
- recompiled with SAS/C V6.57
V4.2 (24.08.1996) :
 - the new TIFF reader code did not correctly left-shift the
  UWORD palette entries of most palette-based pictures
   (only some uncompressed or Mac Packbit compressed, being
   handled by the workaround-code, would have worked).
  All palette entries did became black.
  *Serious* bug.
 - now has new disk read/write flags set
V4.1 (06.08.1996) :
- completely removed my own TIFF reading routines and replaced
  these by the freely available TIFF Library
   (only for "unpacked" and MacPackBits there do remain some fragments,
   since TIFF Library does seem to have some deficites here, so we do
   use my own routines as a fallback here)
 - because of using TIFF Library, TIFF.svobject now became
  _really_ large (worse), but on the other hand now does (hopefully ;-)
  support the following compressions when reading:
  uncompressed, CCITTRLE, CCITTFax3, Next (2-bit RLE), CCITTRLEW,
  Mac PackBits, Thunderscan
 - hope, that these changes did not make anything worse, but
  it simply wasn't possible to make LZW bug-free and add
  CCITT Fax support without doing so
 - also, it now can safely handle 32 Bit graphics
   (24 Bit plus Alpha Channel) and those 12 Bit pictures
   (4:4:4 "Truecolor")
 - removed 030 version, since 2x200K simply would have been too much
 - TIFF.svobject seems to be really fast now
 - added progress indicator support
 - slightly changed "unpacked" and Mac Packbits (fallback) routines
- added/changed/fixed description of old/new compression types
- writing remains unchanged
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcty handles SVOCheckFile
- now uses/requires semaphore system of superview.library V14+
*****************
* Older revision descriptions have been deleted to save diskspace!
*******************
```

## 1.50 EPS.svobject

```
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(Also see notes under "Credits".)

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Version : 4.5
```

Release Date : 24.06.1997

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#### Description

~~~~~~~~

EPS.svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support and TIFF.svobject (respectively GhostScript.svobject) to be present.

It allows two operations, depending on controlpad preferences settings:

- extraction of the trailers/previews which may be part of EPS(F) files. This usually will be TIFF graphics, but it makes no matter, which file format actually is included, because EPS.svobject will create a temporary file, which then will be parsed through superview.library again.

(See documentation of TIFF.svobject for which TIFF derivates currently are supported).

- extraction of the Postscript (TM) part of EPS(F) files, which then, in form of a temporary file, will be parsed through superview.library (and perhaps also GhostScript.svobject) again.

Reading:

- Any contained trailers/previews/thumbnails, as long as the specific contained file format if any is supported by superview.library
- Postscript (TM) as far as supported by the installed Ghostscript implementation

Writing:

- EPS files with Postscript (TM) image content, without TIFF header (only from 24 bit sources -> use the AnyTo24Bit operator).

The graphics will NOT be vectorized - instead a bitmap-like representation of it will be translated into Postscript (TM) format.

Remarks

~~~~~

Please note, that the Encoding Routines of the Library are not (yet) fully re-entrant, so that only one Task may Encode a picture at a time. The Library itself manages it, that the other Task has to Delay() until the Encoding Routines are "free" again.

### ControlPad-Switches

~~~~~~~~~~~~~~~~~~~~

ControlPad-Name : "ENV:SuperView-Libration : "En

: "ENV:SuperView-Library/EPS.controlpad"

- ControlPad-Commands : EXTRACTMODE=<HEADER|PS>
 - ; the Postscript (TM) part should be extracted,
 - ; while parsing the Postscript (TM) part requires
 - ; a working Ghostscript installation with

; Determines, whether the preview image or

- ; GhostScript.svobject being correctly configured
- ; default is: HEADER
- SAVE_ROTATE=<ON|OFF>
 - ; by default, the picture seems to be rotated
 - ; with Postscript (TM) output of this module.
 - ; Enabling SAVE_ROTATE will again re-rotate it to

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```
; the original position.
                      ; default is: OFF
                    - SAVE_CENTER=<ON|OFF>
                      ; centers the images on the page with the
                      ; desired size of SAVE_WIDTH x SAVE_HEIGHT (or not)
                      ; default is: ON
                    - SAVE_RLE=<ON|OFF>
                      ; allows to apply RLE compression to the
                      ; PS output
                      ; default is: OFF
                    - SAVE_DPI=<value>
                      ; DPI value to use for the output
                      ; default is: 300
                    - SAVE_WIDTH=<value>
                     ; Width of the PS page
                      ; default is: 612
                    - SAVE_HEIGHT=<value>
                      ; Width of the PS page
                      ; default is: 762
History
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- now uses/requires semaphore system of superview.library V14+
 - now correcly handles SVOCheckFile
*******************
* Older revision descriptions have been deleted to save diskspace!
******************
```

1.51 GhostScript.svobject

```
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(Also see notes under "Credits".)

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Version: 4.7
```

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Release Date : 24.06.1997

Description

~~~~~~~~

GhostScript.svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support and PNG.svobject to be present.

It supports importing Postscript (TM) language and PDF files as bitmapped graphics. This is done by using Ghostscript for conversion, giving a DPI resolution and a description code for one of the supported output file format, like e.g. PNG.

GhostScript.svobject will create a temporary file, which then will be parsed through superview.library again.

(See documentation of PNG.svobject for which PNG derivates currently are supported).

### Reading:

(Any Postscript (TM) and PDF files as long as readable for Ghostscript).

#### Configuration

~~~~~~~~~~~

This Ghostscript support module has been tested with the Ghostscript 3.53 and 4.03 ports from Aminet, with amiga driver & no ixemul.library: Aladdin Ghostscript is Copyright (C) 1989, 1995 Aladdin Enterprises. All rights reserved.

Recommended is V5.01, Ghostscript 2.6.1 may work, if you don't use PNG as output file format.

At first, Ghostscript must have been successfully installed, and working (test it via command line access).

For enabling Ghostscript support, you either have to supply an AmigaDOS search path to a directory, where the executable "gs000" is stored (default), or explicitely specify path and/or name of the program by the controlpad entry GS_PATH (see below).

But as mentioned before, Ghostscript has to be installed and set-up first.

Setting-up Ghostscript

Since the documentation of some Ghostscript versions is anything-but-not-very-verbose I decided, to shortly explain here, what steps to perform to successfully install Ghostscript on your system:

- unpack Ghostscript to where you wish it to be located at (e.g. "Work:Ghostscript/")
- make an assign "Ghostscript:" to that Ghostscript directory
 (e.g. put the line "Assign Ghostscript: Work:Ghostscript"
 into your "S:User-Startup")
- assign PSFonts: to your postscript font directory (anywhere)

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```
(e.g. put the line "Assign PSFonts: Work:Ghostscript/Fonts"
into your "S:User-Startup", if that font directory already
does exist there)
```

- create some environment variables in ENV: _and_ ENVARC: which have to look as follows (respecting upper and lowercase):

```
Variable Content Remark

GS_FONTPATH *NOT* to be created (do delete)

GS_LIB PSFonts:

GS_OPTIONS create, but leave *EMPTY* (blank)

GS_DEVICE amiga
```

- create a file "PSFonts:FONTMAP" with at least the following lines:

The single ps fonts are assigned via the FONTMAP. For fonts used by ps files there must be an entry to allow interpretation of these files, but basically each font can easily substituted by an other.

It does not matter, which font files are assigned for which fontname; in general entries within the FONTMAP file at "PSFonts:" just have to go conformeous with the following scheme:

```
/Fontname (Filename) ;
for example
    /Helvetica (Helvet.pfb) ;
```

This means that the corresponding files must actually exist. But one also may substitute fonts symbolically by other fonts (to be understood like an alias or replacement font as known from Windows (TM) for "Arial" and "Helvetica") like for example:

```
/Helvetica_Bold /Helvetica ;
```

Remarks

~~~~

- if special versions for specific CPUs do crash, then try versions for "smaller" CPUs (e.g. 68000 version instead of 040+FPU version).
- please note, that setting DPI to higher values does not necessarily increase image quality, but memory usage (default is DPI=72). Same is to mention for the output colordepth:
  - 256 colors give better results, when you've to perform dithering.
- files to be recognized must either have the standard Postscript (TM) header (containing '%!PS-Adobe' in it) or have the file extension ".ps" and begin with '%' (containing instructions for GhostScript).

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```
- PDF files are also supported (extension ".pdf" and beginning with '%'),
  but having the correct and needed fonts installed is more critical
   for these. Had not enough fonts to successfully test loading of any
   of these.
 - error output of Ghostscript still is directed to stdio/Output(),
   so problems may be visible transparently
Where to DOWNLOAD from
Aminet:gfx/show/gs#?.lha (#?=version, CPU and archive content)
ControlPad-Switches
ControlPad-Name
                   : "ENV:SuperView-Library/GhostScript.controlpad"
ControlPad-Commands : - GS_PATH=<gs command path plus name>
                        ; how Ghostscript is to be called
                        ; e.g. GS PATH=Ghostscript:gs000
                        ; default is: gs000
                      - OUTPUTMODE=<PNG256|PNG24BIT|OTHER>
                        ; Output file format to be used
                        ; (-sDEVICE parameter of Ghostscript's gs).
                        ; Only PNG supported yet.
                        ; default is: PNG256
                      - OTHER_OUTPUTMODE=<pcxmono|pcxgray|pcx16|pcx256|
                                          pcx24b|tiffcrle|tiff24nc|
                                          pngmono|pnggray|png16|png256|
                                          png16m|bmpmono|bmp16|bmp256|
                                          bmp16m>
                        ; If OUTPUTMODE=OTHER has been set, the string
                        ; specified here will directly be passed as
                        ; Ghostscript's "-sDEVICE" parameter
                        ; default is: png256
                      - DPI=<value>
                        ; DPI value to use for the converted output
                        ; (-r parameter of Ghostscript's gs)
                        ; default is: 72
                      - STATUS=<ENABLED|DISABLED>
                        ; allows to disable this module - for example
                        ; to be able to use an other, program-specific
                        ; import-module for the same file format
History
~~~~~~
V4.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.6 (25.02.1997) :
 - now using SystemTagList() with 32K stack and setting the CurrentDir
 to the image path. Works better and more stable now.
 (-> Florian Zeiler)
V4.5 (12.02.1997) :
```

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```
- now other temporary file formats than PNG are supported; you even
 may change Ghostscript.cpinfo to allow to select more via prefs GUIs
 - may work with Ghostscript 2.6.1 as well, now
 V4.4 (22.12.1996) :
 - various things cleaned up
 V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
 V4.2 (18.08.1996) :
 - now has new disk read/write flags set
 V3.3 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - now correcly handles SVOCheckFile
 V3.2 (23.07.1996) :
 - added possibility to disable this module, if there's an other,
 program-specific svobject you would like to use instead
 (post.library ?)
 - fixed error return mechanism for SVO_Show (accidentally correct ?)
 V3.1 (07.06.1996) :
 - first version
 Targa.svobject
1.52
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Supports powerUP (TM).
 Version
 : 4.8
 Release Date : 24.06.1997
 Description
  ~~~~~~~~~
  Targa.svobject is an external library module for the superview.library,
  which needs any SVDriver with Bit-/Oneplane-Support.
  It supports reading and writing of TGA (Truevision Targa) files.
  In detail these are :
  Reading:
   Colors Depth Organisation
                                                 RLE-Compression
                  planar monochrome
                                                 supported
              1
     256
                 chunky pixel (colors/gray)
                                                 supported
```

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```
"HighColor 15/16 Bit" Pixel
                                               supported
    (24 bit)
               BGR-Pixel
                                               supported
Writing:
 Depending on the Colordepth of the source the following is written:
 Source Colors
                  Type
                                                 Destination Colors
  2 .. 256
                  Uncompressed chunky pixel
                                                    256
  (24 bit)
                  Uncompressed BGR
                                                    (24 bit)
Remarks
 - 32 Bit graphics files are not supported yet.
 - ColorMaps have to be of type "3-Byte BGR".
 - The flags for "mirroring" Images vertically and/or horizontally
   are not fully interpreted yet, nevertheless these will be reported
   by SVL FileInfoRequest().
   If the VERTINV flag is not set, the picture will be assumed to
   be written as "from bottom to top", otherwise as "from top to
  bottom". Some programs do not set these flags right, when writing,
   so that you might get just the opposite result as expected.
   The HORIZINV flag is currently ignored: when reading such a picture
  as usual, you'd get a mirrored image. But this flag is also set
  wrong sometimes ...
History
V4.8 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
 - clearified version history
V4.7 (06.06.1997) :
 - added powerUP (TM) module support for: - RLE decoding (4 modules)
V4.6 (22.12.1996) :
 - various things cleaned up
V4.5 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.4 (28.09.1996) :
 - fixed bug in file recognition
   (-> Jürgen Schäfer)
V4.3 (04.09.1996) :
 - more restrictive file recognition
   (-> Jürgen Schäfer)
V4.2 (18.08.1996) :
```

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### 1.53 MetaView.svobject

```
© 1996-97 by Andreas R. Kleinert.
```

(Also see notes under "Credits".)

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Version : 4.6

Release Date : 24.06.1997

### Description

~~~~~~~~~

MetaView.svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support, a working ILBM.svobject and an installed MetaView executeable with CLI interface.

It supports importing WMF, AMF, IFF-DR2D, DXF and WPG vector drawings as bitmapped graphics.

This is done by using MetaView for conversion of WMF (Windows Meta File), AMF (Amiga Meta File), IFF-DR2D, DXF or WPG vector files to IFF-ILBM files, which then will be parsed through superview.library again using

ILBM.svobject

Reading:

(Any WMF, AMF, IFF-DR2D, DXF and WPG vector drawings as long as understood and correctly converted to IFF-ILBM by MetaView)

Configuration

~~~~~~~~~~~~

This WMF/AMF/IFF-DR2D/DXF/WPG-Vector support module has been tested with: MetaView 2.0 (C) by Henk Jonas, which is Shareware (30 DEM/20 USD) and can be obtained from Aminet (see below).

At first, you have to correctly install and configure MetaView and

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```
the libraries it is using for vector graphics parsing.
Also, you have to supply an AmigaDOS search path to a directory, where
the executable "MetaView" is stored (default), or explicitely specify
path plus name of the program by the controlpad entry METAVIEW_PATH
(see below).
Where to DOWNLOAD from
Aminet:gfx/conv/MetaView.lha
ControlPad-Switches
: "ENV:SuperView-Library/MetaView.controlpad"
ControlPad-Name
ControlPad-Commands : - METAVIEW_PATH=<MetaView command path plus name>
                       ; how MetaView is to be called
                       ; e.g. METAVIEW_PATH=Work:AMF/MetaView
                       ; default is: MetaView
                     - STATUS=<ENABLED|DISABLED>
                       ; allows to disable this module - for example
                       ; to be able to use an other, program-specific
                       ; import-module for the same file format
History
~~~~~~
V4.6 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.5 (13.2.1997) :
- now also passes IFF-DR2D, DXF and WPG-Vector graphics to MetaView
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (??.10.1996) :
- skipped
V4.1 (17.10.1996) :
- first version
```

# 1.54 WPG.svobject

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© 1994-97 by Andreas R. Kleinert.

FREEWARE. All rights reserved. Only to be distributed with SuperView-Library. Supports powerUP (TM).

Version : 4.7

Release Date : 24.06.1997

#### Description

~~~~~~~~

WPG.svobject is an external library module for the superview.library, which needs any SVDriver with Bit-/Oneplane-Support.

It supports reading of WPG (WordPerfect) BitMap files. In detail these are :

#### Reading:

- WPG Bitmap (grayscaled) with 1, 2, 4 or 8 bits colordepth
- WPG Bitmap (colorMap) with 1, 2, 4 or 8 bits colordepth

#### Remarks

~~~~~~

WordPerfect WPG files do not necessarily have to contain bitmap graphics, they also may contain various other data, e.g. vector graphics. If a WPG file contains a bitMap graphic in any of its chunks, it will be loaded, otherwise the file will be rejected - these rejected files may be loaded by a correctly configured and installed MetaView.svobject, though.

If a file does not contain any color information,  $\mbox{WPG.svobject}$  will generate grayscales by default.

This will be mentioned in the file-info requester.

This version actually has been tested with graphics with 1, 4 and 8 Bit colordepth (2, 16 and 256 Colors).

Due to the fact, that the 2 bit-routine is identically to the 1 bit-routine you should not get any problems with those pictures.

### History

~~~~~

V4.7 (24.06.1997) :

- fixed "memory loss on LibInit failure" bug

V4.6 (07.06.1997) :

- added powerUP (TM) module support for: - RLE decoding (3 modules)

V4.5 (13.02.1997) :

- if a WPG graphics does not contain any bitmap data, it will no longer be rejected while decoding, but already during file recognition, thus it becomes possible to read these files with a working installed MetaView.svobject/MetaView constellation

V4.4 (22.12.1996) :

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```
- various things cleaned up
 V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
 V4.2 (18.08.1996) :
 - now has new disk read/write flags set
 V4.1 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 - made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile

 * Older revision descriptions have been deleted to save diskspace!

1.55 SunRaster.svobject
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
 : 4.5
 Release Date : 24.06.1997
 Description
 SunRaster.svobject is an external library module for the superview.library,
 which needs any SVDriver with Bit-/Oneplane-Support.
 It supports reading and writing of SunRaster (RAS) files.
 In detail these are :
 Reading:
 - SunRaster with 2 Colors (1 Bit, planar)
 - SunRaster with 256 Colors (8 Bit, chunky pixel)
 - SunRaster with 24 bit (24 bit, R-G-B)
 Writing:
 Depending on the Colordepth of the source the following is written :
 Source Colors
 Destination Colors
 Type
 2..256
 Uncompressed Chunky Pixel
 256
 (24 bit)
 Uncompressed 24 bit RGB
 (24 bit)
 Remarks
```

- files with Colorbits other than 1, 8 or 24 are not supported yet

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```
- only RGB-planar colormaps supported (or monochrome, without map)
 - max. 1 plane of bitmap data allowed
 History
  ~~~~~
 V4.5 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
 V4.4 (22.12.1996) :
  - various things cleaned up
 V4.3 (17.11.1996) :
  - recompiled with SAS/C V6.57
 V4.2 (18.08.1996) :
  - now has new disk read/write flags set
 V4.1 (06.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
  - made sure, that always correct svgfx_Version is set
  *******************
  \star Older revision descriptions have been deleted to save diskspace !
  ******************
1.56 SGI.svobject
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version : 4.5
 Release Date : 24.06.1997
 Description
 SGI.svobject is an external library module for the superview.library,
 which needs any SVDriver with 24 bit Oneplane-Support.
 It supports reading and writing of SGI files.
 In detail these are :
  Colors Depth Organisation
                                            RLE-Compression
    256 8
               8 Bit Chunky Pixel (gray)
                                           supported
   (24 Bit)
               8:8:8 24 bit RGB
                                            supported
 Writing:
  Source Colors
                                            Destination Colors
                  Type
```

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```
(24 bit)
               Uncompressed RGB
                                        (24 bit)
Remarks
 - Currently files with BPC-Values of 2 are not supported, which
  means that pixel data has to be stored in bytes, not words
  (either gray 8 Bit or 24 bit RGB as 8:8:8, not 16 or 16:16:16)
History
~~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace !

```

# 1.57 PICT.svobject

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```
Reading:
- Mac PICT-2 with 1, 2, 4, 8 or 24 bit colordepth
 always as 24 bit RGB Data (JPEG optionally as dithered 8 Bit)
Remarks
 - the file extension has to be ".pct" (as on PCs), ".pic"
 or ".pict", otherwise it will be rejected
 (there do more checks take place, but those are less relieable)
- pictures always will be exported as 24 bit RGB data
 - font handling always will operate with the internal
 standard font instead of the appropriate ones
 (derived from PBM package, see Credits)
Limitations
~~~~~~~~
Please note, that the Decoding Routines of the Library are not (yet)
fully re-entrant, so that only one Task may Decode a picture at a time.
The Library itself manages it, that the other Task has to Delay() until
the Decoding Routines are "free" again.
Since Decoding usually is managed very fast, this should not
actually matter.
History
~~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace!
```

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 1.58 Pictor.svobject

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```
© 1994-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
 : 4.5
Release Date : 24.06.1997
Description
~~~~~~~~~
Pictor.svobject is an external library module for the superview.library,
which needs any SVDriver with Bit-/Oneplane-Support.
It supports reading of Pictor/PC Paint (PIC) files.
In detail these are :
Reading:
- Files with 1, 4, or 8 Bit colordepth
   (monochrome or with EGA or VGA palette).
History
~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace!

```

# 1.59 MAC.svobject

```
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```

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```
Release Date : 24.06.1997
Description
~~~~~~~~~
MAC.svobject is an external library module for the superview.library,
which needs any SVDriver with Bitplane-Support.
It supports reading of MAC (MacIntosh MacPaint) files.
In detail these are :
Reading:
- MAC Black & White 576x720
Remarks
~~~~~~
MacPaint files, which are to be loaded into "MAC.svobject" should contain
the specific MacBinary Header (first the 128 Byte-Header, then the
MacPaint specific data appended to it).
In the PC area, there may sometimes files be found, which just contain
the MacPaint 576x720 black and white Data.
These files - without the header - can only be identified via the three
leading zero bytes at the beginning of the 512 Byte MacPaint header.
But there's never a 100% guarantee that a File with three leading zeroes
really is a MacPaint File, so we also request a filename ending with
".mac" or ".MAC" in this special case.
History
~~~~~~
V4.5 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile
******************
* Older revision descriptions have been deleted to save diskspace !
******************
```

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# 1.60 JPEG.svobject

```
© 1994-97 by Andreas R. Kleinert.
(Also see notes under "Credits".)
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
This software is based in part on the work of the Independent JPEG Group.
Version
        : 4.11
Release Date : 27.06.1997
Description
~~~~~~~~~~
JPEG.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It supports reading and writing of JPEG files as written by
"The Independent JPEG Group's JPEG Software" (release 6).
In detail these are :
Reading :
 - JPEG (IJG-JFIF), with output in 256 Colors or 24 bit
Writing:
 - JPEG (IJG-JFIF), from upto 8 or 24 bit Input
Remarks
~~~~~
* VMEM:
* Temporary data might be written to a directory assigned to "VMEM:",
  if neccessary, but please note, that this might affect your HardDisk,
  if this program crashes (e.g. on a corrupt JPEG-picture) !
  So don't blame me, if this happens, but select a _safe_ place for this
  temporary-file directory !
* Writing JPEG-files :
* Note, that JPEG-compression is lossy, which means that the original
  picture cannot be reconstructed totally.
  Only JPEG-compress files, of which you have backups, or files which
  you never want to edit and enhance again.
  You should always control the results from saving an JPEG-File : in
  some special cases (e.g. many thin lines on the screen) there may
  occur strong differences to the original picture.
ControlPad-Switches
~~~~~~~~~~~~~~~
 : "ENV:SuperView-Library/JPEG.controlpad"
ControlPad-Name
ControlPad-Commands :
 ; STANDARD settings
 ; **********
 - COLORDEPTH=<8|24>
 ; For READING colored 24 bit images:
 ; should the output be done as 8 or 24 bit Data ?
```

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```
; default is 8 Bit data. Grayscaled graphics
 ; will _always_ be exported as 8 Bit
- QUANTIZATION=<0..100>
 ; For WRITING 8/24 bit images as 24 bit JPEG:
 ; 0 - poor quality, big compression
 ; 100 - best quality, no compression
 ; never use such extreme values, but try
 ; something like 20, 50, 75
 ; default is: 75)
 ; ADVANCED settings
 , **********
FORCE_GRAY_DECODE
 ; For READING images:
 ; this switch overrides the selected depth
 ; for colored images and always exports them
 ; as 8 Bit grayscaled pictures
 ; default is: not set
- DECODE METHOD=<FAST INTEGER|SLOW INTEGER|
 FLOATING POINT>
 ; For READING images:
 ; how to DECODE the 24 bit or gray data
 ; default is: FAST_INTEGER
- DITHERMODE=<DITHER FLOYD-STEINBERG|
 NO_DITHERING|DITHER_ORDERED>
 ; For READING and dithering 24 bit images
 ; to 8 Bit images:
 ; how and whether to DITHER the 24 bit data
 ; default is: DITHER_FLOYD-STEINBERG
- COLOR_QUANTIZING=<FAST|SLOW>
 ; For READING and dithering 24 bit images
 ; to 8 Bit images:
 ; whether to QUANTIZE the 24 bit data within
 ; two passes (not with DITHER_ORDERED)
 ; default is: SLOW
- UPSAMPLING=<ON|OFF>
 ; For READING and dithering 24 bit images \,
 ; to 8 Bit images:
 ; whether to do fancy upsampling on the 24 bit
 ; default is: ON
- FORCE_GRAY_ENCODE
 ; For WRITING images:
 ; this switch causes grayscales to be written
 ; no matter, whether the input was colored
 ; default is: not set
- ENCODE_METHOD=<FAST_INTEGER|SLOW_INTEGER|
 FLOATING_POINT|FASTEST_INTEGER>
 ; For WRITING images:
 ; how to ENCODE the 24 bit or gray data
 ; default is: FAST_INTEGER
- OPTIMIZE=<ON|OFF>
 ; For WRITING 24 bit images:
 ; whether to optimize the generated huffman
 ; code (good compression, but slow)
 ; default is: OFF
- PROGRESSIVE=<ON|OFF>
 ; For WRITING 24 bit images:
```

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```
; whether to write progressive JPEG files
 ; default is: OFF
History
V4.11 (27.06.1997) :
 - slightly improved memory manager
 - improved compiler settings and
 forced better omptimization;
 fasted *and* smallest version ever:
 68000: 105440 -> 104412
 030: 103644 -> 102592
 (intermediate version byte counts)
V4.10 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.9 (20.03.1997) :
 - least compression (100%) would have resulted in maximum
 compression (0%)
 (-> Marc-Tell Volkmann)
V4.8 (22.02.1997) :
 - no longer rejects JFIFs written by Adobe Photoshop (TM) and maybe others
 (file recognition now - additionally - via IJG API)
V4.7 (22.12.1996) :
 - various things cleaned up
V4.6 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.5 (26.10.1996) :
 - slightly reduced size
 - did some __inline'ing (faster ?)
V4.4 (22.10.1996) :
 - removed option "fastest integer"
 - excluded combination "dither ordered" and "slow color quantizing"
V4.3 (28.09.1996) :
 - upgraded to V6a sources, since some people seem to be so
 "version fanatic", that it doesn't matter, whether an
 upgrade actually makes any sense for our uses %-)
V4.2 (18.08.1996) :
```

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```
- now has new disk read/write flags set
```

V4.1 (08.08.1996) :

- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF\_PUBLIC (for VMM users)
- made sure, that always correct svqfx\_Version is set
- now correcly handles SVOCheckFile
- 68030 version of JPEG.svobject had been linked with 68000 version of JFIF library. Fixed (not a bug, bug simply a nearly a no-op).
- fixed Enforcer hit in the Amiga-specific memory-handler initialization routine, which popped up when trying to load/save a JPEG file.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# 1.61 PCD.svobject

```
© 1994-97 by Andreas R. Kleinert. (Also see notes under "Credits".) FREEWARE. All rights reserved. Only to be distributed with SuperView-Library. Supports powerUP (TM).
```

Version : 4.9

Release Date : 06.07.1997

### Description

~~~~~~~~~

PCD.svobject is an external library module for the superview.library, which needs any SVDriver with 24 bit Oneplane-Support.

It supports reading of the unpacked resolutions of PCD-files, as BASE/16 (192x128), BASE/4 (384x256) and BASE (768x512).

It DOES NOT READ the BASE $\star4$  (1536x1024) and BASE $\star16$  (3072x2048) resolutions, since these are encrypted in a way, which is not only undocumented, but also copyrighted by Kodak.

### Legal Issues

~~~~~~~~~

This program module is FREEWARE.

The author does not claim any copyrights on the code, which is used to decode the YUV-data fromout the PCD-file (see credits) or on the other PCD-related information.

Copyright is only claimed for the program as a whole, which means that some parts of the library module, which are also used within other SVObjects, are copyrighted by the author.

If the writing or the publication of this program should ever be considered to be partly any kind of a violation of third party copyrights, it is hereby expressed that the usage of this program is only allowed, if any user of it agrees to the following: If the case as described above takes place, any user has to SuperView-Library 95 / 176

```
delete any copies of this program immediately when he gets informed
about it.
ControlPad-Switches
~~~~~~~~~~~~~~~~~~~
                : "ENV:SuperView-Library/PCD.controlpad"
ControlPad-Name
ControlPad-Commands : - OUTPUTFORMAT=<BASE/16 | BASE/4 | BASE >
                      ; specifies the output resolution to be used
History
~~~~~~
V4.9 (06.07.1997) :
- crashed on 68k systems, only worked with powerUP :-/
V4.7 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
- clearified version history
V4.6 (19.04.1997) :
- added powerUP support
V4.5 (22.12.1996) :
- various things cleaned up
V4.4 (30.11.1996) :
- the V4.3 coming with sv-lib 15.8 did not do any sophisticated
 file type checking except for the ".PCD" extension
 (former V4.3 did)
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
 - new GST
- now correcly handles SVOCheckFile

\star Older revision descriptions have been deleted to save diskspace !

```

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# 1.62 FastILBM24.svobject

```
© 1994-97 by Andreas R. Kleinert.
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Version
 : 4.5
Release Date : 24.06.1997
Description
~~~~~~~~~
FastILBM24.svobject is an external library module for the superview.library,
which needs any SVDriver with Oneplane-Support.
It has especially been written to allow fast and "low-memory"
loading and dithering of ILBM 24 bit graphics.
This means, that no compressed or uncompressed 24 bit data will
be completely loaded into memory, but directly be dithered
to HAM6/8, so that even people with less memory and no graphics
card will be able to view those nice 24 bit graphics.
May be deactivated, even if installed; may be switched between
HAM6 and HAM8; allows increasing/decreasing of internal cache buffer.
ControlPad-Switches
: "ENV:SuperView-Library/FastILBM24.controlpad"
ControlPad-Name
ControlPad-Commands : - BUFFERSIZE=<Size in Bytes>
                        ; how many bytes should be buffered
                          (more = faster)
                        ; Default is 8192, minimum is 256
                      - PASSTHROUGH
                        ; do not recognize ANY pictures, so that
                        ; they e.g. might be passed through to
                        ; ILBM.svobject instead
                      - DITHERMODE=<HAM6_QUICK|HAM8_QUICK>
                        ; Default is HAM6_QUICK
History
~~~~~~
V4.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
 - various things cleaned up
V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
 - now has new disk read/write flags set
```

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```
V4.1 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 - made sure, that always correct svgfx_Version is set
 - new GST
 - now correcly handles SVOCheckFile

 \star Older revision descriptions have been deleted to save diskspace !

1.63 YUVN.svobject
 © 1994-97 by Andreas R. Kleinert.
 (Also see notes under "Credits".)
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 Version
 : 4.5
 Release Date : 24.06.1997
 Description
 YUVN.svobject is an external library module for the superview.library,
 which needs any SVDriver with 24 bit Oneplane-Support.
 It supports reading and writing of IFF-YUVN (YUVN) files.
 In detail these are :
 Reading:
 - IFF-YUVN 24 bit (gray, 411, 422, 444, 211, 222)
 Gray will be imported as 24 bit with R=G=B.
 Use "ExtractGrayScales" operator to reduce
 memory usage - and redundancy
 Writing:
 - IFF-YUVN 24 bit (411)
 Reading/writing from/to ClipBoard is supported.
 Remarks
 - only 24 bit sources will be written as IFF-YUVN.
 256 color graphics are NOT automatically transformed to 24 bit,
 so that you may have to use the "AnyTo24Bit" operator before saving.
 History
  ~~~~~~
 V4.7 (24.06.1997) :
```

- fixed "memory loss on LibInit failure" bug

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```
V4.4 (22.12.1996) :
  - various things cleaned up
 V4.3 (17.11.1996) :
  - recompiled with SAS/C V6.57
 V4.2 (18.08.1996) :
  - now has new disk read/write flags set
 V4.1 (06.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
  - made sure, that always correct svgfx_Version is set
  - now correcly handles SVOCheckFile
  *******************
  \star Older revision descriptions have been deleted to save diskspace!
  *******************
1.64 DEEP.svobject
 © 1995-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Supports powerUP (TM).
           : 4.6
 Version
 Release Date : 24.06.1997
 Description
 DEEP.svobject is an external library module for the superview.library,
 which needs any SVDriver with 24 bit Oneplane-Support.
 It supports reading and writing of specific IFF-DEEP (DEEP) files.
 In detail these are :
 Reading :
  - IFF-DEEP 24 bit RGB 8:8:8,
                              uncompressed
           32 bit RGBA 8:8:8:8, uncompressed
                                              (Alpha channel ignored)
  - IFF-DEEP 24 bit RGB 8:8:8, RLE-compressed
            32 bit RGBA 8:8:8, RLE-compressed (Alpha channel ignored)
 Writing:
  - IFF-DEEP 24 bit RGB 8:8:8, uncompressed
 Reading/writing from/to ClipBoard is supported.
```

Remarks

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```
- only 24 bit sources will be written as IFF-DEEP.
  There's no conversion done from e.g. 256 Colors to 24 bit
  to perform the requirements of this file format.
- other compression methods (e.g. Huffman) aren't yet supported
  due to a lack of information on implementation
History
~~~~~~
V4.6 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.5 (07.06.1997) :
- added powerUP (TM) module support for: - RLE decoding (1 module)
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (29.08.1996) :
- now has new disk read/write flags set
 - now supports reading of 32 Bit RGB pictures with Alpha channel
 as well (Alpha channel is ignored)
- now checks for correct order of RGB (or RGBA)
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
 - now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace!

```

### 1.65 FAXX.svobject

```
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(Also see notes under "Credits".)
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Version
 : 4.2
Release Date : 24.06.1997
Description
FAXX.svobject is an external library module for the superview.library,
which needs any SVDriver with Bitplane-Support.
```

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```
It supports reading of IFF-FAXX (GPFax) files.
 In detail these are :
 Reading:
 - IFF-FAXX 1 bit black & white, compressed
 Reading from ClipBoard is supported.
 Credits
 Thanks to Dr. Greg Perry (GPSoft) for help on implementation.
 History
  ~~~~~
  V4.2 (24.06.1997) :
   - fixed "memory loss on LibInit failure" bug
  V4.1 (21.03.1997) :
   - first version
1.66
     RGB8.svobject
  © 1997 by Andreas R. Kleinert.
  FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
  Supports powerUP (TM).
  Version
             : 4.3
  Release Date : 24.06.1997
  Description
  RGB8.svobject is an external library module for the superview.library,
  which needs any SVDriver with 24 bit Oneplane-Support.
  It supports reading and writing of IFF-RGB8
  (Turbo Silver, Imagine, ArtEffect) files.
  In detail these are :
  Reading:
   - IFF-RGB8 24 bit RGB 8:8:8, RunLength4 compressed (Alpha channel ignored)
  Writing:
   - IFF-RGB8 24 bit RGB 8:8:8, RunLength4 compressed (no Alpha channel)
  Reading/writing from/to ClipBoard is supported.
```

Remarks

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```
~~~~~~
 - only 24 bit sources will be written as IFF-RGB8.
 There's no conversion done from e.g. 256 Colors to 24 bit
 to perform the requirements of this file format.
 - other compression methods are not available, thus not supported...
 - IFF-RGBN (12 Bit, 4:4:4) is not supported, since it is
 obsolete, anyway
 History
  ~~~~~~
  V4.3 (24.06.1997) :
   - fixed "memory loss on LibInit failure" bug
  V4.2 (07.06.1997) :
   - added powerUP (TM) module support for: - RLE decoding (1 module)
                                            - RLE encoding (1 module)
   - removed some unnecessary code
  V4.1 (14.02.1997) :
   - first version, already with clipboard support
1.67 QRT.svobject
  © 1995-97 by Andreas R. Kleinert.
  FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
  Version
              : 4.5
  Release Date : 24.06.1997
  Description
  QRT.svobject is an external library module for the superview.library,
  which needs any SVDriver with 24 bit Oneplane-Support.
  It supports reading and writing of QRT (POV RayTracer) files.
  In detail these are :
  Reading :
   - QRT Dump 24 bit
  Writing:
   - QRT Dump 24 bit
  Remarks
   - only 24 bit sources will be written as QRT.
     There's no conversion done from e.g. 256 Colors to 24 bit
     to perform the requirements of this file format.
  History
```

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```
~~~~~~
V4.7 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
- various things cleaned up
V4.3 (17.11.1996) :
- recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
- now has new disk read/write flags set
V4.1 (06.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
- made sure, that always correct svgfx_Version is set
- now correcly handles SVOCheckFile

* Older revision descriptions have been deleted to save diskspace!

```

## 1.68 C-Source.svobject

```
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FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
 : 4.5
Release Date : 24.06.1997
Description
~~~~~~~~
C-Source.svobject is an external library module for the superview.library.
It creates C-Source code in chunky/RGB notation from any input graphics
(<= 8 Bit and HAM as chunky, 24 bit as RGB).
In detail these are :
Writing:
 - 8 Bit as C-Source with UBYTE [] pixel array and UBYTE [][3] colormap
   (HAM6/8 indicated by flag #define)
 - 24 bit as C-Source with UBYTE [][3] pixel array (RGB data)
For simple extraction of a colormap from a graphics file, you should
apply the Crop operator with parameters CROP_LEFTEDGE=0
                                          CROP_TOPEDGE=0
```

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CROP\_WIDTH=1
CROP\_HEIGHT=1

and then save the result as C-Source.

```
Remarks
 - this module uses buffered I/O, but nevertheless is quite slow for
  larger graphics (I/O buffer is set to 64K for OS version >= 39)
 - usage of RAM-Disk for output buffers is strongly suggested
 - the module does raw output, which should be compileable with
   any Amiga C compiler - and any other compiler, when simply
   replacing
        #include <exec/types.h>
   with
        typedef unsigned char UBYTE;
        typedef unsigned long ULONG;
  - the "endmark" entries at the end of any written array can simply
   be removed; they actually have no meaning, but simplify the process
    of writing the data to the file
History
~~~~~~
V4.5 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V4.4 (22.12.1996) :
 - various things cleaned up
V4.3 (17.11.1996) :
 - recompiled with SAS/C V6.57
V4.2 (18.08.1996) :
 - now has new disk read/write flags set
V4.1 (06.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - now correcly handles SVOCheckFile
V3.2 (07.06.1996) :
 - fixed bug in initialization code
V3.1 (16.04.1996) :
 - first version: yet only with chunky/RGB support and not very fast
```

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# 1.69 UtahRLE.svobject

This one is not included with this distribution, but can be found on AmiNet or any related BBS.

Look out for an archive called "svoUtah34.lha" or similar.

# 1.70 ECS.svdriver

```
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```

Version : 2.12

Release Date : 24.06.1997

## Requirements

~~~~~~~~~~

- OS V2.04+ (V37+) and its libraries
- AMIGA with Old or Enhanced Chip Set (OCS/ECS)

### Description

~~~~~~~~

ECS.svdriver is an external SV\_GfxBuffer display module for superview.library, which allows object-oriented displaying on ECS displays.

This Driver supports the following:

| Dimensions | Depth  | Type     |                |
|------------|--------|----------|----------------|
| [ECS]      | [ECS]  | BITPLANE |                |
| [ECS]      | 8/(24) | ONEPLANE | (Chunky Pixel) |

The 8-Bit mode will perhaps only work on ECS systems which have any Graphic Card installed, which allows 256 or more colors in a way of an Intuition emulation.

24 bit Graphics will be displayed as "best guess of 256 colors" if no SVOperator is specified.

Autoscrolling of Screens larger than the actual display is supported : Just move the mouse to the boundings !

```
ControlPad-Switches
```

- 8BITOPERATOR=<OperatorName>

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```
; (case-sensitive, ".svoperator" may be added)
 ; e.g. "8BITOPERATOR=ExtractGrayScales"
 ; specifies, which operation should be performed
 ; on non-ECS graphics (more than 16 Colors in
 ; HighRes, more than 32 Colors in LowRes, HAM8)
 ; (if not specified, will be tried to display)
 - BITMAPCOPY=<DIRECT|RTG>
 ; "BITMAPCOPY=RTG" prevents ECS.svdriver from
 ; directly copying into Bitmaps, which will
 ; result in a usage of more memory, but keeps it
 ; working.
 ; Default is "BITMAPCOPY=DIRECT".
 - SCREENINFRONT
 ; Put Screen to front _before_ the graphics
 ; has been displayed (useful with GfxCards)
History
~~~~~~
V2.12 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V2.11 (22.12.1996) :
- various things cleaned up
V2.10 (03.10.1996) :
- checks for availability of SetPatch 43.4+ and its WritePixelLine8()
  patches. Internal workarounds then will be disabled and graphics
  display speed may increase (for graphic cards as well)
 - caching SysBase now
V2.9 (01.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
- using utility.library
V2.8 (21.12.1995) :
- added REV. 2 of new, rock-solid startup code
 - fixed several possible crashing reasons
 - tried to use LAYERS NOBACKFILL with SA BackFill
  and WA_BackFill even under V37-V38.
  This caused an odd-address error since the given
  dummy-pointer to address 1 is only valid for V39 or greater.
  With V2.7 of ECS.svdriver displaying under V38 and below perhaps
  was impossible. Fixed.
   (-> reported by Klaus Schneider and Sven Drieling)
V2.7 (29.10.1995) :
 - faster closing
- recompiled with SAS/C V6.56
******************
\star Older revision descriptions have been deleted to save diskspace !
```

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#### AGA.svdriver 1.71

```
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```

: 2.13 Version

Release Date : 24.06.1997

# Requirements

- OS V3+ (V39+) and its libraries (takes advantage of V40+)
- AMIGA with AGA ChipSet (OCS/ECS still supported, but with restrictions) or an appropriate Graphics Card with Workbench Emulation  $\,$

### Description

AGA.svdriver is an external SV\_GfxBuffer display module for superview.library, which allows object-oriented displaying on AGA displays.

This Driver supports the following:

| Dimensions | Depth  | Type     |                |
|------------|--------|----------|----------------|
| [AGA]      | [AGA]  | BITPLANE |                |
| [AGA]      | 8/(24) | ONEPLANE | (Chunky Pixel) |

24 bit Graphics will be displayed as "best guess of 256 colors" if no SVOperator is specified.

Autoscrolling of Screens larger than the actual display is supported : Just move the mouse to the boundings !

## ControlPad-Switches

```
: "ENV:SuperView-Library/AGA.controlpad"
ControlPad-Name
```

ControlPad-Commands: - 24BITOPERATOR=<OperatorName>

```
; (case-sensitive, ".svoperator" may be added)
; e.g. "24BITOPERATOR=24BitToHAM.svoperator"
      "24BITOPERATOR=ExtractGrayScales"
```

; specifies, which operation should be performed ; on 24 bit graphics \_before\_ displaying them ; (if not specified, "best guess" colors will

be used, which is really slow)

- BITMAPCOPY=<DIRECT|RTG> ; "BITMAPCOPY=RTG" prevents AGA.svdriver from ; directly copying into Bitmaps, which will ; result in a usage of more memory, but keeps it ; working. ; Default is "BITMAPCOPY=DIRECT".
- SCREENINFRONT
  - ; Put Screen to front \_before\_ the graphics

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```
; has been displayed (useful with GfxCards)
 History
  ~~~~~
 V2.13 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
 V2.12 (22.12.1996) :
 - various things cleaned up
 V2.11 (17.11.1996) :
 - recompiled with SAS/C V6.57
 V2.10 (03.10.1996) :
 - checks for availability of SetPatch 43.4+ and its WritePixelLine8()
 patches. Internal workarounds for V39 then will be disabled and
 graphics display speed may increase (for graphic cards as well).
 No difference for OS 3.1 (V40+)
 - caching SysBase now
 V2.9 (01.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library
 V2.8 (21.12.1995) :
 - added REV. 2 of new, rock-solid startup code
 - fixed several possible crashing reasons
 V2.7 (29.10.1995) :
 - faster closing
 - recompiled with SAS/C V6.56

 * Older revision descriptions have been deleted to save diskspace!

1.72 CyberGraphics.svdriver
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 Version
 : 2.15
 Release Date : 24.06.1997
 Requirements
```

~~~~~~~~~~~

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- OS V3+ (V39)+ and its libraries
- AMIGA with CyberGraphX V2/V3 System and appropriate Graphics Card
- cybergraphics.library V40+

### Description

~~~~~~~~~~

CyberGraphics.svdriver is an external SV\_GfxBuffer display module for superview.library, which allows object-oriented displaying on Amigas with the 16/24 bit CyberGraphX RTG System.

This Driver displays any 1..8 or 24 bit graphics via the CyberGraphX System. Graphics upto 256 Colors will be displayed via usual graphics routines, 24 bit graphics will be displayed via CyberGraphX in either 16 or 24 bit (16 Bit is default, because the unregistered version of CyberGraphX does not support more and I guess, that not yet all the users out there registered it already).

 ${\rm HAM6/8}$  will be converted to 24 bit, which then will either be displayed as 16 or 24 bit.

The driver will not open any Screens in standard ECS/AGA modes, since it makes more sense to use AGA.svdriver in such a case. If no CyberGraphX screenmode is specified, it will be generated, which is just the same effect like with an intelligent screen promoter. No ECS/AGA screenmodes will be passed through, since this is neither useful nor practicable on two Monitor systems or with single 31khZ-limited Monitors.

### Credits

~~~~~

Thanks to Ingenieurbüro Helfrich, for supplying the PiccoloSD64 card.

The CyberGraphX Software is of course copyrighted by its authors, which is hereby expressesively respected in all points.

## ControlPad-Switches

~~~~~~~~~~~~~~~~~

ControlPad-Name

: "ENV:SuperView-Library/Cybergraphics.controlpad"

ControlPad-Commands: - EMUSCREENDEPTH=<16|24>

- ; beginning depth for opening CyberGraphX Screens
- ; Default is 16 Bit (which will also be tried
- ; when opening of a 24 bit Screen fails)
- ; This does not concern colordepths < 16 Bit,
- ; except HAM6/8.
- SMALLSCREENS
  - ; unless this KeyWord is specified, it is not
  - ; tried to open screens smaller than 320x240

# History

~~~~~

V2.15 (24.06.1997) :

- fixed "memory loss on LibInit failure" bug

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```
V2.14 (06.06.1997) :
 - some people obviously had problems with some new code;
 removed all (test purpose) workarounds for cybergraphics-clones,
 only the one for EGSPlus (tested) left now
V2.13 (12.03.1997) :
 - rewrote EGSPlus compatibility code (crashes)
 - added a dirty hack, to make it working with EGSPlus'
 cybergraphics.library
 - tested with EGS 7.4, EGSPlus R9 (and its cybergraphics.library):
 when testing, with EGSAmigDriver it did not provide any screenmodes
 thus could not be used for displaying, but at least the driver
 did initialize correctly
V2.12 (08.02.1997) :
 - tried to ensure better compatibility with Picasso96, CyberGraphX,
 EGSPlus and ProBench cybergraphics.library clones
V2.11 (22.12.1996) :
 - various things cleaned up
V2.10 (17.11.1996) :
 - recompiled with SAS/C V6.57
V2.9 (01.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library
V2.8 (10.02.1996) :
 - new C startup-code was compiled for 68020. Fixed.
 - this revision history was slightly wrong
V2.7 (13.01.1996) :
 - added REV. 2 of new, rock-solid startup code
 - using new GST
 - now requesting superviewsupport.library V6+
 - did distort any 8 Bit odd width graphics (not divideable by 16
 without rest) when displaying under OS V3.00 (V39).
 This did not happen with graphics < 320x240 and the SMALLSCREENS
 option unset and it did not concern OS V3.1 (V40) users.
 (-> Jürgen Schäfer)
 May now be slightly slower in displaying such graphics, since
 these will be displayed line-wise. Aligned graphics will be
 displayed using the old method.
V2.6 (29.10.1995) :
 - faster closing
```

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# 1.73 EGS7.svdriver

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Version : 2.9

Release Date : 24.06.1997

### Requirements

~~~~~~~~~~~

- OS V2.04+ (V37)+ and its libraries
- AMIGA with EGS Graphic Card (or EGS distribution with Amiga Emulation)
- egs.library V1+ (should be V7+)
- egsintui.library V1+ (should be V7+)
- egsgfx.library V1+ (should be V7+)

### Description

~~~~~~~~

EGS7.svdriver is an external SV\_GfxBuffer display module for superview.library, which allows object-oriented displaying on EGS V7 (Enhanced Graphic System).

This Driver displays any 1..8 or 24 bit graphics via the EGS7 System. Any source Graphics with less than 24 bit, like 256 Color or HAM6/8 graphics, are converted to 24 bit before displaying them.

This EGS7.svdriver is based on my former "EGS.svdriver", which is to be replaced by the new one. But of course you may still continue using the older one.

The difference is, that the EGS7.svdriver really does display any of the available source graphics formats (even HAM) and is x-times faster than the old one. Also, it is now possible to directly close the EGS-Displaywindow via its Close-Gadget, since some kind of self-written Intuition-Emulation enables us to do so.

### Note:

You may consider not to use this EGS7.svdriver, but instead EGSPlus from Aminet (Aminet:gfx/board/EGSPlus.lha), which offers its own cybergraphics.library clone, and thus should work with CyberGraphics.svdriver.

### Credits

~~~~~

Thanks to Ingenieurbüro Helfrich, for supplying the PiccoloSD64 card.

The EGS7 Software is of course copyrighted by its authors, which is hereby expressesively respected in all points.

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### Notes

~~~~

This EGS-SVDriver should still work with the AMIGA driver for EGS.

When using the ECS/AGA emulation, you should set the max. possible colordepth in the ScreenMode preferences program.

#### AGA:

With AGA any Graphics with less than 256 Colors should be displayed 100% correctly. Only 256 Color-graphics will usually have some Colors wrong, because those are obtained by the EGS-System for the Display itself (Window-Borders, etc.), so that they usually can't be used for the graphics. 24 bit graphics will be dithered to 256 Colors under AGA (usually grayscaled).

### ECS:

Using the ECS emulation will perhaps nearly always result in very ugly Colors, if you're displaying more than, let's say, 8 Colors. This results out of the maximum colordepth of 16 Colors in Hires, of which some - see AGA notes - are already reserved.

Of course 24 bit graphics may also be dithered to 16 Colors/Grayscales, but better don't try it out ...

# History

~~~~~~

V2.9 (24.06.1997) :

- fixed "memory loss on LibInit failure" bug

V2.8 (13.03.1997) :

- the driver sometimes did not work properly, so I searched, found and finally fixed some Enforcer Hits (-> Tom Lively)
- removed some of the EGSPlus compatibility code, which could have caused crashes
- tested with EGS 7.4, EGSPlus R9 and EGSAmigaDriver. Works fine.
   (see also: CyberGraphics.svdriver)
- fixed some memory losses (at least 5K each time, sometimes more)

V2.7 (08.02.1997) :

- tried to ensure better compatibility with EGSPlus

V2.6 (22.12.1996) :

- various things cleaned up

V2.5 (17.11.1996) :

- recompiled with SAS/C V6.57

V2.4 (01.08.1996) :

- now uses/requires semaphore system of superview.library V14+

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```
- using new startup-code now (oops, forgot that before)
 - new GST
 - using utility.library
 - smaller now
 - and more
 V2.3 (29.10.1995) :
 - recompiled with SAS/C V6.56
 V2.2 (9.10.1995) :
 - fixed version counting for info structure
 V2.1 (28.7.1995) :
 - rewrote "EGS.svdriver" and called it "EGS7.svdriver" now
 - is x-times faster now
 - displays any availabe GfxBuffer format (even HAM) in 24 bit now
 - uses kind of self-made Intuition Emulation now, no longer
 a requester-window on the Workbench has to be used to close the
 EGS-Screen, but instead using the EGS-Window's Close-Gagdet
 suffices now (also the most important IDCMP actions, like
 IDCMP MOUSEBUTTONS, -RAWKEY, -VANILLAKEY and -CLOSEWINDOW are
 already supported). Suffices e.g. for SuperView.
1.74 Picasso96.svdriver
 © 1997 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
 Release Date : 24.06.1997
 Requirements
 ~~~~~~~~~~
 - OS V3+ (V39)+ and its libraries
 - AMIGA with Picasso96 System and appropriate Graphics Card
 - Picasso96API.library V2+
 Description
  ~~~~~~~~
 Picasso96.svdriver is an external SV_GfxBuffer display module for
 superview.library, which allows object-oriented displaying on
 Amigas with the Picasso96 RTG System.
 The related Picasso96 libraries are needed.
 This Driver supports the following:
 Special Modes
 Dimensions
 Dest. Depth
 Source
 Depth
 нам6, нам8
 ONEPLANE 8/24
 [Picasso-Dependent] 8 / 24
```

[ Picasso-Dependent] 8 / 24

BITPLANE 1..8

HAM6, HAM8

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HAM6/8 will be converted to 24 bit, which then will either be

displayed as 16 or 24 bit.

```
24 bit will either be displayed in 16 or 24 bit.
 Credits
 Thanks to Tobias Abt (Picasso 96 team) for developer stuff
 and beta-testing/debugging.
 The Picasso 96 Emulation Software is of course copyrighted by
 it authors, c/o Tobias Abt and Alexander Kneer, which is hereby
 expressesively respected in all points.
 ControlPad-Switches
  ~~~~~~~~~~~~~~~~~
                     : "ENV:SuperView-Library/Picasso96.controlpad"
 ControlPad-Name
 ControlPad-Commands : - SMALLSCREENS
                          ; unless this KeyWord is specified, it is not
                          ; tried to open screens smaller than 320x240
                        - EMUSCREENDEPTH=<16|24>
                          ; beginning depth for opening Picasso96 Screens
                          ; Default is 24 bit (if opening fails, it is
                          ; also tried to open a 16 Bit Screen, then)
 History
  ~~~~~
 V2.2 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
 V2.1 (23.03.1997) :
 - first version
1.75 Picassoll.svdriver
 © 1995-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
 : 2.9
 Release Date : 24.06.1997
 Requirements
  ~~~~~~~~~~~
  - OS V2.04+ (V37)+ and its libraries
 - AMIGA with Picasso II/II+/IV Graphics Card and Software,
   Picasso96 emulation should work as well (not tested yet)
 - vilintuisup.library V1+
 Description
 PicassoII.svdriver is an external SV_GfxBuffer display module for
```

superview.library, which allows object-oriented displaying on

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Amigas with the Picasso Workbench Emulation System.

The related Picasso-libraries are needed.

This Driver supports the following:

Source Depth Special Modes Dimensions Dest. Depth
ONEPLANE 8/24 HAM6, HAM8 [Picasso-Dependent] 8 / 24
BITPLANE 1..8 HAM6, HAM8 [Picasso-Dependent] 8 / 24

 ${\rm HAM6/8}$  will be converted to 24 bit, which then will either be displayed as 16 or 24 bit.

24 bit will either be displayed in 16 or 24 bit.

### Credits

~~~~~

Thanks to Florian Zeiler (IrseeSoft) for supplying the Gfx Card.

The Picasso Emulation Software is of course copyrighted by Village Tronic Marketing GmbH, which is hereby expressesively respected in all points.

Known Bugs

~~~~~~~~~

### Problem:

As with V1.8 (6. Apr 1994) of the Picasso II Software Set, the vilintuisup.library sometimes supplies Screens, which differ between internal dimensions and actual dimensions.

A 24 bit graphics with 1165x712 would be displayed on a Screen with correct dimensions in best ViewMode. But for some reason, the Intuition Part of the Screen will be opened in 1168x712 with a related ViewMode. Whenever this ViewMode is the best fitting one, this seems to make problems to the Picasso Emulation. If the ViewMode is one with a larger or smaller display (so that either Autoscroll has to be used, or the graphics does not fill the whole screen) this does not occur. This is not a bug of the PicassoII.svdriver, since width adjustments will occur independently from the viewmode selection.

# Solution:

Whenever the Picture is weirdly distorted, at first try an other viewmode. This bug does not seem to cause crashes, only destroyed displays.

Maybe a newer version of the Picasso Software already did fix this (seems to be an alignment problem when copying from RAM into the Picasso onboard-memory).

## Problem:

When using AUTOSCROLLADJUST the Picasso Software may destroy about two lines within the displayed picture (get black).

# Solution:

Don't use it.

### ControlPad-Switches

~~~~~~~~~~~~~~~~~~~

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```
ControlPad-Name
                    : "ENV:SuperView-Library/PicassoII.controlpad"
ControlPad-Commands : - SMALLSCREENS
                        ; unless this KeyWord is specified, it is not
                        ; tried to open screens smaller than 320x240
                      - BLITTER
                        ; uses the Picasso blitter to copy graphics
                        ; into screens. Otherwise CPU is used.
                        ; On 68000 systems you may wish to use the blitter
                      - EMUSCREENDEPTH=<16|24>
                        ; beginning depth for opening Picasso Screens
                        ; Default is 24 bit (if opening fails, it is
                        ; also tried to open a 16 Bit Screen, then)
                      - SCREENMODEREQUEST
                        ; if this one is specified, the SVDriver ITSELF
                        ; will open a ScreenMode-Requester and ask
                        ; for an appropriate Screenmode to use.
                        ; Useful, if you always like to change modes.
                      - AUTOSCROLLADJUST
                        ; this keyword will force Autoscroll whenever
                        ; it would make sense, but the Picasso Software
                        ; would not manage it by itself (when either
                        ; only width or height need to be autoscrolled)
History
V2.9 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V2.8 (23.03.1997) :
 - when OpenWindow() did fail, there would have followed a call
   to CloseScreen() instead of CloseVillageScreen(). Fixed.
 - OPTGLOBAL specified now
V2.7 (08.02.1997) :
 - tried to ensure better compatibility with Picasso96 and CyberGraphX
   vilintuisup.library clones
 - fixed bug in the makefile for the 030 version. Any effect ?
V2.6 (22.12.1996) :
 - various things cleaned up
V2.5 (17.11.1996) :
 - recompiled with SAS/C V6.57
V2.4 (01.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using new startup-code now (oops, forgot that before)
 - new GST
 - using utility.library
 - smaller now
 - and more
```

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```
V2.3 (29.10.1995) :
- recompiled with SAS/C V6.56
*******************
\star Older revision descriptions have been deleted to save diskspace !
********************
```

1.76 OPAL.sydriver

Just a short note before using and installing OPAL.svdriver and (of course ;-) reading the following documentation:

There's a little problem causing some OPAL programs not to be displayed correctly on certain systems with specific chipsets.

That was the reason why it did not work on the machines of some people - mine was one of these - but nevertheless it is easy to workaround and even already has been described within the official OpalVision Reference Manual [page 326].

To speak clearly, the color palette has to be adjusted concerning Color 0 (the magic color), but only the BLUE component, within the Palette Preferences.

Any other colors and components are freely selectable.

OCS and ECS Chipset Machines with Zorro Bus (2000-3000)

BLUE of COLOR 0 must be either 1, 3, 5, 7, 9, 11, 13, or 15.

AGA Chipset Machines with Zorro Bus (4000)

BLUE of COLOR 0 must have Bit 4 set, which restricts it to one of the following ranges:

```
16-31 or 48-63 or 80-95
                                  or 112-127
     144-159 or 176-191 or 208-223 or 240-255
or
```

Otherwise you may get a black or weirdly distorted screen (I tested it ;-) or must use some tricks and Amiga+M fiddling to get a picture.

[Please also note, that Steve's eMail did change as follows Steve Quartly: steveq@mafeking.scouts.org.au]

******************** included the original documentation at this place ******************

OPAL.svdriver/Documentation

Version 2.3

OPAL.svdriver/Documentation

OPAL.svdriver

PROGRAM

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Relase date: 29.6.95

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DISTRIBUTION

Freely distributable with any non-commerical application that uses superview, however all copyright remains with the authors. This distribution archive may not be split for further distribution.

PURPOSE

OPAL.svdriver is an external display driver module for superview.library. It can display superview buffers on an OpalVision display card.

CONTENTS

OPAL.svdriver - This is the driver to copy to LIBS:svdrivers. OPAL.svdriver.doc - Documenation you are reading now.

USAGE

Select OPAL.svdriver as the display driver from SuperViewPrefs and/or from the superview compatible software you are using.

While conversion for OpalVision is taking place, the following information will be displayed:

OPAL.svdriver version number,

and the image size (which can be larger than the screen size).

REQUIREMENTS

- 1) An OpalVision card :-)
- 2) opal.library must be in LIBS: otherwise the driver will fail with an internal error.
- 3) A minimum of Kickstart 2.0.

CONTROL PAD

ControlPad-Name:

"ENV: SuperView-Library/OPAL.controlpad"

ControlPad-Commands:

OVERSCAN=ON | OFF

Force Opal to display in either overscan or non-overscan. Not specifiying an overscan setting informs OPAL.svdriver to intelligently select an overscan screen mode for you.

CENTER_IMAGE

Force the displayed image to be taken from the centre section of the image buffer, i.e. If the image is 640×512 and the display mode is LoRes, Non-interlace and CENTER_IMAGE is specified then the top left of the visible display will be 160, 156 offset into the original image.

If not present, the image will be displayed from the top left of the image buffer.

NOTES

Opal images cannot be scrolled yet (until superview supports scrolling images larger than the drivers screen size), so if the picture is larger than the display area, the displayed image will be cropped.

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HISTORY

V0.0 First the earth cooled.

V1.0 Initial release.

V2.2 Supports new features of superview.library version 11.6

- Selectable screen modes.
- Control pads for configuration.
- V2.3 Fixed byte aligning of 24 bit images.
 - Drastically reduced memory requirements and increased speed by removing the conversion from RGB triplets through RGB planes.

COMPLIER

OPAL.svdriver was written using CED V3.5 and compiled with SAS/C 6.55 on an Amiga 2000/030 and Amiga 4000/040. Enforcer was used to detect and correct programming errors.

BUGS

Should you find any bugs, please report them so that they can be fixed. Likewise any suggestions for improvment of the driver should be forwarded so that they can be addressed.

THANKYOU

Very many thanks to Andreas, the author of Superview.library for implementing some of our suggestions and also for explaining some of the internals of superview.library. Without superview this driver would be a boat anchor. (It would probably float :-)

AUTHORS

You can contact the authors via:
Email:
Paul Huxham
paulh@Perth.DIALix.oz.au

Steve Quartly
steveq@sndcrft.DIALix.oz.au
or
P.O. Box 875
Morley,
Perth,
Western Australia 6943

1.77 Retina.svdriver

```
© 1995-97 by Andreas R. Kleinert.

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Version : 2.12

Release Date : 24.06.1997
```

Requirements

~~~~~~~~~~

- OS V2.04+ (V37)+ and its libraries

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- AMIGA with Retina Z2/Z3 Graphics Card and Software
- retina.library V7+
- retinaemu.library V1+

#### Description

~~~~~~~~~~~

Retina.svdriver is an external SV_GfxBuffer display module for superview.library, which allows object-oriented displaying on Amigas with the 16/24 bit Retina Workbench Emulation System.

The related Retina-libraries are needed.

This Driver supports the following:

Source	Depth	Special Modes	Dimensions	Dest. Depth
ONEPLANE	8/24	нам6, нам8	[Retina-Dependent]	16 / 24
BITPLANE	18	HAM6, HAM8	[Retina-Dependent]	16 / 24

 ${\rm HAM6/8}$ will be converted to 24 bit, which then will either be displayed as 16 or 24 bit.

USAGE

~~~~

#### RetinaEmu:

-----

For SuperView's "svdRetina-Screen" screen entry, select an AutoScroll-Area of "800x600" and "No Refresh" with "Retina Standard" (Z2) or "Retina Blitter" (Z3) output.

### RetinaScreenMode:

\_\_\_\_\_

The Monitor specifications need to be 100% correct.

### What using instead?

-----

Retina.svdriver always displays graphics in 16/24 bit - so when running on AGA systems, AGA.svdriver would be the better solution for upto 256 Colors. On ECS systems this may only apply to 16/32 Color graphics as long as you don't have OS 3.1 and a RetinaEmu which supports 256 Color Screens for this configuration (should be available). Otherwise with ECS.svdriver you would still have to specify "8BITOPERATOR" for more than 16/32 Colors, which then would be as slow or even slower.

### Credits

~~~~~~

Thanks to Florian Zeiler (IrseeSoft) for supplying the Gfx Card.

The Retina Emulation Software is of course copyrighted by MS MacroSystem Computer GmbH Germany, which is hereby expressesively respected in all points.

ControlPad-Switches

ControlPad-Name : "ENV:SuperView-Library/Retina.controlpad"

ControlPad-Commands: - EMUSCREENDEPTH=<16|24>

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```
; beginning depth for opening Retina Screens
                        ; Default is 24 bit (if opening fails, it is
                        ; also tried to open a 16 Bit Screen, then)
History
~~~~~
V2.12 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V2.11 (22.12.1996) :
 - various things cleaned up
V2.10 (17.11.1996) :
 - recompiled with SAS/C V6.57
V2.9 (01.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using new startup-code now (oops, forgot that before)
 - new GST
 - using utility.library
 - smaller now
 - and more
V2.8 (29.10.1995) :
 - recompiled with SAS/C V6.56
V2.7 (9.10.1995) :
 - fixed version counting for info structure
V2.6 (1.10.1995) :
 - COMPLETE, MAJOR REWORK.
 - fixed several bugs; did some thousand workarounds %-)
 - removed several controlpad entries :-)
 - fixed width, height and bpl parameters for cases, where
   screensize and buffersize do differ (larger or smaller than
   expected/requested/desired)
 - fixed screenmode generation for BestModeID generation
   with graphics, where width<height. Before, always NTSC:LowRes
   was used (returned by OS function), which caused crashes.
   Side effect sometimes are better x/y aspect results.
 - changed way of autoscroll activation (as for Retina.svdriver it's
   always active, but RetinaEmu needs to be informed about)
 - now always allows to select and specify ScreenModes, as long
   as compliant to the needs of the Retina (when being passed,
   they'll be checked. Valid ViewModes also are available about
  the ViewMode-Requester when using the list supplied by Retina.svdriver,
   e.g. fromout SuperView)
 - requests support-lib V6+ now
```

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1.78 MERLIN.svdriver

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Version : 2.7

Release Date : 24.06.1997

Requirements

~~~~~~~~~~

- OS V2.04+ (V37)+ and its libraries
- AMIGA with MERLIN Graphics Card and Software
- hrgsystem.library V38+
- hrgrender.library V38+

### Description

~~~~~~~~

MERLIN.svdriver is an external SV_GfxBuffer display module for superview.library, which allows object-oriented displaying on Amigas with the 16/24 bit Merlin Workbench Emulation System.

Original Author

~~~~~~~~~~~~~~~

MERLIN.svdriver has been included into the SuperView-Library distribution with friendly permission by the original author, who also supplied the source code to continue development.

Thomas' does no longer continue development of MERLIN.svdriver, which I took over from him, but for any other issues you may Thomas Eigentler reach him via one of his email adresses:

FidoNet: Thomas Eigentler 2:246/1511.0

### Credits

~~~~~

The Merlin Emulation Software is of course copyrighted by its authors (ProDev), which is hereby expressesively respected in all points.

Thanks go to Mika Lundell and Thomas Eigentler for reporting bugs and doing beta testing.

Notes

~~~~

It has been reported, that MERLIN.svdriver crashes, when it is tried to open the 040 version of hrgblitter.library on a 060. Not a bug of superview.library (-> Thomas Eigentler).

History

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```
~~~~~~
V2.7 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V2.6 (22.12.1996) :
- various things cleaned up
V2.5 (17.11.1996) :
- recompiled with SAS/C V6.57
V2.4 (19.09.1996) :
- *tried* to fix some well known bugs (8 Bit chunky graphics distorted,
 with every second line blank) with the help of Mika Lundell (thanks),
 but it seems, as if the Merlin software itself is buggy :-((
V2.3 (22.08.1996) :
- taken over development from Thomas Eigentler
- now uses/requires semaphore system of superview.library V14+
- using new startup-code now (oops, forgot that before)
- new GST
- using utility.library
 - smaller now
 - and more

* Older revision descriptions have been deleted to save diskspace!

```

# 1.79 XOR.svoperator

```
© 1994-97 by Andreas R. Kleinert.

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Version: 3.6

Release Date: 24.06.1997

Description

XOR.svoperator is an external SV_GfxBuffer modification module for superview.library.

XOR.svoperator modifies a graphics in a way, that the color register numbers of the supplied picture's pixels are XOR'ed with a given value, which may be specified via ControlPads (see below).

Note, that the supplied XOR value must be be smaller or equal the number of colors, thus smaller or equal 2^(depth) - 1.

ControlPad-Switches
```

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```
: "ENV:SuperView-Library/XOR.controlpad"
ControlPad-Name
ControlPad-Commands : - XORVALUE=<0..255>
 ; 0 and 255 will not be the best decision ;-)
 ; Use 15 or something like this.
History
~~~~~~
V3.6 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V3.5 (22.12.1996) :
- various things cleaned up
V3.4 (17.11.1996) :
- recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- using utility.library and new GST
- using new startup-code now
- no longer allocs large buffers using {\tt MEMF\_PUBLIC} (for VMM users)
V3.2 (29.10.1995) :
- recompiled with SAS/C V6.56
V3.1 (08.10.1995) :
- upgraded to V2/V3 specs
******************
\star Older revision descriptions have been deleted to save diskspace !
******************
```

# 1.80 24BitToHAM.svoperator

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```
either quick or well.
ControlPad-Name
                   : "ENV:SuperView-Library/24BitToHAM.controlpad"
ControlPad-Commands : - DITHERMODE=< HAM6_QUICK|HAM6_WELL</pre>
                                   |HAM8_QUICK|HAM8_WELL>
                       ; specifies the HAM-Mode to be used and
                       ; the resulting speed/quality
History
V3.8 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V3.7 (14.04.1997) :
  - added powerUP (TM) module support for: - "well" HAM6 conversion
                                            (HAM8 not yet)
V3.6 (22.12.1996) :
- various things cleaned up
V3.5 (17.11.1996) :
- recompiled with SAS/C V6.57
V3.4 (11.08.1996) :
- fixed progress indicator for "well"-modes also
   (-> Patrik Nydensten)
 - highly optimized "ham8_well" mode (but still is very slow)
  - now completely different from ham6 version (100% rewritten)
 - added 68030 version
V3.3 (05.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- using utility.library and new GST
- using new startup-code now
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.2 (29.10.1995) :
 - recompiled with SAS/C V6.56
 - now tries to keep the selected, original ViewMode for the 24 bit
  graphics, if it has HAM capability. Otherwise old behaviour
  takes place. So if you select "DBLPAL: HighRes", it will no
  longer become "PAL:HighRes" or "PAL:HighRes Interlace".
  Was uncomfortable when not using 24BitToHAM separately, but
   instead hidden behind ECS/AGA.svdriver's 24BITOPERATOR feature.
V3.1 (08.10.1995) :
- upgraded to V2/V3 specs
******************
\star Older revision descriptions have been deleted to save diskspace !
```

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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# 1.81 Crop.svoperator

```
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FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
             : 3.6
Version
Release Date : 24.06.1997
Description
~~~~~~~~~~~
Crop.svoperator is an external SV_GfxBuffer modification module
for superview.library.
Crop.svoperator may extract shapes of any size from any 2..256 Color
or 24 bit graphics.
Values for "LeftEdge", "TopEdge", "Width" and "Height", describing
the crop box have to be supplied via ControlPad settings.
ControlPad-Switches
~~~~~~~~~~~~~~~~~~~
ControlPad-Name
                : "ENV:SuperView-Library/Crop.controlpad"
ControlPad-Commands : - CROP_LEFTEDGE=<Value>
                        ; crop from x position
                        ; (will be adjusted, if >= source width)
                      - CROP_TOPEDGE=<Value>
                        ; crop from y position
                        ; (will be adjusted, if >= source height)
                      - CROP_WIDTH=<Value>
                        ; crop how many x pixels from leftedge
                        ; (will be adjusted, if too large)
                      - CROP_HEIGHT=<Value>
                        ; crop how many y pixels from topedge
                        ; (will be adjusted, if too large)
History
~~~~~~
V3.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.6 (22.12.1996) :
 - various things cleaned up
V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
```

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# 1.82 Dither24Bit.svoperator

```
© 1994-97 by Andreas R. Kleinert.
(Also see notes under "Credits".)
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Supports powerUP (TM).
Version
 : 3.11
Release Date : 24.06.1997
Description
~~~~~~~~~
Dither24Bit.svoperator is an external SV_GfxBuffer modification module
for superview.library.
Dither24Bit.svoperator dithers 24 bit RGB graphics to 256 Colors
by default. Possible is also dithering to less colors (2..128),
if specified via ControlPad-Settings.
This module applies Heckbert's median cut and dithers
using Floyd-Steinberg.
ControlPad-Switches
~~~~~~~~~~~~~~~~~
 : "ENV:SuperView-Library/Dither24Bit.controlpad"
ControlPad-Name
ControlPad-Commands : - COLORDEPTH=<1..8>
 ; specifies the colordepth of the dithering
 ; output (1->2 Colors .. 8->256 Colors)
 - DITHERMODE=<BESTPEN|DITHER_FLOYD-STEINBERG
 |ORDERED|BURKES>
 ; whether to just select the best pen or
 ; do Floyd-Steinberg pixel error adjustment
History
V3.11 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.10 (14.04.1997) :
```

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```
- added powerUP (TM) module support for: - ordered Dithering
 - F/S (Floyd-Steinberg) Dithering
 - Burkes Dithering
 - BestPen Selection
 - fixed big bug in all dithering modes except "ordered"
V3.9 (22.12.1996) :
- various things cleaned up
V3.8 (06.12.1996) :
- removed some dead code
V3.7 (17.11.1996) :
- recompiled with SAS/C V6.57
V3.6 (22.10.1996) :
- fixed two bugs in palette generation, which strongly increases image
 quality now
V3.5 (30.08.1996) :
- added new dithermode: BURKES
V3.4 (28.08.1996) :
- used some __inlines instead of #defines
- fixed bestpen() routine

 added BESTPEN mode (no Floyd-Steinberg dithering)

 - (hopefully) fixed bug in F/S error spreading code
- completely replaced F/S dithering by better routine
 (more reliable, better results, faster)
 - added new dither mode: ORDERED
V3.3 (05.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- using utility.library and new GST
- was linked for utility.library, although not compiled for
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.2 (29.10.1995) :
- recompiled with SAS/C V6.56
V3.1 (09.10.1995) :
- upgraded to V2/V3 specs
- now uses black&white for 2 color dithering mode
 (-> Florian Zeiler)

* Older revision descriptions have been deleted to save diskspace!
```

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\*\*\*\*\*\*\*\*\*\*\*\*

# 1.83 HilbertDither256.svoperator

```
© 1994-97 by Andreas R. Kleinert.
(Also see notes under "Credits".)
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Version
 : 3.6
Release Date : 24.06.1997
Description
~~~~~~~~
HilbertDither256.svoperator is an external SV_GfxBuffer modification module
for superview.library.
HilbertDither256.svoperator modifies any supplied source SV_GfxBuffer in a
way, that all supplied graphics with upto 256 Colors are dithered to
Black & White graphics (2 Colors), as e.g. needed for desktop publishing
or output on matrix printers.
It uses the fractal Hilbert curve for getting best results in
eliminating the resulting errors.
As a side effect, the resulting picture will always have a width and
height, which is divideable by 16 (graphics will be adjusted this way).
ControlPad-Switches
                    : "ENV:SuperView-Library/HilbertDither256.controlpad"
ControlPad-Name
ControlPad-Commands : - BACKGROUND=<BLACK|WHITE>
                        ; defines, which of the two colors will act
                        ; as background color. Useful e.g. for printing.
History
~~~~~~
V3.6 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.5 (22.12.1996) :
 - various things cleaned up
V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
```

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# 1.84 AnyTo24Bit.svoperator

```
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FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
 : 3.6
Release Date : 24.06.1997
Description
AnyTo24Bit.svoperator is an external SV_GfxBuffer modification module
for superview.library.
AnyTo24Bit.svoperator converts any input graphics into TrueColor
RGB graphics with 24 bit.
Input may be any (upto) 256 Color graphics or HAM6/HAM8 data.
History
~~~~~
V3.6 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.5 (22.12.1996) :
- various things cleaned up
V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.2 (29.10.1995) :
 - recompiled with SAS/C V6.56
V3.1 (08.10.1995) :
```

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```
- upgraded to V2/V3 specs
   - HAM8 -> 24 bit conversion had not been fixed in 1.6
    Now it has.
    (-> Florian Zeiler, Jürgen Schäfer)
  **********************
  * Older revision descriptions have been deleted to save diskspace !
  *****************
1.85
     ExtractGrayScales
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
             : 3.8
 Release Date : 24.06.1997
 Description
  ~~~~~~~~~~~~
 ExtractGrayScales.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 ExtractGrayScales.svoperator modifies any supplied source SV_GfxBuffer
 in a way, that its colormap will be changed to reflect gray-scales
 (works with (upto) 256 Colors and 24 bit files).
 Output is done in input colordepth or 256 Colors by default (fastest).
 This is a sample SVOperator for simple demonstration how to write one.
 It's simple, but effective.
 ControlPad-Switches
 : "ENV:SuperView-Library/ExtractGrayScales.controlpad"
 ControlPad-Name
 ControlPad-Commands : - COLORDEPTH=<1..8>
 ; specifies the colordepth of the grayscaled
 ; output (1->2 Colors .. 8->256 Colors)
 - OUICK
 ; uses >>2, >>1, >>3 (\star0.25, \star0.5, \star0.125)
 ; instead of \star 0.3, \star 0.59, \star 0.11
 History
 ~~~~~~
 V3.8 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
 V3.7 (22.12.1996) :
  - various things cleaned up
 V3.6 (17.11.1996) :
```

- recompiled with SAS/C V6.57

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```
V3.5 (05.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - using utility.library and new GST
  - using new startup-code now
  - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 V3.4 (21.12.1995) :
  - added REV. 2 of new, rock-solid startup code
 V3.3 (16.12.1995) :
  - added new, rock-solid startup code
  - no longer causes crashes
  - now using new GST
 V3.2 (29.10.1995) :
  - recompiled with SAS/C V6.56
 V3.1 (08.10.1995) :
  - upgraded to V2/V3 specs
 ********************
 \star Older revision descriptions have been deleted to save diskspace !
 *****************
1.86 ExtractRed
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
            : 3.6
 Release Date : 24.06.1997
 Description
 ~~~~~~~~~
 ExtractRed.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 ExtractRed.svoperator modifies any supplied source SV_GfxBuffer
 in a way, that only the RED values of a picture will be extracted
 for creation of a new (upto) 256 Color graphics
 (works with (upto) 256 Colors and 24 bit files).
 History
 ~~~~~~
 V3.6 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
 V3.5 (22.12.1996) :
```

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```
- various things cleaned up
 V3.4 (17.11.1996) :
  - recompiled with SAS/C V6.57
 V3.3 (05.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - using utility.library and new GST
  - using new startup-code now
  - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 V3.2 (29.10.1995) :
  - recompiled with SAS/C V6.56
 V3.1 (08.10.1995) :
  - upgraded to V2/V3 specs
 ******************
 \star Older revision descriptions have been deleted to save diskspace !
 *****************
1.87 ExtractGreen
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
 Release Date : 24.06.1997
 Description
 ~~~~~~~~~
 ExtractGreen.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 ExtractGreen.svoperator modifies any supplied source SV_GfxBuffer
 in a way, that only the GREEN values of a picture will be extracted
 for creation of a new (upto) 256 Color graphics
 (works with (upto) 256 Colors and 24 bit files).
 History
 ~~~~~~
 V3.6 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
 V3.5 (22.12.1996) :
  - various things cleaned up
```

V3.4 (17.11.1996) :

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```
- recompiled with SAS/C V6.57
 V3.3 (05.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - using utility.library and new GST
  - using new startup-code now
  - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 V3.2 (29.10.1995) :
  - recompiled with SAS/C V6.56
 V3.1 (08.10.1995) :
  - upgraded to V2/V3 specs
 ******************
 * Older revision descriptions have been deleted to save diskspace!
 *****************
1.88 ExtractBlue
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
           : 3.6
 Release Date : 24.06.1997
 Description
 ~~~~~~~~~
 ExtractBlue.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 ExtractBlue.svoperator modifies any supplied source SV_GfxBuffer
 in a way, that only the BLUE values of a picture will be extracted
 for creation of a new (upto) 256 Color graphics
 (works with (upto) 256 Colors and 24 bit files).
 History
 V3.6 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
 V3.5 (22.12.1996) :
 - various things cleaned up
 V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
 V3.3 (05.08.1996) :
```

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```
- now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
 V3.2 (29.10.1995) :
 - recompiled with SAS/C V6.56
 V3.1 (08.10.1995) :
 - upgraded to V2/V3 specs

 * Older revision descriptions have been deleted to save diskspace !

1.89
 TopToBottom
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
 : 3.6
 Release Date : 24.06.1997
 Description
 ~~~~~~~~~~
 TopToBottom.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 TopToBottom.svoperator modifies any supplied source SV_GfxBuffer
 in a way, that it will be swapped from bottom to top
 (works with (upto) 256 Colors and 24 bit files).
 History
 V3.6 (24.06.1997) :
  - fixed "memory loss on LibInit failure" bug
 V3.5 (22.12.1996) :
  - various things cleaned up
 V3.4 (17.11.1996) :
```

using new startup-code nowno longer allocs large buffers using MEMF\_PUBLIC (for VMM users)

- now uses/requires semaphore system of superview.library V14+

- recompiled with SAS/C V6.57

- using utility.library and new GST

V3.3 (05.08.1996) :

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```
V3.2 (29.10.1995) :
- recompiled with SAS/C V6.56
V3.1 (08.10.1995) :
- upgraded to V2/V3 specs
*******************
\star Older revision descriptions have been deleted to save diskspace !
******************
```

# 1.90 LeftToRight

```
© 1994-97 by Andreas R. Kleinert.
FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
Version
          : 3.6
Release Date : 24.06.1997
Description
LeftToRight.svoperator is an external SV_GfxBuffer modification module
for superview.library.
LeftToRight.svoperator modifies any supplied source SV_GfxBuffer
in a way, that it will be swapped from left to right (mirrored)
(works with (upto) 256 Colors and 24 bit files).
History
~~~~~
V3.6 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.5 (22.12.1996) :
 - various things cleaned up
V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.2 (29.10.1995) :
 - recompiled with SAS/C V6.56
```

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```
V3.1 (08.10.1995) :
- upgraded to V2/V3 specs

\star Older revision descriptions have been deleted to save diskspace !

```

# 1.91

```
Rotate
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FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 : 3.6
Version
Release Date : 24.06.1997
Description
Rotate.svoperator is an external SV_GfxBuffer modification module
for superview.library.
Rotate.svoperator rotates any (upto) 256 Color or 24 bit graphics
by (default) 90 degrees (reverse clockwise).
The default behaviour may be overwritten via controlpad settings,
which also allow 180 and 270 degrees (no extra memory needed: uses
different algorithm).
ControlPad-Switches
 : "ENV:SuperView-Library/Rotate.controlpad"
ControlPad-Name
ControlPad-Commands : - DEGREES=<90|180|270>
 ; rotate by how many degrees (reverse clockwise) ?
History
~~~~~~
V3.6 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V3.5 (22.12.1996) :
 - various things cleaned up
V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.2 (29.10.1995) :
```

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```
- recompiled with SAS/C V6.56
 V3.1 (08.10.1995) :
  - upgraded to V2/V3 specs
  ********************
  * Older revision descriptions have been deleted to save diskspace!
  *****************
1.92 RotateFree
 © 1995-97 by Andreas R. Kleinert.
  (Also see notes under "Credits".)
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Supports powerUP (TM).
 Version
           : 3.9
 Release Date : 24.06.1997
 Description
 ~~~~~~~~~
 RotateFree.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 Rotate.svoperator rotates any (upto) 256 Color or 24 bit graphics
 by 0..360 (default is 90) degrees (reverse clockwise) about any
 given point (default is the middle, which is width/2, height/2).
 The default behaviour may be overwritten via controlpad settings.
 ControlPad-Switches
 : "ENV:SuperView-Library/RotateFree.controlpad"
 ControlPad-Name
 ControlPad-Commands : - ROTATE_ANGLE=<0..360>
 ; rotate by how many degrees (reverse clockwise) ?
 - METHOD=<MIDDLE|GIVENPOINT>
 ; default is rotation about the middle
 - X COORD=<Value>
 ; if METHOD=GIVENPOINT we need (X/Y)
 ; Default is (0/0)
 - Y_COORD=<Value>
 ; if METHOD=GIVENPOINT we need (X/Y)
 ; Default is (0/0)
 - KEEPSIZE
 ; if this keyword is set, it is NOT tried to
 ; readjust the image size and to center the
 ; image, so that parts, which would be out of
 ; range won't be cut off (which works best
 ; with (X/Y) pairs in the left, upper quarter)
 History
```

V3.9 (24.06.1997) :

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```
- fixed "memory loss on LibInit failure" bug
V3.8 (31.5.1997) :
 - added support for two optional PPC modules. Much faster with these !!
V3.7 (22.12.1996) :
 - various things cleaned up
V3.6 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.5 (05.08.1996) :
 - now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.4 (13.1.1996) :
 - mathtrans.library was not opened by the code, but AUTOOPENLIB
 instead -> did crash ALWAYS
 - it seems as if the opening (can't say, whether the libraries
 themself) of transient math libraries (like "mathtrans.library"
 together with "mathffp.library" or "mathieeedoubtrans.library"
 together with "mathieee.library") did cause all the concerned
 SVObjects and/or SVOperators to crash on certain systems like
 68060, some 68000 and some 68040 (on my system only, when running
 SnoopDOS at the same time to catch library openings).
 No problems when only using "mathffp.library" or using link
 libraries for both, non-transient and transient functions.
 No more crashes.
 We now do that.
 - added correct sscanf() routine (.lib)
V3.3 (21.12.1995) :
 - added REV. 2 of new, rock-solid startup code
V3.2 (16.12.1995) :
 - added new, rock-solid startup code
 - replaced IEEE with FFP support (due to crashes)
 - no longer causes crashes
 - now using new GST
V3.1 (29.10.1995) :
 - first version
```

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# 1.93 Scale50

```
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Supports powerUP (TM).
Version
 : 3.7
Release Date : 24.06.1997
Description
~~~~~~~~~
Scale50.svoperator is an external SV_GfxBuffer modification module
for superview.library.
Scale50.svoperator scales any (upto) 256 Color or 24 bit graphics
to their half size by default.
The default behaviour may be overwritten via controlpad settings,
which also allows to double the size instead.
ControlPad-Switches
ControlPad-Name
                 : "ENV:SuperView-Library/Scale50.controlpad"
ControlPad-Commands : - METHOD=<HALF|DOUBLE>
                       ; scale to which size ?
History
V3.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.6 (07.06.1997) :
 - added support for two optional PPC modules (two: half, double)
V3.5 (22.12.1996) :
 - various things cleaned up
V3.4 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.3 (05.08.1996) :
- now uses/requires semaphore system of superview.library V14+
 - using utility.library and new GST
 - using new startup-code now
 - no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.2 (29.10.1995) :
 - recompiled with SAS/C V6.56
V3.1 (08.10.1995) :
```

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## 1.94 CallPNM

```
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```

Version : 3.5

Release Date : 24.06.1997

Description

~~~~~~~~~

 ${\tt CallPNM.svoperator}\ is\ an\ external\ {\tt SV_GfxBuffer}\ modification\ module\ for\ superview.library.$

This is not an operator in the common sense.

Instead it is just an Interface to allow easy access to any external operators from the well known PBM package (distributed as NetPBM).

When using this operator, the given GfxBuffer will be saved as a 24 bit PNM file (8 Bit input as well), after that the specified PBM program module will be externally called and its output will be written into another temporary file.

This file then will be parsed through superview.library (perhaps it will be in PNM format, but one never know) and the buffer will be returned as the result of the "CallPNM" operation.

Please note, that the whole internal construction of the operator is a little bit more complicated than usual, so that any error handling will perhaps not always result in very clear statements (can't parse the output of the PBM programs).

BTW, any temporary files will of course be placed into "VMEM:", from where they will be deleted later.

```
ControlPad-Switches
ControlPad-Name
ControlPad-Commands

: "ENV:SuperView-Library/CallPNM24.controlpad"
ControlPad-Commands
: - PNMCOMMAND=<PBM command path and name>
; PNM command to be called
; e.g. PNMCOMMAND=Work:NetPBM/pnm/pnmscale
- PNMOPTIONS=<Options>
; Options for PNM command to be called
; e.g. PNMOPTIONS=-xscale 2.0 -yscale 2.0

History
ControlPad-Switches
History
ControlPad-Name
: "ENV:SuperView-Library/CallPNM24.controlpad"
ControlPad-Name
: PNMCOMMAND=Vork:NetPBM/pnm/pnmscale
- PNMOPTIONS=<Options>
; Options for PNM command to be called
; e.g. PNMOPTIONS=-xscale 2.0 -yscale 2.0
```

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```
- fixed "memory loss on LibInit failure" bug
 V3.4 (22.12.1996) :
  - various things cleaned up
 V3.3 (06.12.1996) :
  - recompiled with SAS/C V6.57
 V3.2 (05.08.1996) :
  - now uses/requires semaphore system of superview.library V14+
  - using utility.library and new GST
  - using new startup-code now
    (oops, forgot that before - other notes were wrong)
 V3.1 (07.06.1996) :
  - there was a little bit messed up concerning version information
  - NOW the module has been: - recompiled with SAS/C V6.56
                            - upgraded to V2/V3 specs
  - added new, rock-solid startup code
  - PNM command now called in double quotes
  ******************
  \star Older revision descriptions have been deleted to save diskspace !
  ********************
1.95 OptimizePalette
 © 1995-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Version
            : 3.7
 Release Date : 24.06.1997
 Description
  ~~~~~~~~~~
 OptimizePalette.svoperator is an external SV_GfxBuffer modification module
 for superview.library.
 OptimizePalette.svoperator filters all unused colors out of a palette
 of a given graphics with upto 256 Colors
  (EHB, HAM6/8 and 24 bit graphics will be rejected).
 A new palette will be created - which also misses any duplicate color
 table entries - to which then the given graphics is remapped.
 This Operator may have three effects (plus combinations):
   a) none, if the palette already was or has been optimized
   b) only some black colors at the end of the color map, if
```

removing of unused colors did not suffice to fall back to

the next lower depth boundary

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```
(<= 256 to <= 1, 2, 4, 8, 16, 32, 64 or 128)
 c) a reduced colordepth to one of the next lower depth boundaries
    (as described under b) if there've been a lot of actually
    unused colors
 d) combinations of b) and c)
History
~~~~~~
V3.7 (24.06.1997) :
- fixed "memory loss on LibInit failure" bug
V3.6 (22.12.1996) :
- various things cleaned up
V3.5 (17.11.1996) :
- recompiled with SAS/C V6.57
V3.4 (05.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- using utility.library and new GST
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)
V3.3 (8.1.1996) :
- added REV. 2 of new, rock-solid startup code
- now using new GST
- the svoperator shifted the image left by one pixel, adding
  garbage to the right border, when color reduction was performed.
   (-> Henrik Tikanvaara)
V3.2 (29.10.1995) :
- recompiled with SAS/C V6.56
V3.1 (08.10.1995) :
- upgraded to V2/V3 specs
********************
* Older revision descriptions have been deleted to save diskspace!
*******************
```

1.96 PaletteDither.svoperator

```
© 1996 by Andreas R. Kleinert.

(Also see notes under "Credits".)

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Version : 3.7

Release Date : 24.07.1997
```

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Description

PaletteDither.svoperator is an external SV_GfxBuffer modification module for superview.library.

PaletteDither.svoperator dithers 24 bit RGB graphics 2..256 color graphics by using a selectable number of colors from a specified fixed palette for that (taken from a given graphics file) and calculating the (optional) rest by itself.

other applications where the palette of used graphics have to

```
This is useful for creation of ANIMations, where the palette for
all single frames have to be (mostly) identical or for games and
harmonize together.
ControlPad-Switches
~~~~~~~~~~~~~~~~~
                    : "ENV:SuperView-Library/PaletteDither.controlpad"
ControlPad-Name
ControlPad-Commands : - COLORDEPTH=<1..8>
                        ; specifies the colordepth of the final,
                        ; dithered graphics (1..8 for 2..256 colors)
                      - DITHERMODE=<BESTPEN|DITHER_FLOYD-STEINBERG>
                        ; whether to just select the best pen or
                        ; do Floyd-Steinberg pixel error adjustment
                      - PALETTEDEPTH=<1..8>
                        ; number of colors (depth) to be taken from the
                        ; fixed palette - the possible rest will be
                        ; generated (if specifying more palette colors
                        ; than available, all available will be taken)
                      - PALETTEFILE = < palette graphics filename >
                        ; any 2..256 color graphics file, of which
                        ; superview.library is able to extract a
                        ; palette from (for example an IFF-ILBM file,
                        ; but including a BMHD and - maybe empty - BODY).
                        ; Allows to take one graphics as sample for
                        ; the others (concerning the palette).
History
~~~~~~
V3.7 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
V3.6 (22.12.1996) :
 - various things cleaned up
V3.5 (17.11.1996) :
 - recompiled with SAS/C V6.57
V3.4 (22.10.1996) :
 - fixed two bugs in palette generation, which strongly increases image
   quality now
V3.3 (28.08.1996) :
```

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```
- used some __inlines instead of #defines
- fixed bestpen() routine
- added BESTPEN mode (no Floyd-Steinberg dithering)
- completely replaced F/S dithering by better routine (more reliable, better results, faster)

V3.2 (05.08.1996) :
- now uses/requires semaphore system of superview.library V14+
- using utility.library and new GST
- no longer allocs large buffers using MEMF_PUBLIC (for VMM users)

V3.1 (27.01.1996) :
- first version
  (-> Michael Flad)
```

1.97 Requirements for the SuperView-Library Package

```
Generally, you need at least an 68000 Amiga, running with OS \leftrightarrow
                    2.04 + ...
Better performance results require better software/hardware.
More requirements (software, hardware, legal):
  \textdegree{} For usage of the IFF-based SVObjects, like ILBM, ACBM, PBM, DEEP
    and YUVN, you should take care to have iffparse.library V37+
    on your bootdisk or system partition.
  \text{textdegree} For DataType support with OS 3.x+ you need datatypes.library V39 \leftrightarrow
    to be present. If it is not present, datatype-support is disabled,
    but you might not need it, anyway.
  \textdegree{} For being able to use 24 bit Datatypes extension,
    you need Ralph Schmidt's picture.datatype V43 to be installed
    (with ECS/AGA you'll also need a version of cyberncg.library, which
    had been removed from newer pic-dt 43 distributions).
  \textdegree{} Postscript (TM) support via
              GhostScript.svobject
               and EPS.svobject
    requires Ghostscript being correctly installed and configured.
    Without working GhostScript.svobject and a special flag set,
    EPS.svobject will not be able to extract any of the Postscript (TM)
    data from EPS(F) files, but only the possibly included preview
    images from the header (which usually are TIFFs).
  \textdegree{} FIG (-> AmiFIG) support requires both, Ghostscript and
              AmiFIG.svobject
    being correctly installed and configured.
  \textdegree{} CGM (-> GPlot) support requires both, Ghostscript and
              GPlot.svobject
    being correctly installed and configured.
  \textdegree{} WMF/AMF/IFF-DR2D/DXF/WPG-Vector (-> MetaView) support requires
```

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```
MetaView.svobject
, being correctly installed and configured.

\textdegree{} SVG.svobject and Unpack.svobject may/will require xpkmster. ←
library
to work fully/properly. The Xpk package can be found on Aminet
as Aminet:util/pack/xpk_User.lha (also present are xpk_Develop.lha
and xpk_Source.lha).

GIF is obsolete - you neither should use nor support it any longer. If
```

GIF is obsolete - you neither should use nor support it any longer. If you are doing WWW design, use PNG and JPEG instead. It's important!

Additionally there are some more requirements, which do not necessarily depend on the OS or the hardware:

\textdegree{} Some SVObjects, SVDrivers or SVOperators additionally require
different hardware/software configurations, but usually this is
stated within their own documentation.

Turbo versions will be installed by the installer-script automatically, if it makes sense (CPU auto-detection - should even work with 68060).

1.98 NotesAndHints

Notes and Hints

How much Memory does this program eat ?!

Problems with displaying 24 bit files

Problems with converting 24 bit files

1.99 Memory Usage

```
How much Memory does this program eat ?!

Simply enough, there are no fixed limits ...
```

Superview.library and its attached SVObjects, SVDrivers and SVOperators request as much memory as they need - which directly depends on the size of the processed graphics - and there's no automatic virtual memory manager or such (I added some virtual memory support, but up to now there aren't any modules making use of it).

But actually no CHIP memory is needed for most of the actions (only some chunky-to-planar conversion operations and some specific SVDrivers may make use of CHIP memory) - so perhaps

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nearly anything will be performed in FAST ram, when your configuration offers enough. You should have at least 2 MB Ram at all (1 CHIP, 1 FAST or 2 CHIP), better 4 MB (2 CHIP, 2 FAST) or more.

The large memory usage results out of the buffering-technique, which is used with the SuperView-Library.

This technique increases memory usage by using large (full-sized) buffers, which often do exist twice e.g. for conversion from chunky-pixel to bitplane format or vice versa.

But this increases SPEED !!

There are perhaps no "real" multimedia-systems out there, which have less than $6-16~\mathrm{MB}$ and why shouldn't we use this memory (you may BTW use VMM or so, if you don't have so much RAM).

Anyway, here's a check-list for what you can do to make more memory available to superview.library:

- o first of all, check if there are some background-programs running, which you do not really need (especially Commodities).

 Remove them !
- o call "avail flush" in the Shell or select "flushlibs" in the WB-debug menu (available when started with "LoadWB -debug"). (SuperView and Image Engineer do also allow flushing Libraries directly fromout the program.)
- o decrease the "AddBuffers" values of drives, which you do not really need (e.g. DF2, DF3, PC0, ...)
- o last not least : leave/close Workbench, stay in the Shell
- o start your favorite viewer or conversion program (e.g. SuperView)
- o again: call "avail flush" (this time also all unused SVObjects and SVDrivers will be flushed out of the memory, so that we later only will have the needed ones in Ram)

If you tried all of the above, and memory still does not suffice, you should buy some more SIMMs at your local Computer Shop...

1.100 Displaying 24 bit graphics

The Problem

"All of my attempts in displaying my really nice 24 bit graphics with AGA.svobject resulted in really ugly colors. What shall I do ?"

The Reason

You did not set an available or valid 24 bit SVOperator, which could have been used by the selected SVDriver (e.g. AGA.svdriver, ECS.svdriver) adjusting the number of colors to less than 256 (by dithering, conversion to gray, etc.).

The solution

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o Within the SVDriver's controlpad settings file (e.g. AGA.controlpad, ECS.controlpad) you may set "24BITOPERATOR=<operatorname>" and specify a specific operator for e.g. dithering 24 bit graphics to 256 colors (Dither24Bit), converting them to grayscales (ExtractGrayScales) or HAM6/8 (24BitToHam), etc.

- o The same trick may take place for ECS.svdriver on systems, which can't display more than 16/32(64EHB) colors, so that specifying the (optional) "8BITOPERATOR=<operatorname>" would allow automatic conversion to less colors.
- o Besides this, a special case perhaps perhaps is the combination of AGA.svdriver and JPEG.svobject, where it may be good for performance and memory usage to simply use the internal on-the-fly dithering of JPEG.svobject, which then simply does not make 24 bit, but 256 color output anymore, when the colordepth controlpad switch has been set as: "COLORDEPTH=8" within JPEG.controlpad.

These default settings intuitively can be changed via SVPrefs, or possibly via your application's GUI as well.

o An other possibly way is, to always do the dithering only when needed - by simply invoking the needed SVOperator fromout your application's GUI.

1.101 Converting 24 bit graphics

The Problem

You have problems converting from one 24 bit file format into other 24 bit file formats ?

The Reason

Not necessarily all SVObjects, which support reading of $24\ \mathrm{bit}$ files do also support writing of $24\ \mathrm{bit}$ files.

SVObjects, which support writing 24 bit data yet are for example:

| non-lossy | | | | |
|-----------|-----------|---------|-----------|--------------|
| | | | | |
| IFF-ILBM | BMP | Targa | SunRaster | PNG |
| IFF-DEEP | PCX | PNM | SGI | SVG |
| IFF-RGB8 | TIFF | QRT | FBM | UtahRLE |
| lossy | not for r | eimport | not impor | table |
| | | | | |
| IFF-YUVN | EPS | | C-Source | |
| JPEG | | | PNM (when | in Raw-Mode) |
| Limbo | | | | |

The solution

A temporary solution might be to use other 24 bit programs for

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conversion, if you don't want to use one of the file formats, which are already supported.

1.102 SVPrefs

© 1994-97 by Andreas R. Kleinert.

FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.

Version : 15.11 Release Date : 01.01.1997

Description

~~~~~~~~~

SVPrefs is the Preferences Program for superview.library.

Any specific ControlPad settings for superview.library, superviewsupport.library and all the SVObjects, SVDrivers and SVOperators may be modified fromout here in a comfortable GUI-based way - as long as these ControlPad requirements are documented in form of a CPInfo-file placed in ENVARC:SuperView-Library (as usually).

Additionally, adding and removing of single SVObjects, SVDrivers or SVOperators is possible from here, if no other program is accessing superview.library and the related modules at the same time (to keep the internal lists valid).

Inclusion and Exclusion: Explanation

As one of the newest features of superview.library, you may also decide here, which of the installed SVObjects, SVDrivers and/or SVOperators should not be loaded into memory at startup time. This works as follows:

- excluded modules will be written to a specific configuration file at ENVARC:superview-Library and ENV:superview-Library (svobjects.exclude, svdrivers.exclude, svoperators.exclude)
- excluded modules will not be opened when the library starts its initialization phase, which means that these modules will never be loaded. May speed up opening and save memory. On the other side, these modules are not available as long as you don't re-add them to the system, either only temporarily or also by re-including.
  - So you only should apply this to modules you seldomly or never use, but don't want to de-install (everytime) nevertheless.
- any of these modules may temporarily be loaded via the "Add" function of SVPrefs as well as these (or others) may again temporarily be removed
- SVPrefs can apply (re)inclusion and exclusion to modules currently held in memory (to re-include an currently excluded module you at first have to re-load it via "Add")

Inclusion and Exclusion: Overview

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INCLUDE temporarily ADD permanently ADD, INCLUDE EXCLUDE temporarily REMOVE EXCLUDE, REMOVE permanently If you don't need that feature: simply don't use it... History ~~~~~ SVPrefs' version depends on the version of superview.library it first has been included with. V15.11 (01.01.1997) : \_\_\_\_\_\_ - forgot to updated docs for V15.9 (missed versions since 15.2 ?) - and more V15.10 (01.12.1996) : - recompiled with SAS/C V6.57 - and more V15.2 (30.08.1996) : - processing of filerequester-based .cpinfo tags now more sensitive for file name and path conventions, also better remembers former entries, better handles default settings and also performs safe SVObject, SVDriver, SVOperator selection from LIBS:#? - list of SVObjects, SVDrivers and SVOperators now presented alphabetically sorted - fixed bug in SVOperator list initialization: did not show the first, but the last entry at at startup (luckily not an EHit) V13.3 (28.06.1996) : - reworked GUI again: smarter, smaller, more handy (-> Simon Edwards) - since Add/Del and Include/Exclude are now named +/- and I/E, there's no practical use for gadget underscores any longer. Removed. - removed priority setting facility for SVObjects. Was not of practial need for the typical user, anyway (more useful maybe for debugging purposes, but I never needed it) - always free'd SVPList as SVOList (well, thanks to FreeVec(), that there did not happen anything) - changed compiler options, no more printf(), etc. Saves about 6K. Wow ;-) - no longer reacts on CLI parameter "?" (since does not make sense) - did not do any error output (should have gone to CLI stdout). Now opening requester, if possible. V13.2 (06.06.1996) :

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```
- adjusted window size/font-handling to that one of SuperView
    (-> Patrik Nydensten)
  - there was still version information referring to 12.x
  ********************
  \star Older revision descriptions have been deleted to save diskspace !
  ******************
1.103 SuperViewSupport-Library
 © 1994-97 by Andreas R. Kleinert.
 FREEWARE. All rights reserved. Only to be distributed with SuperView-Library.
 Supports powerUP (TM).
           : 10.3
 Version
 Release Date : 29.06.1997
 Description
  ~~~~~~~~~~
 superviewsupport.library contains functions, which are heavily used
 by the superview.library and its SVObjects, SVDrivers and SVOperators.
 superviewsupport.library helps saving diskspace by just holding this
 functions for usage by the other libraries, also some superview.library
 debugging functions are included.
 ControlPad-Switches
 : "ENV:superview-library/superviewsupport.controlpad"
 ControlPad-Name
 ControlPad-Commands : - C2P=<OS|SV>
 ; determines, whether chunky to planar conversion
 ; is managed via the appropriate OS functions
 ; or via internal ones.
 ; Due to various problems with the OS functions
 ; "SV" is now default.
 ; Be careful when using "OS" with GfxCards,
 ; which carelessly patched graphics.library.
 History
 V10.3 (29.06.1997) :
 - fixed 'memory loss on LibInit failure bugfix' ;-)
 V10.2 (24.06.1997) :
 - fixed "memory loss on LibInit failure" bug
 V10.1 (11.04.1997) :
 - now support PPC via powerUP's ppc.library for the following tasks:
 - chunky to planar conversion (c2p)
 - planar to chunky conversion (p2c)
```

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```
V9.1 (02.04.1997) :
 - new, universal screen grabbing function with 24 Bit Cybergraphics
 support added
V8.2 (24.03.1997) :
 - another safety check for deep color screens (error when grabbing)
V8.1 (08.02.1997) :
 - introduced GfxBuffer V3 extensions: transparency support
V7.6 (08.12.1996) :
 - fixed screen mode routine (again)
 - fixed/changed some older routines
 - now also rejects V1 SVDrivers (debugging functions)
 - fixed possible word alignment problem
 - virtual memory routines now do use buffered I/O
V7.5 (30.11.1996) :
 - fixed (possible) Ctrl-C problem
V7.4 (08.11.1996) :
 - completely recompiled with SAS/C V6.57
 (obviously saved 100/56 Bytes)
V7.3 (03.10.1996) :
 - for "C2P=OS" setting:
 Checks for availability of SetPatch 43.4+ and its WritePixelLine8()
 patches. Internal workarounds then will be disabled and chunky-to-
 planar conversion speed may increase.
V7.2 (10.09.1996) :
 - again revised startup-code
 - caching SysBase now (SAS/C's __USE_SYSBASE)
 - removed any remaining Assembler fragments
 (there's now only an ULONG remaining,
 which contains 4 Byte "pure" 68k-Code
 for RawDoFmt)
 - a little bit smaller and faster now
 - Calling ScreenToBitPlane8() now checks for BMF_STANDARD
 and does an internal ScreenToOnePlane8() plus OnePlaneToBitPlane8()
 for any graphic card screens, which don't offer a standard
 bitmap image. This uses additionally memory (for this case only),
 but prevents us from any crashes because of chunky-only RTG screens,
 since ScreenToOnePlane8() is protected against that
V7.1 (05.08.1996) :
 - forgot to mention V6.14 (what did I change ?! ;-)
```

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# 1.104 SuperView in the Press

```
PRESS FEEDBACK (05.05.1997)
```

Following some excerpts from articles - mainly from the computer press - which directly or indirectly reported about SuperView(/Library) in the past (if german, these have not been translated).

```
- Amiga Computing (IDG Media, UK)
```

- Amiga Magazin, Amiga Public Domain Sonderheft (Magna Media, Germany)
- Amiga Plus (ICP, Germany)
- Amiga special (media, Germany)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

```
Amiga Computing (IDG Media, UK)
```

"The SuperViewLibraries [...] allow other programs, that support SuperView to easily load, save, convert and process images with the minimum of ease. This allows programmers to concentrate on perfecting their program without having to worry about supporting every different type of picture format out there."
[ Issue 12/1995, page 21. Refered to SuperView V5.10 + Library V12.3. The CoverDisk contained ImageEngineer V2.1a and licensed V12.3]

"SuperView is a set of libraries, that allows Image Engineer to load and save a large number of different file types, [...]"
"Installation of SuperView is very straightforward using the standard Amiga installer program, [...]"
[ Issue 7/1996, page 18/20. Refered to SuperView V5.41 + Library V12.9. The CoverDisk contained ImageEngineer V3.0 Demo and licensed V12.9]

Amiga Magazin (Magna Media, Germany)

```
"Zum Betrachten von Bildern ist dieses PD-Programm wohl
die beste Lösung. [...]"
[Issue 12/1994, p. 120. Refered to SuperView V2.1]
```

\*\*\*

"[...] SuperView besticht durch seinen modularen Aufbau. [...] SuperView kennt sehr viele Bildformate. Jedes Format wird durch ein SVObject verwaltet. Das erlaubt eine flexible Erweiterbarkeit des Programms. [...] Daß das Programm [...] alle Features des Amiga-OS bis hin zur Version 3.1 unterstützt [...] ist angesichts des großen

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```
Funktionsumfanges klar. [...]
 Fazit: SuperView ist ein sehr leistungsfähiger Bildanzeiger und
 eine echte Konkurrenz [...]"
 [Issue 7/1995, p. 134. Refered to SuperView V4.52 on Time #386]

 "[...] Das Programm ist komplett modular aufgebaut und somit
 erweiterbar. Sogar die Benutzerschnittstelle ist austauschbar. [...]"
 [Issue 2/1996, p. 50. Referred to SuperView V5.10 on German #561]
 "'SuperView' als Bildanzeiger zu beschreiben, wäre nur die halbe
 Wahrheit. Diese Aufgabe erfüllt das Programm zwar mit Bravour,
 hält aber noch anderes auf Lager. [...] "
 [Issue 4/1996, p. 92. Refered to SuperView V5.32 on Time \#486]
 "[...] Es dürfte kaum ein Bitmap-Format geben, mit dem der PM nichts
 anfangen kann. [...]"
 [Issue 3/1997, p. 87. Article about Picture Manager professional
 (PMPro) V4.0, which uses superview.library 15.x for images]
Amiga Plus (ICP, Germany)
 "SuperView benutzt zwar auch ab OS3.0 Datatypes, zeigt aber
 ab OS2.0 auch bereits IFF-, [...] -Grafiken an.
 Erreicht wird dies durch eine eigene 'superview.library',
 die [...] es ermöglicht, Grafiken in diesen Formaten zu speichern"
 [Issue 7/1994, S. 42. Referred to SuperView V2.1]
 "Wir haben für Sie eine Auswahl der besten und wichtigsten
 Tools und Utilities aus allen Sparten des Computeralltags
 zusammengetragen" [...]
 "SuperView [...] Bildanzeiger, der ab OS3 Datatypes zum Erkennen der
 Grafikformate verwendet. Mit Hilfe der SuperView-Library sind die
 wichtigsten Formate auch ab OS2 lesbar."
 [Issue 4/1995, p. 46. Refered to SuperView V2.1]
 [Formatvielfalt, Konvertierung]
 "[...] Dieses Kunststück verdankt unser Testkandidat unter anderem
 der exzellenten SuperView.library von Andreas Kleinert [...]
 [Issue 2/1996, p. 73. Article about Picture Manager professional
 (PMPro) V3.0, with superview.library 12.x]
 "SuperView [...] ist ein Anzeiger, der durch unzählige externe Module
 erweiterbar ist und alle erdenklichen Bildformate auf ECS- und
 AGA-Amigas, sowie auf EGS-, OpalVision, Picasso-, Merlin-, Retina-
 und CyberGraphX-Grafikkarten darstellt. [...]"
 [Issue 3/1996, p. 61. Refered to SuperView V4.63, V4.70, V5.10]
 "'SuperView' zeichnet sich durch seine Vielseitigkeit aus. [...]
 Mehr als nur ein kleiner Bonus sind die 31 Operatoren [...].
 Selbstverständlich lassen sich die Bilder auch wieder
```

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```
speichern. [...]"
[Issue 6/1996, p. 43. Referred to SuperView V5.32]
"[...] Dieses Programm unterstützt eine deutlich höhere Anzahl
von Bildformaten (wie PCX, BMP und TIFF) und kann auch Effekte
hinzufügen und Bilder zwischen verschiedenen Formaten
konvertieren [...]"
[Issue 9/1996, p. 58. Referred to SuperView V5.30]
"[...] In der Ausgabe 6/96 haben wir Ihnen das hervorragende
Anzeige- und Konvertierungsprogramm 'SuperView' vorgestellt.
"[...] SuperView beherrscht eine Vielzahl von Grafikformaten"
"[...] Neben IFF-ILBM, GIF, JPEG und TIFF beherrscht SuperView
unter anderem auch die Formate BMP, Targa, PNM, FBM, PCX,
IFF-ACBM, IFF-YUVN, IFF-DEEP, Sun Raster, SGI, RT, UtahRLE
und SVO. Puh. [...]"
[Issue 10/1996, p. 39. Referred to SuperView V5.50]
"[...] Image Engineer verwendet die Superview-Library und
versteht daher beim Laden und Schreiben eine Vielzahl von
Formaten, unter anderem IFF, GIF, [...]"
[Issue 10/1996, p. 46. Article about Image Engineer 3.1,
 which uses SuperView-Library]
"[...] Die besten Tools für Ihren Amiga [...]
Bildanzeiger [...]"
"Wer schnell Grafiken in Top-Qualität sehen will,
braucht Bildanzeige-Tools. Ein weitverbreiteter
Vertreter dieser Programmgattung ist SuperView. [...]
SuperView kennt alle wichtigen [...] Grafikformate. [...]"
[Issue 11/1996, p. 53. Article about "Best Tools For Your Amiga"]
"[...] Eine Stärke des Programms ist das automatische Erkennen
der vorhandenen Grafikformate [...]
Picture Manager unterstützt jetzt auch die Scanner-Software
'ScanQuix3', respektive deren Pseudo-Twain-Standard. [...]
Gut gemacht."
[Issue 1/1997, p. 26. Article about Picture Manager prof. V4.0,
 which uses SuperView-Library]
"[...] Alle weiteren Dateiformate ließen sich bislang nur über
das Installieren entsprechender Datatypes nutzen.
 [...] Damit haben Sie jetzt Zugriff auf nahezu jede Art von
Bildmaterial. [...] Über die Qualität und Arbeitsgeschwindigkeit
dieser Library braucht man wohl kaum noch ein Wort zu verlieren,
sie hat sich mittlerweile zu einer Art Standard bei der automatischen
Erkennung von Bild- und Grafiktypen entwickelt. [...]"
[Issue 2/1997, p. 32. Article about "AE SuperView" plugin for ArtEffect
 which uses SuperView-Library]
* * *
```

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```
"'SuperView' ist eine Art Schweizer Taschenmesser für Computer-
 Grafiker: [...] Das Programm unterstützt eine stolze Liste von
 Formaten: [...]"
 [Issue 5/1997, p. 45. Overview article about "The best freely
 distributable graphics and animation programs"]
Amiga special (media, Germany)
 "SuperView - Bildbetrachter" [...]
 "Bildanzeiger gibt es viele [...]
 Doch ein Programm, das all dies beherrscht und dabei noch
 anwenderfreundlich und kompakt ist, das fehlte bisher.
 Die Situation hat sich nun geändert [...]"
 "Superview.library [...] Programmierer können mit diesen frei
 vetreibbaren Routinen interessante und komplexe Anwendungen
 realisieren. [...] Sämtliche Module sind [...] gut dokumentiert,
 so daß sich jeder Interessierte schnell zurechtfindet [...]"
 "Die grafische Benutzeroberfläche [...]"
 "Diese [...] ist einleuchtend aufgebaut, so daß man nach kürzester
 Einarbeitung damit klarkommt." [...]
 "Fazit [...] SuperView ist ein tolles Paket zum Anzeigen und
 Bearbeiten von Grafiken [...]. Anwender haben mit SuperView endlich
 einen kleinen und leistungsfähigen Bildanzeiger gefunden, der [...]
 sogar kleine Funktionen zur Bildbearbeitung enthält."
 [Issue 1/1995, p. 62-63. Article about SuperView V4.0]
 "Gerade auch die Unterstützung von Grafikkarten geschieht
 "mit SuperView einfach und effizient." [...]
 [Issue 6/1995, p. 77. Article about SuperView V4.0]

 "Im Zusammenspiel mit der 'SuperView.library' von Andreas Kleinert
 konnte diese Weiterentwicklung [...] seine Leistungsfähigkeit
 eindrucksvoll unter Beweis stellen"
 [Issue 12/1995, p. 116. Article about Picture Manager Professional
 Beta 0.97]
 "SuperView gehört mit zu dem Besten, was im Amiga-Sektor an
 Grafikbetrachtungs-Programmen verfügbar ist. Es ist kompatibel
 mit fast allen gängigen Formaten [...], besitzt [...] eine
 durchdachte und komfortable Oberfläche. Erfreulicherweise trägt
 die mehrsprachige umfangreiche Anleitung [...] und das durchdachte
 Installationsprogramm ebenfalls zum hervorragenden Gesamteindruck
 von 'SuperView' bei."
 [Issue 5/1996, p. 66. Article about SuperView V5.30 on Time #472]
 "[...] Zum Laden und Speichern werden die Libraries von SuperView
 genutzt. [...] Durch diese Libraries werden fast alle Grafikformate
 unterstützt, die auf dem Amiga erhältlich sind. Unterstützt werden
 auch alle bekannten Grafikkarten sowie der AGA-Chipsatz. [...]"
 [Issue 9/1996, p. 48. Article about Image Engineer 3.0,
 which uses SuperView-Library]
Amiga Public Domain Sonderheft (Magna Media, Germany)
```

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"'SuperView' ist sowohl eine Bibliothek (Library), die Lade- und Speicherformate [...] zur Verfügung stellt, als auch Treiber zum Anzeigen von Bildern. [...] Das Ganze erinnert an die Datatypes des Amiga-OS 3.0, allerdings auf Grafik spezialisiert und um Operatoren und spezielle Grafiktreiber erweitert. Außerdem kann die Library mit 24-Bit-Bildern umgehen." [...]
"In der Library steckt viel Arbeit." [...]
"Fazit: SuperView besitzt potentiell das Zeug zum universellen Bildanzeigeprogramm und Konvertierutility." [...]
[ Issue 2/1995, p. 43. Article about SuperView V4.52 / V10.2]

## 1.105 Books and other written stuff used during development

- [ 1] "Bitmapped Graphics", 2nd Edition, Steve Rimmer, Windcrest/McGraw-Hill, © 1993 by Windcrest Books (registered Trademark of TAB Books). ISBN 0-8306-4209-9
- [ 2] "Supercharged Bitmapped Graphics", Steve Rimmer, Windcrest/McGraw-Hill, © 1992 by Windcrest Books (registered Trademark of TAB Books). ISBN 0-8306-3788-5
- [ 4] "Amiga Magazin", Issue 2/1992, Markt & Technik Verlag AG
- [ 5] "DOS Extra", Issue 4/1993, DMV-Verlag
- [ 7] "Formats.doc" of the ShowVIC distribution on SaarAG-Disk #616. ShowVIC is (C)opyright 1993 by Matt Francis.

- [10] The Independent JPEG Group's software package(s) with Source-Code(s) and Documentation. Release 4 through 6.
- [11] "The Programmer's PC Sourcebook", Thom Hogan,
   published by Microsoft Press, © 1991 by Thom Hogan.
   ISBN 1-55615-321-X
- [13] ... and perhaps books/magazines/articles, which I don't remember yet !
- [14] ... as well as texts found on AmiNet, BBS or CD-ROM.
- [15] Newsgroups in Fido (mostly \*.GER) and UseNet (mostly DE.\* and Z-Netz)
- ...plus a bunch of Amiga-related books, like RKMs and the Guru Book, etc.

## 1.106 Other Program Projects

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| Name<br>of Program    | Archive<br>Name (current)                            | Location<br>(maybe)                            | Current<br>Version |
|-----------------------|------------------------------------------------------|------------------------------------------------|--------------------|
| ak_gen0-lib +         | ak_gen0-lib_38_22Dev.lha<br>ak_gen0-lib_38_22Usr.lha | binary only: Aminet:util/libs/ RareOldLibs.lha | V38.22             |
| akJFIF.datatype       | akJFIF43x.lha                                        | Aminet:util/dtype                              | V43.75             |
| akLJPG.datatype       | akLJPG43x.lha                                        | Aminet:util/dtype                              | V43.75             |
| akPNG.datatype        | akPNG43x.lha                                         | Aminet:util/dtype                              | V43.75             |
| akSVG.datatype        | akSVG43x.lha                                         | Aminet:util/dtype                              | V43.75             |
| AKCC                  | AKCC.lha                                             | Aminet:util/cli                                | V4.4               |
| C Exec Lib Sample     | CLib37x.lha                                          | Aminet:dev/c                                   | V37.10             |
| C Datatype Sample     | C_V43-DT.1ha                                         | Aminet:dev/c                                   | V43.6              |
| DeTAR port            | DeTar12.lha                                          | Aminet:util/arc                                | V1.2               |
| DRAFU plus            | DRAFU.lha                                            | Aminet:misc/math                               | V2.00              |
| fractal (Y. Fisher)   | frac10.lha                                           | Aminet:gfx/misc                                | 1.0                |
| GNUTar port (V1.11.2) | GNUTar14.lha                                         | Aminet:util/arc                                | V1.4               |
| IFF-Arranger          | IFFArr31.lha                                         | Aminet:util/misc                               | V3.1               |
| K8SVX                 | K8SVX_V2.00.1ha                                      | _                                              | V2.00              |
| KFracPlus             | KFrac50.lha                                          | Aminet:gfx/fract                               | V5.0               |
| KILBM                 | KILBM_V1.32.lha                                      | _                                              | V1.32              |
| KVOC                  | KVOC_V1.00.lha                                       | _                                              | V1.00              |
| Make060               | Make060.lha                                          | Aminet:util/sys                                | V1.0               |
| ModeP                 | ModeP.lha                                            | Aminet:util/sys                                | V1.0               |
| PNG-Box               | PNG-Box.lha                                          | Aminet:gfx/conv                                | V1.40              |
| PR                    | PR_V3.02.1ha                                         | _                                              | V3.02              |
| RetinaView            | RetinaView11-11.lha                                  | Aminet:gfx/board                               | V11.11             |
| SIP                   | SIP.lha                                              | Aminet:util/moni                               | V3.7               |
| SpaceArchivPlus       | SPAPlus_V3.00.lha                                    | _                                              | V3.00              |
| STPlayer              | STPlayer_V1.26.lha                                   | _                                              | V1.26              |
| superplay-lib         | SPLibUsr.lha                                         | Aminet:mus/play                                | V6.3               |
| +                     | SPLibDev.lha                                         | ^                                              |                    |
| SuperView             | SView.lha                                            | Aminet:gfx/show                                | V5.81              |
| SViewNG               | SViewNG.lha                                          | Aminet:gfx/show                                | V7.10              |
| +                     | SViewNGWiz.lha                                       | ^                                              |                    |
| TICker                | TICker12.lha                                         | _                                              | V1.2               |
| UnARJ port (V2.41)    | UnARJ241.lha                                         | Aminet:util/arc                                | V2.41              |
| UtahRLE.svobject      | svoUtah.lha                                          | Aminet:gfx/show                                | V4.2               |

Some of the old, obsolete projects have not been uploaded to Aminet from my side. Maybe someone else did, but most possibly these are not of such a high interest for today's AmigaOS;—)

## 1.107 Credits

24BitToHAM.svoperator

Z IBICIOMMI. O Voperacor

This SVOperator bases on code, which has been included with FBM Release 1.0 25-Feb-90 by Michael Mauldin. The original code had been written by Harald C. Koch to convert 24 bit RGB data (FBM format) to HAM6-ILBM files. I modified it to create format-independent 8 Bit chunky pixel buffers, which can be handled by SuperView-Library.

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The code used for the "quick" option of the SVOperator (without palette) is not related in any way to code of the FBM package. The ham8-well code originally was drived from fbham.c, but now no longer does show any similarities to it. Here's the copyright notice as found in "fbham.c" (revision headers cut off / left out) : \* fbham.c: FBM Release 1.0 25-Feb-90 Michael Mauldin \* Copyright (C) 1989,1990 by C. Harald Koch & Michael Mauldin.  $\star$  Permission is granted to use this file in whole or in part for  $\star$  any purpose, educational, recreational or commercial, provided \* that this copyright notice is retained unchanged. This software  $\star$  is available to all free of charge by anonymous FTP and in the \* UUNET archives. [...] \* based on ray2.c from DBW\_Render, Copyright 1987 David B. Wecker [...]

### AmiFIG.svobject

-----

This FIG support module accesses the external program "fig2dev", which for example is available as port of the fig port AmiFIG 1.1 from AmiNet, which is (C) 1996 Andreas Schmidt.

## C64.svobject

-----

For getting information about the C64 Koala and Doodle formats I took a look into the source code of ComView 1.0 by Paul Grebenc, which can be found as "C64View" on the SaarAG-Disk #523.

I did not include and use the Source Code as such, but I really learnt a much out of it. The algorithms are perhaps nearly the same, but because I do not use file-to-screen decoding my code is perhaps some 100% faster (different structure, many optimizations).

```
EPS.svobject

EPS.svobject uses strongly modified code from

/* pnmtops.c - read a portable anymap and produce a PostScript file

**

** Copyright (C) 1989 by Jef Poskanzer.

**

[...]

which is allowed by its copyright statements.
```

FBM.svobject

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\_\_\_\_\_

For getting information on the FBM-Format I took a look into the file "fbm.h" and other source-files, which describe this file format and are part of FBM Release 1.0 25-Feb-90 by Michael Mauldin. No source-code from this package - only the "pure information" - has been used for FBM.svobject.

#### GhostScript.svobject

\_\_\_\_\_

GhostScript.svobject accesses an external Ghostscript port, like for example Ghostscript 3.53 from AmiNet, which is based on Aladdin Ghostscript.

Aladdin Ghostscript is Copyright (C) 1989, 1995 Aladdin Enterprises. All rights reserved.

#### Limbo.svobject

\_\_\_\_\_

Limbo.svobject does support the Limbo 4.0 port from Aminet:gfx/conv, which was based on a version developed by Carsten Frigaard, Jess Gade, Thomas Therp Hemmingsen and Torben Sand in 1993/94 on Aalborg University, Denmark.

### JPEG.svobject

\_\_\_\_\_

This software is based in part on the work of the Independent JPEG Group. Release 6 was used as found on AmiNet, former attempts based on V4.

#### PICT.svobject

\_\_\_\_\_

part (also free).

The PICT loader module is based on code derived from the PBM package, namely the standalone-module "picttoppm.c".

It is said it can be used freely, so I decided to do this instead of trying to implement this weird PICT-2 stuff of QuickDraw

The original source has been stronly modified to fulfil the needs of being integrated as a library module for superview.library. To be more independent from the pbm.package (great improvments on code size) I also extracted the standard bdf font from the pbm

(is it a vector format or a bitmap format ;-)

Here are the Copyright notice of these modules as found in the files "picttoppm.c" and "libpbm5.c" (revision headers cut off / left out) :

/\*
 \* picttoppm.c -- convert a MacIntosh PICT file to PPM format.
 \*
[...]
 \*
 \* Copyright 1989,1992,1993 George Phillips
 \*

 $\star$  Permission to use, copy, modify, and distribute this software and its

 $\star$  documentation for any purpose and without fee is hereby granted, provided

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```
* that the above copyright notice appear in all copies and that both that
 * copyright notice and this permission notice appear in supporting
 * documentation. This software is provided "as is" without express or
 * implied warranty.
 * George Phillips <phillips@cs.ubc.ca>
 * Department of Computer Science
 * University of British Columbia
 * $Id: picttoppm.c,v 1.7 1993/10/26 22:40:31 phillips Exp phillips $
 */
Only the default font definition has been taken from this one:
/* libpbm5.c - pbm utility library part 5
** Font routines.
** Support for BDF fonts Copyright 1993 by George Phillips.
** Copyright (C) 1991 by Jef Poskanzer.
* *
** Permission to use, copy, modify, and distribute this software and its
** documentation for any purpose and without fee is hereby granted, provided
\star\star that the above copyright notice appear in all copies and that both that
** copyright notice and this permission notice appear in supporting
** documentation. This software is provided "as is" without express or
** implied warranty.
*/
 PNG.svobject
 Is based on the png reference library (including libpng and zlib), which
 allows being used e.g. for freely distributable and commercial programs
 libpng:
 libpng 1.0 beta 6 - version 0.96
 Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.
 Copyright (c) 1996, 1997 Andreas Dilger
 zlib:
 zlib 1.0.4
 (C) 1995-1996 Jean-loup Gailly and Mark Adler
 RotateFree.svoperator

 The basic algorithm for rotation about any given point with any
 possible angle had been described in "C/C++ Users Journal",
 issue August 1995. It was strongly dependend on TIFF input,
 did only work with 8 Bit input and was not able to adjust
 the image buffer size to prevent image parts to be cut off.
 Used only the basic algorithm as a hint how to do hit.
```

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#### TIFF.svobject

\_\_\_\_\_

Since V3.7 this module makes use of the freely distributable TIFF Library (libtiff). For this version V3.4 beta 024 has been used.

Please note the following copyrights:

```
Copyright (c) 1988-1995 Sam Leffler
Copyright (c) 1991-1995 Silicon Graphics, Inc.
```

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IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

```
YUVN.svobject and PCD.svobject
```

For the 24 bit YUV <-> RGB Conversion Routines I used some code of the NetPBM Package.

The code of the original routines has been \_strongly\_ modified and enhanced/improved (there are almost no similarities to the original code left now, except the main algorithm).

For PCD also the factors to scale YCbCr to RGB had to be adjusted, since the ones of PCD are slightly different to those of JPEG.

Here are the Copyright notices as found in the specific source files :

```
/* ppmtoyuvsplit.c - convert a portable pixmap into 3 raw files:
** - basename.Y : The Luminance chunk at the size of the Image
** - basename.U : The Chrominance chunk U at 1/4

** - basename.V : The Chrominance chunk V at 1/4

** The subsampled U and V values are made by arithmetic mean.

**

** If CCIR601 is defined, the produced YUV triples are scaled again
** to fit into the smaller range of values for this standard.

**

** by A.Beck

** Internet: Andre_Beck@IRS.Inf.TU-Dresden.de

**
```

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```
** Based on ppmtoyuv.c
** Permission to use, copy, modify, and distribute this software and its
** documentation for any purpose and without fee is hereby granted, provided
** that the above copyright notice appear in all copies and that both that
\star\star copyright notice and this permission notice appear in supporting
\star\star documentation. This software is provided "as is" without express or
** implied warranty.
*/
/* yuvsplittoppm.c - construct a portable pixmap from 3 raw files:
** - basename.Y: The Luminance chunk at the size of the Image
** - basename.U : The Chrominance chunk U at 1/4
** - basename.V : The Chrominance chunk V at 1/4
** The subsampled U and V values are made by arithmetic mean.
** If ccir601 is defined, the produced YUV triples have been scaled again
** to fit into the smaller range of values for this standard.
** by Marcel Wijkstra <wijkstra@fwi.uva.nl>
** Based on ppmtoyuvsplit.c
** Permission to use, copy, modify, and distribute this software and its
** documentation for any purpose and without fee is hereby granted, provided
** that the above copyright notice appear in all copies and that both that
** copyright notice and this permission notice appear in supporting
\star\star documentation. This software is provided "as is" without express or
** implied warranty.
*/
 MetaView.svobject
 This WMF/AMF/IFF-DR2D/DXF/WPG-Vector support module accesses the external
```

program "MetaView", which is (C) Henk Jonas.

HilbertDither256.svoperator

The description of the "fractal Hilbert dithering" method has been found in the "mc magazine, issue 6/94, Franzis-Verlag GmbH". The basic techniques (L-System, 16x16 block error approximation) are perhaps the same, but the source code as such has been rewritten completely in almost any of its parts, so that it has not just been "taken out of there" (any limits have been removed; e.g. the original source was a standalone-program, which only worked with TARGA graphics, which had a width and height divideable by 16, but max. 1280x960 or 2560x1920).

## 1.108 ControlPad Fileformat

Many SVObjects, SVDrivers and SVOperators have to handle globally set preferences, which may also have to be handled and/or modified by custom programs or SuperViewPrefs.

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To prevent multiple different ways of storing these preferences data, I introduced a common standard fileformat for such configuration files: The ControlPad fileformat (please read the notes under "Style Guide" below).

- To allow easy reading and understanding of these files, these are stored in plain ASCII
- To prevent people from learning just another technique of configuring files, these are constructed just like a kind of "tooltype lists"
- a single ControlPad takes a full line of the file
  and looks like that : <Name>=<Content> or <Keyword>
  Content and Name may contain any ASCII characters except "=", because
  the first "=", which is found, is used to separate the Name from the
  Content in the line. A Keyword is anything, which does not contain
  a "=" somewhere, but is not a comment.
- So all other special characters are possible (although you should not make too much use of them for ergonomical reasons).
- it is supported to write as much comments to the files, as wished.
  A comment line has to begin with "/" or ";" in its first column.
  A totally blank line fits to the same category as "/" or ";" lines.
- any single line should not exceed 255 characters

#### Additional Notes

~~~~~~~~~~~~~~~~~

- \* Note, that comments are safely read and written by the current library version.
- \* The SVSUP\_FindControlPad() function is case-sensitive, so if nothing else is specified, the ControlPad entries are always also case-sensitive. Case-insensitive functions already have been added (SVSUP\_FindControlPadNoCase()) but are not used widely yet.

By using GUI-based functions for ControlPad modifications which prevent the user from changing them directly, you may be able to avoid such conflicts.

## Style Guide

~~~~~~~

Common "style guide" rules (PLEASE NOTE) :

- ControlPads should be located in "ENV:superview-library/" and have the plain name of the SVDriver/SVObject/... plus ".controlpad" as extension.
  - For example a ControlPad for JPEG.svobject should be named "ENV:superview-library/JPEG.controlpad".
- for boolean entries use <YES|NO> choices, not <TRUE/FALSE>
   or just set single Keywords like "USE\_..."
- for switches, <ON|OFF> choices are most often preferable against setting single Keywords for either "on" or "off"
- use pregnant and verbose names for multiple-choices, like <HUFF|LWZ|ENTROPY>, not <1|2|3>
- use short names and statements, not long and complicated ones :
   "ColorDepth=24" instead of "Number\_of\_Colors=16.7\_million"

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### Examples

~~~~~~

In "Programmers/C-Language/Example\_Tools/ControlPad" you find some example sources, which deal with ControlPads and should explain anything you need to know about these.

## 1.109 CPInfo Fileformat

Some applications might wish to enable the user to interactively specify controlpad settings just when reading, writing or processing an image and not before or after by setting preferences.

Until this will be managed by superview.library, superviewsupport.library or the single modules by introducing new functions for handling this, applications may take this information from ".cpinfo" files, where the specific ControlPad entries are dynamically described.

#### Content

======

- Structure in general
- Structure in detail
- Structure Entry Description in detail
- Examples
- Last Words and Exceptions
- Future
- Special configuration Standards

### Structure in general

\_\_\_\_\_

Every CPInfo-File is constructed like an usual ControlPad file, but in this case, the \_order\_ of the entries becomes meaningful. These files are separated into SECTIONs, where any necessary information about specific ControlPad entries are stored.

To allow easy enhancements and improvements on this format, there's an important note:

- the number of sections is not limited
- each SECTION \_must\_ contain at least the entries described below
- each SECTION \_may\_ contain more entries, so that it might be necessary to skip all the following entries until another "SECTION" entry will be reached
- the order of the entries is \_fixed\_
- if any of the following \_needed\_ entries makes no sense, it will still be present as a "dummy", thus just a Keyword is placed there and no value is given via "="
- any single line should not exceed 255 characters
- as with usual ControlPad files, comments and blank lines are allowed

#### Structure in detail

CPINFO
SECTION=<Name of ControlPad entry>
TYPE=<INTEGER|FLOAT|ASCII|NONE>
; identification
; the name of the entry
; type of data

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```
; (signed or unsigned for
 ; INTEGER or FLOAT may
 ; be detected via MIN and MAX).
 ; NONE is used for KeyWords.
 ; - minimum value for numbers
MIN=<Value>
 ; - minimum length for strings
 ; - or empty ("MIN")
 ; Empty with KeyWords.
MAX=<Value>
 ; - maximum value for numbers
 ; - maximum length for strings
 ; - or empty ("MAX")
 ; Empty with KeyWords.
 ; what will be used if nothing
DEFAULT=<Default value for entry>
 ; is specified ?!
 ; Empty e.g. with KeyWords.
DESCRIPTION=<descriptive text>
 ; what does it do ?
 ; this one allows to separate
MASK=<input mask>
 ; choices and "free" enterings
 ; Empty with KeyWords.
WHEN=<READ|WRITE|ALWAYS|PREFS|NEVER> ; ask for it, when the user
 ; does reading or writing
 ; (SVObjects) ? Or always
 ; (SVDrivers/SVOperators) ?
 ; Or never ? (Undocumented)
 ; Or Just handle it as a real
 ; preferences thing ?
```

# Structure Entry Description in detail

#### o A few words to the MASK entry:

Any entries which don't have a specific meaning (just comments) or mutual exclude entries do have to begin with "<" and end with ">". Anything else are control sequences, qhich either are to be supported or have to be ignored.

### a) "<...>" or "<...|...>"

Usually you should print out this text as a little help for the user, how to enter the data, e.g. into a string/integer gadget. But if the string included by "<" and ">" does contain one or more "|" these are meant as exclusice choices, which e.g. might be represented as mx-, cycle- or listview-gadgets. So you may a) present this mask to the user while editing a string/integer gadget or b) parse it and just "filter" the input via supplying appropriate input gadgets. Please note, that the "MIN" and "MAX" values (if specified) still have to be valid for this input (if the file definition has been done correctly;-) So for a "MASK=<8|24>" these would equal "MIN=8" and "MAX=24". But note, that this "mask" is not really meant to define ranges with gaps, like "anything between 5 and 37, but except the numbers between 33.3 und 36.5" 8-)

### b) Control Sequences

MASK=\_SVOBJECT means, that a file from "LIBS:svobjects"

has to be requested, which matches "#?.svobject". MASK=\_SVDRIVER means, that a file from "LIBS:svdrivers" has to be requested, which matches "#?.svdriver". MASK=\_SVOPERATOR means, that a file from "LIBS:svoperators" has to be requested, which matches "#?.svoperator". MASK= FILE a file to be selected e.g. fromout a requester (it is supposed, that the user does the right choice). Examples Anentry for a KeyWord might look like this: SECTION=ANYDATATYPES TYPE=NONE MIN MAX DEFAULT DESCRIPTION=Switches Datatypes support to ANY WHEN=PREFS An entry for a float value: SECTION=SCALE\_FACTOR TYPE=FLOAT MIN=0.1MAX=2.0DEFAULT=1.0 DESCRIPTION=Factor for scaling graphics MASK=<Value> WHEN=ALWAYS An entry for an ASCII text: SECTION=PACKMETHOD TYPE=ASCII MIN=4MAX=4DEFAULT=NUKE DESCRIPTION=How to pack the written data MASK=<XPK-Packer> WHEN=WRITE An example for an ignoreable Keyword: SECTION=DEBUGMODE

TYPE=NONE

MIN MAX SuperView-Library 167 / 176

DEFAULT DESCRIPTION=Enables debugging mode with Confirm-Requesters MASK WHEN=NEVER

### Last Words and Exceptions

So you see, that it's easy to describe any of the existing ControlPad variations this way.

The "WHEN" statement is a help for applications to decide, whether and when to allow changing of specific ControlPad entries.

Applications should either ignore entries of type "WHEN=NEVER" or prepared to handle slightly differing entries, like e.g. TYPE=INTEGER entries with a non-set default value. (An example had been the "AVAILMEM" switch of interim versions of JPEG.svobject - which was both: a keyword and a common setting, but should never be changed during runtime.)

"WHEN=NEVER" is just for options with experimental state or debugging purposes.

#### Future

In the future, there may be a function in superview.library, which allows passing a controlpad list to it, which then may be passed to the attached SVObject/SVDriver/SVOperator as a "local" setting, which will override the "global" ControlPad files.

So the CPInfo Files will be helpful for applications on how to find out, which ControlPads might be possibly set.

## Special configuration Standards

\_\_\_\_\_\_

For special cases it seems to be suitable to define a common behaviour, so that GUI-based and interactive selections for those special cases may become independent from specific modules.

Applying operations to parts of images only (crop standard) Suggested by Steve Quartly in 11/95

Operators and other modules, which allow to apply their specific operations to either the whole given image or only a defined part of it, should use the following controlpads as a standard for allowing the application to better visualize the process of selecting the concerned parts of the graphics.

#### REGION=<ENTIREIMAGE | RECTANGULAR>

- ; if this one exists, you have the choice.
- ; Then, if REGION-ENTIREIMAGE, the following are supposed to be
- ; 0, 0, width, height, otherwise they have to be specified.

LEFTEDGE=<Value smaller or equal width>

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```
TOPEDGE=<Value smaller or equal height>
WIDTH=<width of shape>
HEIGHT=<height of shape>
; just like opening a window
```

## 1.110 ControlPad Overview

```

MAIN LIBRARIES
ControlPad-Name : "ENV:SuperView-Library/LIBRARY.controlpad"
ControlPad-Commands : - DEFAULTSVDRIVER=<#?.svdriver>
 ; Which SVDriver should be set, when
 ; SuperView-Library is being initialized ?
 ; For example: "DEFAULTSVDRIVER=AGA.svdriver"
 - ANYDATATYPES
 ; if this KeyWord is set, ANY DataTypes will
 ; be loaded and tried to be displayed in some
 ; way (e.g. not only pictures, but also 8SVX
 ; sounds or ANIM-Files ...)
 ; This changes are recognized each time, when
 ; a new handle for loading a file is being
 ; initialized - but may be superseded by specific
 ; program's settings internally.

 : "ENV:SuperView-Library/superviewsupport.controlpad"
ControlPad-Name
ControlPad-Commands : - C2P=<OS|SV>
 ; determines, whether chunky to planar conversion
 ; is managed via the appropriate OS functions
 ; or via internal ones.
 ; Due to various problems with the OS functions % \left(1\right) =\left(1\right) +\left(1\right) +\left(
 ; "SV" is now default.
 ; Be careful when using "OS" with GfxCards,
 ; which carelessly patched graphics.library.

ControlPad-Name : "ENV:SuperView-Library/AmiFIG.controlpad"
ControlPad-Commands : - AMIFIG_PATH=<fig2dev command path plus name>
 ; how fig2dev is to be called
 ; e.g. AMIFIG_PATH=Work: AmiFIG/fig2dev
 ; default is: fig2dev
 - STATUS=<ENABLED|DISABLED>
 ; allows to disable this module - for example
 ; to be able to use an other, program-specific
 ; import-module for the same file format
ControlPad-Name
 : "ENV:SuperView-Library/EPS.controlpad"
ControlPad-Commands : - EXTRACTMODE=<HEADER|PS>
 ; Determines, whether the preview image or
 ; the Postscript (TM) part should be extracted,
 ; while parsing the Postscript (TM) part requires
 ; a working Ghostscript installation with
 ; GhostScript.svobject being correctly configured
 ; default is: HEADER
```

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```
- SAVE ROTATE=<ON|OFF>
 ; by default, the picture seems to be rotated
 ; with Postscript (TM) output of this module.
 ; Enabling SAVE_ROTATE will again re-rotate it to
 ; the original position.
 ; default is: OFF
 - SAVE_CENTER=<ON|OFF>
 ; centers the images on the page with the
 ; desired size of SAVE_WIDTH x SAVE_HEIGHT (or not)
 ; default is: ON
 - SAVE_RLE=<ON|OFF>
 ; allows to apply RLE compression to the
 ; PS output
 ; default is: OFF
 - SAVE_DPI=<value>
 ; DPI value to use for the output
 ; default is: 300
 - SAVE_WIDTH=<value>
 ; Width of the PS page
 ; default is: 612
 - SAVE HEIGHT=<value>
 ; Width of the PS page
 ; default is: 762
ControlPad-Name : "ENV:SuperView-Library/FastILBM24.controlpad"
ControlPad-Commands : - BUFFERSIZE=<Size in Bytes>
 ; how many bytes should be buffered
 (more = faster)
 ; Default is 8192, minimum is 256
 - PASSTHROUGH
 ; do not recognize ANY pictures, so that
 ; they e.g. might be passed through to
 ; ILBM.svobject instead
 - DITHERMODE=<HAM6_QUICK|HAM8_QUICK>
 ; Default is HAM6_QUICK
ControlPad-Name
 : "ENV:SuperView-Library/GhostScript.controlpad"
ControlPad-Commands : - GS_PATH=<gs command path plus name>
 ; how GhostScript is to be called
 ; e.g. GS_PATH=Ghostscript:gs000
 ; default is: gs000
 - OUTPUTMODE=<PNG256|PNG24BIT|OTHER>
 ; Output file format to be used
 ; (-sDEVICE parameter of Ghostscript's gs).
 ; Only PNG supported yet.
 ; default is: PNG256
 - OTHER_OUTPUTMODE=<pcxmono|pcxgray|pcx16|pcx256|
 pcx24b|tiffcrle|tiff24nc|
 pngmono|pnggray|png16|png256|
 png16m|bmpmono|bmp16|bmp256|
 bmp16m>
 ; If OUTPUTMODE=OTHER has been set, the string
 ; specified here will directly be passed as
 ; Ghostscript's "-sDEVICE" parameter
 ; default is: png256
 - DPI=<value>
 ; DPI value to use for the converted output
```

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```
; (-r parameter of GhostScript's gs)
 ; default is: 72
 - STATUS=<ENABLED|DISABLED>
 ; allows to disable this module - for example
 ; to be able to use an other, program-specific
 ; import-module for the same file format
ControlPad-Name : "ENV:SuperView-Library/GPlot.controlpad"
ControlPad-Commands : - GPLOT_PATH=<qplot command path plus name>
 ; how gplot is to be called
 ; e.g. GPLOT_PATH=Work:GPlot/GPlot
 ; default is: GPlot
 - STATUS=<ENABLED|DISABLED>
 ; allows to disable this module - for example
 ; to be able to use an other, program-specific
 ; import-module for the same file format

ControlPad-Name : "ENV:SuperView-Library/ILBM.controlpad"
ControlPad-Commands : - ANIM_BODIES
 ; if set, ANIM files' ILBM-BODY chunk
 ; (first frame) will be extracted when
 ; such a file is encountered. Otherwise
 ; anim.datatype may do that task later.
 ; (not actually IFF-ILBM support: it's
 ; IFF-ANIM support)
ControlPad-Name : "ENV:SuperView-Library/JPEG.controlpad"
ControlPad-Commands :
 ; STANDARD settings
 ; **********
 - COLORDEPTH=<8 | 24>
 ; For READING colored 24 bit images:
 ; should the output be done as 8 or 24 bit Data ?
 ; default is 8 Bit data. Grayscaled graphics
 ; will _always_ be exported as 8 Bit
 - QUANTIZATION=<0..100>
 ; For WRITING 8/24 bit images as 24 bit JPEG:
 ; 0 - poor quality, big compression
 ; 100 - best quality, no compression
 ; never use such extreme values, but try
 ; something like 20, 50, 75
 ; default is: 75)
 ; ADVANCED settings
 ; ************
 - FORCE_GRAY_DECODE
 ; For READING images:
 ; this switch overrides the selected depth
 ; for colored images and always exports them
 ; as 8 Bit grayscaled pictures
 ; default is: not set
 - DECODE_METHOD=<FAST_INTEGER|SLOW_INTEGER|
 FLOATING_POINT>
 ; For READING images:
 ; how to DECODE the 24 bit or gray data
 ; default is: FAST_INTEGER
 - DITHERMODE=<DITHER_FLOYD-STEINBERG|
```

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```
NO DITHERING | DITHER ORDERED>
 ; For READING and dithering 24 bit images
 ; to 8 Bit images:
 ; how and whether to DITHER the 24 bit data
 ; default is: DITHER FLOYD-STEINBERG
 - COLOR_QUANTIZING=<FAST|SLOW>
 ; For READING and dithering 24 bit images
 ; to 8 Bit images:
 ; whether to QUANTIZE the 24 bit data within
 ; two passes (not with DITHER_ORDERED)
 ; default is: SLOW
 - UPSAMPLING=<ON|OFF>
 ; For READING and dithering 24 bit images
 ; to 8 Bit images:
 ; whether to do fancy upsampling on the 24 bit
 ; default is: ON
 - FORCE_GRAY_ENCODE
 ; For WRITING images:
 ; this switch causes grayscales to be written
 ; no matter, whether the input was colored
 ; default is: not set
 - ENCODE_METHOD=<FAST_INTEGER|SLOW_INTEGER|
 FLOATING_POINT|FASTEST_INTEGER>
 ; For WRITING images:
 ; how to ENCODE the 24 bit or gray data
 ; default is: FAST_INTEGER
 - OPTIMIZE=<ON|OFF>
 ; For WRITING 24 bit images:
 ; whether to optimize the generated huffman
 ; code (good compression, but slow)
 ; default is: OFF
 - PROGRESSIVE=<ON|OFF>
 ; For WRITING 24 bit images:
 ; whether to write progressive JPEG files
 ; default is: OFF
ControlPad-Name : "ENV:SuperView-Library/Limbo.controlpad"
ControlPad-Commands : - LIMBO_PATH=<Limbo command path plus name>
 ; how Limbo is to be called
 ; e.g. LIMBO PATH=Work:Limbo/Limbo.68030.881
 ; default is: Limbo.68000
 - STATUS=<ENABLED|DISABLED>
 ; allows to disable this module - for example
 ; to be able to use an other, program-specific
 ; import-module for the same file format
 ._____
 : "ENV:SuperView-Library/MetaView.controlpad"
ControlPad-Name
ControlPad-Commands : - METAVIEW_PATH=<fig2dev command path plus name>
 ; how MetaView is to be called
 ; e.g. METAVIEW_PATH=Work:AMF/MetaView
 ; default is: MetaView
 - STATUS=<ENABLED|DISABLED>
 ; allows to disable this module - for example
 ; to be able to use an other, program-specific
 ; import-module for the same file format
ControlPad-Name : "ENV:SuperView-Library/PCD.controlpad"
```

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```
ControlPad-Commands : - OUTPUTFORMAT=<BASE/16 | BASE/4 | BASE >
 ; specifies the output resolution to be used

ControlPad-Name : "ENV:SuperView-Library/PNG.controlpad"
ControlPad-Commands : - PNG8_TRANSPARENCY=<ON|OFF>
 ; whether 8 Bit PNGs should contain
 ; transparency information
 ; Default: OFF
 - PNG8 TRANSPARENT COLOR=<0..255>
 ; Default color to be enabled and set
 ; (graphics control extension block)
 ; Default: 0
 - Z_COMPRESSION=<0..9>
 ; allows changes in compression/speed.
 ; 0 results in uncompressed data, 9 compresses
 ; best, but increases decompression time.
 ; Default: 6
 - SAVE_INTERLACED=<ON|OFF>
 ; Save image as interlaced (progressive) ?
 ; Default: OFF
 : "ENV:SuperView-Library/PNM.controlpad"
ControlPad-Name
ControlPad-Commands : - SUPPRESS_HEADER
 ; setting this keyword will suppres
 ; writing the PNM header for P5/P6
 ; files, which actually will generate
 ; a RAW data file, which cannot be loaded
 ; with superview.library again, but may be
 ; used for different purposes
 ; Default: (not set)

 : "ENV:SuperView-Library/Printer.controlpad"
ControlPad-Name
ControlPad-Commands : - DENSITY = < density value for printing quality >
 ; Amiga's printer device does allow seven
 ; modes of printing density (1-7)
 ; (not with TurboPrint)
 ; default is: 3

ControlPad-Name : "ENV:SuperView-Library/Scanner.controlpad"
ControlPad-Commands : - PUBSCREEN NAME=<PubScreenName>
 ; where the scanner drivers should open
 ; their windows (if not set or not available,
 ; the default Public Screen will be used).
 : "ENV:SuperView-Library/SVG.controlpad"
ControlPad-Name
ControlPad-Commands : - PACKMETHOD=<xxxx>
 ; if this one is specified, it is tried to
 ; pack the resulting file with the specified
 ; XPK-Packer. If this fails, the file keeps
 ; unpacked.

SVDRIVERS
ControlPad-Name : "ENV:SuperView-Library/AGA.controlpad"
ControlPad-Commands: - 24BITOPERATOR=<OperatorName>
 ; (case-sensitive, ".svoperator" may be added)
 ; e.g. "24BITOPERATOR=24BitToHAM.svoperator"
```

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```
"24BITOPERATOR=ExtractGrayScales"
 ; specifies, which operation should be performed
 ; on 24 bit graphics _before_ displaying them
 ; (if not specified, "best guess" colors will
 ; be used, which is really slow)
 - BITMAPCOPY=<DIRECT|RTG>
 ; "BITMAPCOPY=RTG" prevents AGA.svdriver from
 ; directly copying into Bitmaps, which will
 ; result in a usage of more memory, but keeps it
 ; working.
 ; Default is "BITMAPCOPY=DIRECT".
 - SCREENINFRONT
 ; Put Screen to front _before_ the graphics
 ; has been displayed (useful with GfxCards)

ControlPad-Name
 : "ENV:SuperView-Library/ECS.controlpad"
ControlPad-Commands : - 24BITOPERATOR=<OperatorName>
 ; (case-sensitive, ".svoperator" may be added)
 ; e.g. "24BITOPERATOR=24BitToHAM.svoperator"
 ; or "24BITOPERATOR=ExtractGrayScales"
 ; specifies, which operation should be performed
 ; on 24 bit graphics _before_ displaying them
 ; (if not specified displaying will fail)
 - 8BITOPERATOR=<OperatorName>
 ; (case-sensitive, ".svoperator" may be added)
 ; e.g. "8BITOPERATOR=ExtractGrayScales"
 ; specifies, which operation should be performed
 ; on non-ECS graphics (more than 16 Colors in
 ; HighRes, more than 32 Colors in LowRes, HAM8)
 ; (if not specified, will be tried to display)
 - BITMAPCOPY=<DIRECT|RTG>
 ; "BITMAPCOPY=RTG" prevents ECS.svdriver from
 ; directly copying into Bitmaps, which will
 ; result in a usage of more memory, but keeps it
 ; working.
 ; Default is "BITMAPCOPY=DIRECT".
 - SCREENINFRONT
 ; Put Screen to front _before_ the graphics
 ; has been displayed (useful with GfxCards)

 : "ENV:SuperView-Library/CyberGraphics.controlpad"
ControlPad-Name
ControlPad-Commands : - EMUSCREENDEPTH=<16|24>
 ; beginning depth for opening CyberGraphics Screens
 ; Default is 16 Bit (which will also be tried
 ; when opening of a 24 bit Screen fails)
 ; This does not concern colordepths < 16 Bit,
 ; except HAM6/8.
 - SMALLSCREENS
 ; unless this KeyWord is specified, it is not
 ; tried to open screens smaller than 320x240

 : "ENV:SuperView-Library/Picasso96.controlpad"
ControlPad-Name
ControlPad-Commands : - SMALLSCREENS
 ; unless this KeyWord is specified, it is not
 ; tried to open screens smaller than 320x240
 - EMUSCREENDEPTH=<16|24>
 ; beginning depth for opening Picasso96 Screens
```

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```
; Default is 24 bit (if opening fails, it is
 ; also tried to open a 16 Bit Screen, then)
 ._____
ControlPad-Name : "ENV:SuperView-Library/PicassoII.controlpad"
ControlPad-Commands : - SMALLSCREENS
 ; unless this KeyWord is specified, it is not
 ; tried to open screens smaller than 320x240
 - BLITTER
 ; uses the Picasso blitter to copy graphics
 ; into screens. Otherwise CPU is used.
 ; On 68000 systems you may wish to use the blitter
 - EMUSCREENDEPTH=<16|24>
 ; beginning depth for opening Picasso Screens
 ; Default is 24 bit (if opening fails, it is
 ; also tried to open a 16 Bit Screen, then)
 - SCREENMODEREQUEST
 ; if this one is specified, the SVDriver ITSELF
 ; will open a ScreenMode-Requester and ask
 ; for an appropriate Screenmode to use
 ; Useful, if you always like to change modes.
 - AUTOSCROLLADJUST
 ; this keyword will force Autoscroll whenever
 ; it would make sense, but the Picasso Software
 ; would not manage it by itself (when either
 ; only width or height need to be autoscrolled)
ControlPad-Name : "ENV:SuperView-Library/Retina.controlpad"
ControlPad-Commands : - EMUSCREENDEPTH=<16|24>
 ; beginning depth for opening Retina Screens
 ; Default is 24 bit (if opening fails, it is
 ; also tried to open a 16 Bit Screen, then)

SVOPERATORS
ControlPad-Name : "ENV:SuperView-Library/24BitToHAM.controlpad"
ControlPad-Commands : - DITHERMODE=< HAM6_QUICK|HAM6_WELL</pre>
 |HAM8_QUICK|HAM8_WELL>
 ; specifies the HAM-Mode to be used and
 ; the resulting speed/quality
ControlPad-Name
 : "ENV:SuperView-Library/CallPNM24.controlpad"
ControlPad-Commands : - PNMCOMMAND=<PBM command path and name>
 ; PNM command to be called
 ; e.g. PNMCOMMAND=Work:NetPBM/pnm/pnmscale
 - PNMOPTIONS=<Options>
 ; Options for PNM command to be called
 ; e.g. PNMOPTIONS=-xscale 2.0 -yscale 2.0

 : "ENV:SuperView-Library/Crop.controlpad"
ControlPad-Name
ControlPad-Commands : - CROP_LEFTEDGE=<Value>
 ; crop from x position
 ; (will be adjusted, if >= source width)
 - CROP_TOPEDGE=<Value>
 ; crop from y position
 ; (will be adjusted, if >= source height)
 - CROP_WIDTH=<Value>
 ; crop how many x pixels from leftedge
```

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```
; (will be adjusted, if too large)
 - CROP HEIGHT=<Value>
 ; crop how many y pixels from topedge
 ; (will be adjusted, if too large)
ControlPad-Name : "ENV:SuperView-Library/Dither24Bit.controlpad"
ControlPad-Commands : - COLORDEPTH=<1..8>
 ; specifies the colordepth of the dithering
 ; output (1->2 Colors .. 8->256 Colors)
 - DITHERMODE=<BESTPEN|DITHER_FLOYD-STEINBERG
 |ORDERED|BURKES>
 ; whether to just select the best pen or
 ; do Floyd-Steinberg pixel error adjustment

 : "ENV:SuperView-Library/ExtractGrayScales.controlpad"
ControlPad-Name
ControlPad-Commands : - COLORDEPTH=<1..8>
 ; specifies the colordepth of the grayscaled
 ; output (1->2 Colors .. 8->256 Colors)
 - QUICK
 ; uses >>2, >>1, >>3 (*0.25, *0.5, *0.125)
 ; instead of *0.3, *0.59, *0.11
ControlPad-Name : "ENV:SuperView-Library/HilbertDither256.controlpad"
ControlPad-Commands : - BACKGROUND=<BLACK|WHITE>
 ; defines, which of the two colors will act
 ; as background color. Useful e.g. for printing.
 ._____
 : "ENV:SuperView-Library/PaletteDither.controlpad"
ControlPad-Name
ControlPad-Commands : - COLORDEPTH=<1..8>
 ; specifies the colordepth of the final,
 ; dithered graphics (1..8 for 2..256 colors)
 - DITHERMODE=<BESTPEN|DITHER_FLOYD-STEINBERG>
 ; whether to just select the best pen or
 ; do Floyd-Steinberg pixel error adjustment
 - PALETTEDEPTH=<1..8>
 ; number of colors (depth) to be taken from the
 ; fixed palette - the possible rest will be
 ; generated (if specifying more palette colors
 ; than available, all available will be taken)
 - PALETTEFILE=<palette graphics filename>
 ; any 2..256 color graphics file, of which
 ; superview.library is able to extract a
 ; palette from (for example an IFF-ILBM file,
 ; but including a BMHD and - maybe empty - BODY).
 ; Allows to take one graphics as sample for
 ; the others (concerning the palette).

ControlPad-Name : "ENV:SuperView-Library/Rotate.controlpad"
ControlPad-Commands : - DEGREES=<90|180|270>
 ; rotate by how many degrees (reverse clockwise) ?

ControlPad-Name
 : "ENV:SuperView-Library/RotateFree.controlpad"
ControlPad-Commands : - ROTATE_ANGLE=<0..360>
 ; rotate by how many degrees (reverse clockwise) ?
 - METHOD=<MIDDLE|GIVENPOINT>
 ; default is rotation about the middle
 - X_COORD=<Value>
```

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```
; if METHOD=GIVENPOINT we need (X/Y)
 ; Default is (0/0)
 - Y_COORD=<Value>
 ; if METHOD=GIVENPOINT we need (X/Y)
 ; Default is (0/0)
 - KEEPSIZE
 ; if this keyword is set, it is NOT tried to
 ; readjust the image size and to center the
 ; image, so that parts, which would be out of
 ; range won't be cut off (which works best
 ; with (X/Y) pairs in the left, upper quarter)
 : "ENV:SuperView-Library/Scale50.controlpad"
ControlPad-Name
ControlPad-Commands : - METHOD=<HALF|DOUBLE>
 ; scale to which size ?

ControlPad-Name : "ENV:SuperView-Library/XOR.controlpad"
ControlPad-Commands : - XORVALUE = <0..255>
 ; 0 and 255 will not be the best decision ;-)
 ; Use 15 or something like this.
```