SuperPlay-Library

COLLABORATORS

	TITLE : SuperPlay-Library		
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WRITTEN BY		January 18, 2023	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

SuperPlay-Library

1.1 SuperPlay Library Documentation

```
                              superplay.library V4.5

                     - FREEWARE -

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

           Release Date : 27.5.1996
```

```
     _ //
Only \X/ Amiga makes it possible!
```

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")

Dedicated to all people, who actually READ docfiles ;-)

1.2 Copyright

Usage of the "superplay.library" for non-commercial programs (Freeware, Shareware), is allowed without any restrictions.
With commercial programs an explicite license is required.

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

Remark: Drawericons have been taken from Fred Fish's AmigaLibDisks.

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.

1.4 Distribution

The program superplay.library V4.5 is freely distributable (FREEWARE).
You may copy it, if the copyright notice is left intact and all of its parts are included in the distribution.
This program must not be included in commercial packages or commercial program collections without my written permission.
This program must not be sold in any way, but it is allowed to take a nominal fee including the costs for copying.

This program may be put on public domain disks or included in public domain disk libraries.

Special permission hereby goes to Fred Fish’s AmigaLib-Disks and the german series (in alphabetical order) :
AmigaSzene, BerndsPD, FRANZ, GPD, SaarAG, TAIFUN and TIME.
Also CD-ROMs by Fred Fish, AmiNet and ADX (Amiga Demos and Tools).

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

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

1.5 Abilities, Purposes and much more

The "superplay.library" is used in many of my programs and it consists of many functions, which make playing, saving and converting of various sound formats (SoundTracker, MED, IFF-8SVX, VOC, ...) much easier. External Player-Libraries (SPObjects) allow highest possible flexibility and easy to do expansions.

Just send me your own SPObjects if you want to have them added to the main distribution archive or onto the developer disk.

1.6 Installation and Configuration

Just copy the "superplay.library" into your "LIBS:"-directory.
Copy all the SPObjects to "LIBS:spobjects/".

1.7 Overview of currently available SPObjects

Available SPObjects (as far as included) :

SPObject	Formats	Type	Write
8SVX	IFF-8SVX (unencoded)	Sample	Sample
JAM	JamCracker V1.00+	Module	-
MED	MMD0	Module	-
SPO	SPO V1.00	Sample	Sample
ST	Sound/ProTracker	Module	-

```
                VOC
                        PC VOC V1.10                Sample   Sample

                WAV
                        RIFF-WAVE (Windows)         Sample   Sample


                SoundDT
                    OS3 Sound Datatypes         Sample   -
```

1.8 Software supporting SuperPlay.library

```
  The following programs are currently supporting "superplay.library":

     - SuperPlay      by Andreas R. Kleinert
     - SimplePlay     by Andreas R. Kleinert
     - DosXS          by Frank Dittmar
```

1.9 Thanks, greetings, credits and the rest

```
    in alphabetical order :)

    Alex    Carbin      (TuC / PowerBrei Red.),
    Fred    Fish        (AmigaLibDisks),
    Gerd    Frank       (BerndsPD),
    Stefan  Grad        (GPD),
    Stefan  Kremer      (TuC / PowerBrei Red.),
    Alex    Lange       (Time PD-Serie),
    H.P.    Lattka      (Franz PD-Serie),
    Andreas Manewaldt   (Taifun PD-Serie),
    Michael Petrikowski (Amiga Szene),

    and all I forgot !
```

1.10 How to contact the author

```
   _________________________________________________________
  |      You may reach me the following way.                |
  |    Send bug-reports, money or whatever to:              |
  |---------------------------------------------------------|
  |                  Persistant Software                    |
  |                                                         |
  |                  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.        |
  |_________________________________________________________|

  SuperView WWW page: http://members.aol.com/tfischb/main.htm/

  EMail:

        DO not SEND ANY binaries (or uuencoded) VIA THE
        FOLLOWING EMAIL ADDRESSES, EXCEPT MAYBE small ONES
        VIA t-online.de (smaller or equal 16 KB).
        THANK YOU.

           - Fido    Andreas Kleinert 2:2457/350.18
           - Usenet
                     Andreas_Kleinert@superview.ftn.sub.org
                     Andreas_Kleinert@t-online.de
           (Z-Netz)  AK@COB.wwbnet.de

           - If nothing else works, try one of these
             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 superplay.library (and e.g. SuperPlay)
    which caused the bug and describe your system configuration
    (Amiga model CDTV/CD-32/600(HD)/500(+)/1000/1500/1200(HD)/1300/2000/2200/
     2500(UX/AT)/3000(+/T)/4000(/030/040/060)(T)/DraCo, 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, 68881/882, PMMU).
```

1.11 The future of the SuperPlay.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
(why not also write your own SPObjects ?)

- Andy
```

1.12 History

```
    V4.5 (27.5.1996) :
    ------------------
     - completely recompiled using SAS/C V6.56
       (library and modules)
     - reworked startup code of all modules (svobject-like)
     - ST.spobject's Data and Instruction Cache disabling did
       cause enourmous declines in the system's speed, especially
       on 040 systems. The code has completely been removed
       - should work nevertheless.
       (-> Dimitri Eskalow - not sure about the last name,
           since mentioned vai phone)
     - wrong information: SoundDT.spobject does NOT support writing
     - revised, updated and bug-fixed documentation
     - MY SNAIL MAIL ADDRESS CHANGED AND VARIOUS OTHER STUFF AS WELL

    V4.4 (26.8.1995) :
    ------------------
     - recompiled main library with SAS/C V6.55
     - recompiled all supplied SPObjects with SAS/C V6.55
     - all modules now do save A1 within assembler routines
     - completely rewrote documentation:
         - moved english docs to a new guide file, which also
           includes docs for the single SPObjects
         - removed german docs - replaced with "LiesMich.doc"
         - removed redundant information
         - added note about distribution and commercial licensing
         - added note about Frank Dittmar's DosXS, which is allowed
           to use superplay.library since a long time already
         - overall reworked documentation
     - updated SuperPlay to V4.4
     - completely replaced Installer-Script
     - and so on

    V4.3 (13.12.1994) :
    -------------------
     - added JamCracker support (JAM.spobject)
     - added OS3 Sound DataTypes support (SoundDT.spobject).
       Needs at least superplay.library V4.3, since
       some additional work has to be done.
     - fixed bug in ST sample extraction routine
       (was only possible with XPK packed modules)
     - fixed internal bug inside all SPObjects.

    V4.1/4.2 (02/09.12.1994) :
    --------------------------
     - file recognition did not work with V4.1 (UNUSEABLE)
     - adjusted some version descriptions in the Reference-Docs
     - added new SPL_GetFileType() function, like in superview.library
     - SPObject-Docfiles had been included twice in different directories
       (old and new docs). Removed.
       (-> Gerd Frank)

  *************************************************************************
  * Revision history entries below V3.1 have been deleted                 *
  *                      to save diskspace !                              *
  *************************************************************************
```

1.13 Credits

ST.spobject, JAM.spobject, SPO.spobject

The "powerpacker.library" V33+ is (C)opyright by Nico François. The Library is FREEWARE and is needed by ST.spobject, to be able to read and play also PP20-packed Modules.

The "xpkmaster.library" V2+ is (C)opyright by its authors (c/o Urban Dominik Müller). The Library is freely distributable and is needed by several SPObjects to be able to read and play XPK-(also PP-)packed Modules.

ST.spobject

Upto V1.2 the main Player Source-Code in Assembler had been taken from the Public Domain Library "STReplay" by Oliver Wagner, which can be found on AmigaLib-Disk #258.
Oliver said in the Docs to STReplay, that he did not obtain any rights to the Source, so I used it for my own purposes.
Nevertheless I did not just "include" the Source, but made many - more or less useful and important - changes to it.

Since V1.3 the new ProTracker V2.2a Player Routine is used.
I got it from Gerd Frank (thanks Gerd !) and modified it for my own purposes : Some changes had to be made to assemble it with the SAS/C ASM V6.55 and to make it living in the multitasking better than before.
Finally, I had to change and add some more code to create an interface to the C-SourceCode of the SPObject's main routines.

Here's an excerpt from the SourceCode as far as concerning the original authors (no special copyright notice was found, so it is perhaps Public Domain) :

```
* ProTracker2.2a replay routine by Crayon/Noxious. Improved and modified
* by Teeme of Fist! Unlimited in 1992. Share and enjoy! :)
```

```
 * Rewritten for Devpac (slightly..) by CJ.


JAM.spobject
------------
 The main Player Source-Code in Assembler was taken from a Public
 Domain Assembler Source-Code, which has originally been written
 by M. Gemmel and re-written by "Arcade of CADCAM".
 Some changes had to be made to assemble it with the SAS/C ASM V6.55
 and to make it living in the multitasking better than before.
 Finally, I had to change and add some more code to create an interface
 to the C-SourceCode of the SPObject's main routines.

 Here's an excerpt from the SourceCode as far as concerning the original
 authors (no special copyright notice was found, so it is perhaps
 Public Domain) :

 *
 * JamCracker V1.0 Replay routine, written by M. Gemmel
 *
 [...]
 *
 * This is not a demonstration source, showing how to write
 * a song-play routine.  This source is merely ment for
 * inclusion in other sources, or as assembly module for
 * linkage with other programs.
 *
 * This source was modified for the MasterSeka V1.53 assembler
 * and can be easily modified for other assemblers. (Not true, it's a lot of work ↩
     - Arcade)
 * The song should be inserted at 'mysong' near the bottom of
 * this source, in chip memory.
 *
 *                  Modified for MasterSeka 1.53 by Arcade of CADCAM
 *
 * Note from Arcade: I saved all of you who want to use the replayer
 * with MasterSeka a lot of work. So leave this text here, I want the credits.
```

1.14 Requirements for the SuperPlay.library Package

```
 Generally, you need at least an 68000 Amiga, running with OS 2.04+.
 Better performance results require better Software/Hardware.

   \textdegree{} For usage of the IFF-based SPObjects, like 8SVX,
     you should take care to have iffparse.library V37+ on your bootdisk.
   \textdegree{} For DataType support with OS 3.x+ you need datatypes.library V39 ↩
      +
     to be present. If it is not present, datatype-support is disabled,
     but you might not need it, anyway.
   \textdegree{} SPObjects with Packer support - like ST, JAM and SPO - usually
     do require the following:

       Packer      needed Libraries
       ----------------------------
       XPK         xpkmaster.library V2+, speficic xpk-compressor libraries
      PP20        a) xpkmaster.library V2+, powerpacker.library V33+
                  b) _only_ powerpacker.library V33+
      <None>      No special libraries are needed, but they will simply
                  pass through unpacked data modules.

   \textdegree{} MED.spobject does require med.library V1+ (see Credits)

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

   \textdegree{} Some SPObjects additionally require
     different Hardware/Software configurations, but usually this is
     stated within their own documentation.

 Turbo versions would be installed by the Installer-Script automatically,
 if it makes sense (CPU auto-detection).
```

1.15 ST.spobject

```
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 Version      : 2.5
 Release Date : 27.05.1996


 Description
 ~~~~~~~~~~~
 ST.spobject is an external Library-Module for the superplay.library V1+.

 It supports reading of ST Modules (SoundTracker V2.4+, ProTracker V2.2a,
 NoiseTracker and compatible Modules).

 Remarks
 ~~~~~~~
  - As with other Players, the filename of the Module has to begin
    or end with the prefix/entension "MOD" ("MOD.module" or "module.MOD")
  - ST.spobject at first tries to use xpkmaster.library.
    If this one is not available, it tries powerpacker.library.
    If none of them is available, it simply uses dos.library :
    So, if you read a packed module, although you did not install any
    decompression libraries, please note the following :
    After loading the data is checked, so that modules which could
    not be decompressed are rejected without any further notice.

 History
 ~~~~~~~
 V2.5 (27.05.1996) :

  - completely recompiled with SAS/C V6.56
    (with new GST and using utility.library)
  - using new startup-code as with svobjects

 V2.4 (21.10.1995) :
```

```
   - removed calls for disabling/enabling of Inst/Data cache.
     Has been reported to cause drastically reduced system performance
     on 040 systems while playing samples.
     (-> Dimitri Eskalow - not sure about last name)

  V2.3 (26.8.1995) :

   - completely recompiled with SAS/C V6.55
   - now saves A1 within assembler routines

  V2.2 (11.12.1994) :

   - extraction of samples only worked with modules, which had been
     XPK-packed. Now also PP20 or unpacked modules can be handled.
   - fixed internal bug

***************************************************************************
* Older revison history entries have been deleted for space reasons       *
***************************************************************************
```

1.16 MED.spobject

```
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  FREEWARE. All rights reserved.

  Version      : 2.4
  Release Date : 27.05.1996


  Description
  ~~~~~~~~~~~
  MED.spobject is an external Library-Module for the superplay.library V1+.

  It supports reading of MED Files.


  History :
  ~~~~~~~~~
  V2.4 (27.05.1996) :

   - completely recompiled with SAS/C V6.56
     (with new GST and using utility.library)
   - using new startup-code as with svobjects

  V2.3 (26.8.1995) :

   - completely recompiled with SAS/C V6.55
   - now saves A1 within assembler routines

  V2.2 (11.12.1994) :

   - fixed internal bug
```

```
****************************************************************************
* Older revison history entries have been deleted for space reasons       *
****************************************************************************
```

1.17 JAM.spobject

```
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Version      : 2.3
Release Date : 27.05.1996


Description
~~~~~~~~~~~
JAM.spobject is an external Library-Module for the superplay.library V1+.

It supports reading of JAM Modules (JamCracker 1.00+).

Remarks
~~~~~~~
 - As with other Players, the filename of the Module has to begin
   or end with the prefix/entension "JAM" ("JAM.module" or "module.JAM")
 - JAM.spobject at first tries to use xpkmaster.library.
   If this one is not available, it tries powerpacker.library.
   If none of them is available, it simply uses dos.library :
   So, if you read a packed module, although you did not install any
   decompression libraries, please note the following :
   After loading the data is checked, so that modules which could
   not be decompressed are rejected without any further notice.

History
~~~~~~~
V2.3 (27.05.1996) :

 - completely recompiled with SAS/C V6.56
   (with new GST and using utility.library)
 - using new startup-code as with svobjects

V2.2 (26.8.1995) :

 - completely recompiled with SAS/C V6.55
 - now saves A1 within assembler routines

V2.1 (11.12.1994) :

 - first version
```

1.18 8SVX.spobject

```
  © 1994-96 by Andreas R. Kleinert.

  FREEWARE. All rights reserved.

  Version      : 2.5
  Release Date : 27.05.1996


  Description
  ~~~~~~~~~~~
  8SVX.spobject is an external Library-Module for the superplay.library V1+.

  It supports reading and writing of unencoded IFF-8SVX Sample-Files.

  Features / Handicaps
  ~~~~~~~~~~~~~~~~~~~~
  - once a sample has been loaded, it will be repeated until an explicite
    stop command arrives
  - an arriving stop command waits (asynchroneous) until the current repeat
    loop ends
  - there’s no possibility to continue a once stopped Sample

  History :
  ~~~~~~~~~
  V2.5 (27.05.1996) :

   - completely recompiled with SAS/C V6.56
     (with new GST and using utility.library)
   - using new startup-code as with svobjects

  V2.4 (26.8.1995) :

   - completely recompiled with SAS/C V6.55
   - now saves A1 within assembler routines

  V2.3 (11.12.1994) :

   - fixed internal bug.

***************************************************************************
* Older revison history entries have been deleted for space reasons       *
***************************************************************************
```

1.19 SPO.spobject

```
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  Version      : 2.4
  Release Date : 27.05.1996


  Description
```

SPO.spobject is an external Library-Module for the superplay.library V1+.

It supports reading and writing of SPO Sample-Files.

File Format Information

Sound Samples in the "SPO Sample File Format" consist of two Files :
The Header-File (<Sample>.spo) and the Data-File (<Sample>).
The Header-File contains information about the Raw-Data in the Data-File. For loading and saving the Sample it makes no difference, which FileName - Header-File or Data-File - is given.
This is managed by the SPObject.

Because recognition of the Types of packed Files is only possible by reading the whole File into a buffer and then check it, we use two different Files for both : Sample Information and Sample-
The Data-File CAN be packed, the Header-File MUST NOT be packed.

The SPO.object does NOT save packed data, but it is possible, to pack the Data File with ANY XPK-Packer you like, because the SPO.spobject uses the xpk.library for decoding.

This allows efficient packing and unpacking with PowerPacker and all other XPK-Packers.

Remember, that the original Data written by the SPO.spobject is NOT packed and therefore needs a lot of Diskspace. So pack it immediately after it has been written.

The Data saved into the <Sample> File is written almost in the same way like in an IFF-8SVX. The only difference is : Future versions might contain 12- or 16-Bit Sample Data.

Features / Handicaps

- once a sample has been loaded, it will be repeated until an explicite stop command arrives
- an arriving stop command waits (asynchroneous) until the current repeat loop ends
- there’s no possibility to continue a once stopped Sample

History :

V2.4 (27.05.1996) :

- completely recompiled with SAS/C V6.56 (with new GST and using utility.library)
- using new startup-code as with svobjects

V2.3 (26.8.1995) :

- completely recompiled with SAS/C V6.55
- now saves A1 within assembler routines

V2.2 (21.07.1994) :

```
   - added possibility to save all Samples from all multiple-SampleList
     and to accept NULL parameters for the Source-SPObject with
     SPO_Write(), so that custom applications may save their self-
     created SampleLists by simply setting them via SPO_SetSampleList().
     The old way behaviour is still supported (as also handling of
     V1 SPObjects).
   - will correctly write Samples with more Bits than 8,
     if it is confronted with them

***************************************************************************
* Older revison history entries have been deleted for space reasons       *
***************************************************************************
```

1.20 VOC.spobject

```
  © 1994-96 by Andreas R. Kleinert.

  FREEWARE. All rights reserved.

  Version      : 2.5
  Release Date : 27.05.1996


  Description
  ~~~~~~~~~~~
  VOC.spobject is an external Library-Module for the superplay.library V1+.

  It supports reading and writing of PC VOC-Sample-Files (V1.10).

  Features / Handicaps
  ~~~~~~~~~~~~~~~~~~~~
  - Currently only VOC-Version V1.10 is supported.
  - All Blocks except Block 1 and the Header are ignored,
    e.g. Stereo-Sample-Data.

  History :
  ~~~~~~~~~
  V2.5 (27.05.1996) :

   - completely recompiled with SAS/C V6.56
     (with new GST and using utility.library)
   - using new startup-code as with svobjects

  V2.4 (26.8.1995) :

   - completely recompiled with SAS/C V6.55
   - now saves A1 within assembler routines

  V2.3 (11.12.1994) :

   - fixed internal bug

***************************************************************************
* Older revison history entries have been deleted for space reasons       *
```

```
****************************************************************************
```

1.21 WAV.spobject

```
  © 1994-96 by Andreas R. Kleinert.

  FREEWARE. All rights reserved.

  Version      : 2.5
  Release Date : 27.05.1996


  Description
  ~~~~~~~~~~~
  WAV.spobject is an external Library-Module for the superplay.library V1+.

  It supports reading and writing of PC RIFF-WAVE (WAV) Sample-Files,
  playing is supported as far as the Amiga is able to (8 Bit only).

  History :
  ~~~~~~~~~
  V2.5 (27.05.1996) :

   - completely recompiled with SAS/C V6.56
     (with new GST and using utility.library)
   - using new startup-code as with svobjects

  V2.4 (26.8.1995) :

   - completely recompiled with SAS/C V6.55
   - now saves A1 within assembler routines

  V2.3 (11.12.1994) :

   - fixed internal bug

****************************************************************************
* Older revison history entries have been deleted for space reasons       *
****************************************************************************
```

1.22 SoundDT.spobject

```
  © 1994-96 by Andreas R. Kleinert.

  FREEWARE. All rights reserved.

  Version      : 2.3
  Release Date : 27.05.1996


  Description
  ~~~~~~~~~~~
```

```
SoundDT.spobject is an external Library-Module for the superplay.library V1+.

It supports reading of Sound Datatypes.


Features / Handicaps
~~~~~~~~~~~~~~~~~~~~
- once a sample has been loaded, it will be repeated until an explicite
  stop command arrives
- an arriving stop command waits (asynchroneous) until the current repeat
  loop ends
- there’s no possibility to continue a once stopped Sample

History :
~~~~~~~~~
V2.3 (27.05.1996) :

 - completely recompiled with SAS/C V6.56
   (with new GST and using utility.library)
 - using new startup-code as with svobjects

V2.2 (26.8.1995) :

 - completely recompiled with SAS/C V6.55
 - now saves A1 within assembler routines

V2.1 (11.12.1994) :

 - first version
```