CyberAVI

COLLABORATORS			
	TITLE : CyberAVI		
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WRITTEN BY		August 24, 2022	

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

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CyberAVI is a fast AVI animation player for 020+ machines with AmigaOS 3.0
or higher and a graphic board with CyberGraphX or AGA.

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```
                         Credits

                    Disclaimer
              CyberAVI is Freeware. You don't need to send money or anything  ←
                  else (but if you
really want to I won't stop you from doing that :). But I would be glad if  you
send
                me
                 an EMail if you like CyberAVI.
```

1.2 background

The main reason why CyberAVI was developed was because all existing animation
players for AVI files were either far to slow or didn't support my graphic
board in the way I wanted. All ports of XAnim supported only very few file
formats and were "optimized" for the original Amiga graphic chipset.

So I planed to write such a piece of software myself. Because I own a
CyberVision64 graphic board it was so easy to support the different file types
with display depth >8 bits.

```
CyberAVI was developed on:
  - A4000/030 (yes, just an MC68EC030 at 25MHz)
    now equipped with CyberStrom MK2 68060 at 50MHz
  - AmigaOS 3.1
  - 2MB ChipRAM
  - 16MB FastRAM
  - FastLaneZ3 SCSI host (disk capacity about 1.3GB)
  - CyberVision64 with 4MB graphic memory
  - Philips 17B 17" monitor
```

1.3 requirements

```
minimum hardware requirements:
  -Amiga with AmigaOS 3.0 (V39)
  -MC68020
  -graphic board (eg. CyberVision64, Picasso II, Retina, etc) or AGA chipset
  -2MB of FastRAM, 512K of ChipRAM

software requirements
  -CyberGraphX 2.16 or higher if used with a graphic board
  -asyncio.library V37 (included)

recommended hardware requirements:
  -Amiga with AmigaOS 3.1 (V40)
  -MC68040 at 25MHz minimum
  -graphic board with CyberGraphX
```

I recommend a registered version of CyberGraphX since the unregistered version
doesn't support 24 bit screenmodes. So no screenmode requester will appear
since there are no screenmodes to select!

Up from version 1.5 there is support for AGA, but I still recommend a graphic
board with CyberGraphX, because OS3.x's graphics.library has some bugs and
display on AGA is not just slow, it is DAMN slow! Please don't blame me for
this...

1.4 install

Just use the supplied installer script.

If you are very experienced you can install CyberAVI "by hand". Just copy
asyncio.library to LIBS: and copy CyberAVI to where ever you want to. I
recommend to use the installer script.

1.5 encoding

              CyberAVI's implementation of AVI decoding is based on the source ←
                  code to Mark
Podlipec's
              XAnim
               program.
I will add more decoders as I need them and get any animations to test them.

Supported encodings until now:

  Video:

    Microsoft Video 1 (CRAM)   8/16 bit
    Radius CinePak   (CVID)   24 bit
    Microsoft RGB   (RGB)   8/16/24/32 bit
    Microsoft RLE8   (RLE8)   8 bit
    IBM Ultimotion   (ULTI)   16 bit
    Component Video   (YUV2)   24 bit
    Intel Raw   (YUV9)   24 bit

  Audio:

    PCM   8 bit   Mono/Stereo
    PCM   16 bit   Mono/Stereo
    ADPCM   4 bit   Mono

I am still looking for other encodings. Please
            contact me
              if you have an
animation with one of the following compressions:

```
    - Microsoft RGB with 4 bits
    - RLE4 (Microsoft RLE4)
    - JPEG (JFIF JPEG)
    - MJPG (Motion JPEG)
    - XMPG (Editable MPEG)
    - IJPG (Intergraph JPEG)
    - CYUV (Creative Technology CYUV)
```

You can send me any animation with one of the above compressions. Just compress it (with e.g. LhA) and send it uuencoded to one of my
            EMail
             addresses.

My worst problem is to support the
                Intel Indeo
                 codec. Intel charges $5000 (in
words: five thousand US-Dollars) for a licence to their source code. So it
seems to be impossible that Indeo is ever supported :(

1.6 shell

The command template for CyberAVI is...

```
    FILES/M,DELAY/K/N,BUFFERSIZE=BUF/K/N,PUBSCREEN/K,SOUND/S,LOOP/S,
    SCREENMODEREQ=SMR/S,AGA/S,GRAY=GREY/S,FORCE24/S,MAXFPS/S,NOINDEX/S,
    SKIP/S,STATS/S,QUIET/S,DEBUG/S
```

FILES   One or more AVI files you want to view. If you don't specify a
                filename an ASL file requester will pop up to let you choose one
                or more animations. Wildcards, like ?, #? or *, are allowed.

DELAY   CyberAVI will wait the given amount of seconds before displaying
                the first frame. This is very useful if you have a slow
                synchronizing monitor, so you don't miss a few frames at
                beginning of the animation. Default value is 1 second. The given
                value has to be between 0 and 10.

BUFFERSIZE   This option sets the buffersize for asynchronous reading.
                asyncio.library allocates two buffers of the given size! Default
                value is 64K per buffer. The given value has to be between 1 and
                4096.

                NOTE:
                    This value is interpreted as the given amount of blocks of
                    1024 bytes. So a value of 50 means 51200 bytes and NOT 50
                    bytes!!

PUBSCREEN   This options forces playback to a window on a public screen.
                Both the screen and the animation must have at least a depth of

                      16 bits. If this screen does not exist or if the screen's or
                      animation's depth is lower than 16 bits or CyberAVI will use its
                      own screen.

                      NOTE:
                          This option only works with CyberGraphX!

    SOUND   Enables sound playback. If audio encoding is unknown sound
                      playback will be switched off for the current animation. If
                      sound listens bad you should try the SKIP (see below) option.

                      NOTE:
                          This option will have no effect on a DraCo, because this
                          machine doesn't have the Amiga custom chips, and also no
                          audio.device.

    LOOP   Enables looping of the animation when it finishes. The default
                      is to exit at the animation's end.

    SCREENMODEREQ   Enables screenmode requester. If the screen is to be opened for
                      playback you can choose a screenmode here. This requester will
                      appear everytime CyberAVI tries to open a screen.

    AGA   Enables AGA support. This options doesn't need to be specified
                      if you don't own a graphic board. CyberAVI will recognize itself
                      if either AGA or CyberGraphX is available. It is just meant to
                      force playback on AGA if you want. If this option is specified
                      or only AGA chipset is available all frames will be reduced to
                      256 colors without doing any dithering, just color reduction.

                      NOTE:
                          Do not expect too much from AGA support. AGA chipset is damn
                          slow compared to recent CyberGraphX compatible boards. And
                          since there are still some bugs in OS3.x's graphics.library
                          display may look corrupt on AGA screens.

    GRAY or GREY   This switch will set a grayscale palette instead of the normal
                      color palette.

    FORCE24   Forces 16 bit animations to be displayed on a 24 bit screen.
                      This may increase playback speed a bit.

                      NOTE:
                          If CyberAVI is running on a non-CyberGraphX system this
                          option is totally useless and will be ignored.
                          This option only works for 16 bit animations.
                          For 8 bit animations this option will be ignored!!
                          For 24 bit animations this option is (of course) senseless.

    MAXFPS   Set playback speed to maximum possible. In fact a delay of 0

seconds per frame is set, so there won't be any delay and playback will be as fast as your machine can do.

NOINDEX   This switch forces CyberAVI to read the file "as is". Every AVI file can have an optional index describing in which sequence the file has to be played. If you set this option the index will be ignored and the animation will be played in the sequence the frames appear in the file.

SKIP   This option enables skipping of video chunks if playback speed is to slow. SKIP will only work if the animation's index can be used (index available and NOINDEX ist NOT specified). Skipping will be done to the next available keyframe to avoid "humpling" of sound. If there is no "next" keyframe and your machine is too slow there is no way to play sound correctly.

STATS   This option causes some statistical information to be displayed after playback. This will include the number of frames, the number of displayed frames, expected playback speed and real playback speed.

QUIET   This options will switch off all message printing. This does not affect error messages!

DEBUG   Enables debug mode. When switching debug mode on CyberAVI will print much stuff to the output window describing the work being done.

Attention!

  The FRAMESPERSEC switch doesn't exist anymore from V1.4 on since there was no real reason for its existance. Or does anybody view his AVIs with 2 fps?? :)

  The PRIORITY option doesn't exist anymore from V1.7 on, because all subtasks have been removed.

Examples:

  CyberAVI blabla.avi

    This will just show blabla.avi without sound. The index will be used if it is available.

  CyberAVI blabla.avi sound noindex maxfps

    This will show blabla.avi with sound (if available) and at maximum possible speed. No index will be used.

```
   CyberAVI blubb.avi screenmodereq buffersize=128


     This will show blubb.avi, but before playback starts CyberAVI will ask  you
     for  a screenmode. A buffersize of 128K is used for reading.


   CyberAVI brabbel.avi delay=5 loop stats


     This will show brabbel.avi with  a  delay  of  5  seconds  before  starting
     playback.  The  loop  option  causes CyberAVI to restart playback as soon as
     the animation's end is reached. Playback  can  be  aborted  by  pressing  a
     mousebutton,  ESC  or  CTRL-C. After playback some statistical data will be
     shown.


   CyberAVI veryslow.avi skip quiet gray


     This will show veryslow.avi  without  printing  any  information.  If  your
     machine  isn't fast enough then delayed frames will be skipped if possible.
     A grayscale palette will be used instead of the normal colors.
```

1.7 workbench

```
              The following ToolTypes are available for CyberAVI's and  any   ←
                 AVI  animation's
icon:


WINDOW         This specifies the output window CyberAVI uses.  "NIL:"  is  the
               default  value,  so  no text output will be visible. This option
               only exists if CyberAVI was started from Workbench


DELAY          \
BUFFERSIZE     |
PUBSCREEN      |
SOUND          |
LOOP           |
SCREENMODEREQ  |
AGA            | These options are identical with the
               shell options
               '
GRAY or GREY   |
FORCE24        | so please have a look there for further explanation.
MAXFPS         |
NOINDEX        |
SKIP           |
STATS          |
QUIET          |
DEBUG          /


NOTE:
```

The DEBUG option only makes sense in combination with the WINDOW option. So
if you specify DEBUG but not WINDOW you won't see any debug information.

1.8 operation

CyberAVI will try to show the animation at the correct speed, but ←
this mostly
depends on your machine. Faster processors (e.g. MC68040 or MC68060) and fast
graphic board will result in more smooth playback.

If you did not specify the
NOINDEX
option CyberAVI will try to read the index
in every AVI file. This may take a few seconds and depends on how fast you
machine is and how big the animation is.

To quit CyberAVI or stop playback you can do one of the following things:

  - press either mousebutton or ESC
    This will just terminate playing the current animation and is the only way
    to quit CyberAVI if the
              LOOP
              option has been specified.

  - press CTRL-C
    This will quit CyberAVI completely

  - send a Break to CyberAVI's task with tools like Scout or XOper
    This is the same as pressing CTRL-C

During playback you can use the function keys to adjust playback speed:

  F1 - as fast as possible, same as
              MAXFPS
              option
  F2 - 60 frames per second
  F3 - 30 frames per second
  F4 - 24 frames per second
  F5 - 15 frames per second
  F6 - 12 frames per second
  F7 - 10 frames per second
  F8 - 5 frames per second
  F9 - 1 frame per second
  F10 - speed specified in AVI file

The real speed you get may differ from the speed it should be, but this depends
on you machine. The faster you machine is, the more exact playback speed will
be.

1.9 faq

Q: Why is "Intel Indeo" not supported? Most of my AVIs are ←
saved with this
encoding!

A: Intel charges $5000 (or more) for a non-disclosure agreement and the source
to their Indeo technology. I am just a student and can't afford so much
money. Now you can imagine?

Q: Why is the ECS chipset not supported?

A: There are some very simple reasons:
CyberAVI was originally designed just to run on CyberGraphX systems only.
From V1.5 on CyberAVI will also run on AGA machines and all graphics are
reduced to 256 colors. AGA chipset is a lot faster than ECS chipset, but
access to ChipRAM is still very slow. Thus playing AVIs on AGA machines is
MUCH slower than on CyberGraphX machines, even if you have a fast CPU, like
MC68040 or MC68060. Watching AVIs on AGA machines is really no fun. So, what
would you expect from ECS?

Q: Why does the sound sometimes listen very bad?

A: Either your machine isn't fast enough to decode the video frames in time and
so the sound can't be played correctly, or it is my fault. Sound support
still is not perfect. You can try the
SKIP
option to allow skipping of video
frames if your machine is not fast enough.

Q: After playing a huge animation with index it takes some time until my
Shell's prompt appears again. Are there any bugs when playing such huge
animations??

A: Hey, please give Oberon's runtime system some time to free the memory
occupied by the index :) This is definately NO bug and only appears with
large indices.

Q: CyberAVI doesn't display anything or crashes the machine!

A: Please
contact me
! It seems you have found a bug in CyberAVI.

Q: CyberAVI refuses to work on my A500 with MC68000/7 bought back in 1988! Why?

```
A: <sigh>!!
```

```
Q: CyberAVI refuses to work on my 200MHz Pentium with Win95?  Should  I  buy  a
   faster processor and more memory?
```

```
A: YOU DAMN IDIOT!!
```

1.10 contact

```
My adresses:
```

```
  Snail mail:
    Thore Böckelmann
    Entgelhof 11
    D-32278 Kirchlengern    Tel: +49-5744-1309 and +49-5744-1323
    Germany
```

```
    Thore Böckelmann
    Stephanusstraße 82
    D-33098 Paderborn       Tel: +49-5251-730837
    Germany
```

```
  Electronic mail:
    tboeckel@uni-paderborn.de
    tboeckel@guardian.fido.de
    FidoNet:  2:2432/230.15
    AmigaNet: 39:170/410.15
```

```
 NOTE:
   I prefer guardian.fido.de and my  FidoNet  account  for  "just  talking"  and
   bugreports.  If  you  want  to  send any uuencoded stuff (like animations for
   testing) then PLEASE send them to tboeckel@uni-paderborn.de, because  I  have
   (nearly) unlimited mailquota at the university.
```

```
The most recent version of CyberAVI is always available by filerequest at Blind
Guardian BBS. Just request "CyberAVI.lha" at one of the following lines:
```

```
  Line 1: 38400 - 64000  Elink 310  +49-5742-920340  (2:2432/231.0)
  Line 2:  2400 - 28800  Elsa TQV   +49-5742-920341  (2:2432/230.0)
  Line 3:  2400 - 19200  ZyXEL EG+  +49-5742-920342  (2:2432/232.0)
```

1.11 history

```
            V1.0:
  17-May-96  - first release on Aminet
```

```
V1.1:
   19-May-96   - corrected version string
                 now it should look like "CyberAVI Vx.x (date)"
               - timer checking implemented
                 now playback speed should be the same on MC68030 and MC68060
               - added user adjustable playback speed
               - added startup delay
               - added user adjustable buffersize for asynchronous I/O.

   26-May-96   - added support for RGB and RLE compression
               - small speed improvements

   28-May-96   - playback may now be aborted by pressing any mousebutton
               - reduced CVID memory usage a lot by decreasing maximum allowed
                 strip count from 16 to 4. This may lead to incompatibiliy
                 with some animations, but I never saw any animation with more
                 than one strip. Please report your experiences with this.


V1.2:
   31-May-96   - fixed a bug that caused "memory header to located" gurus
               - again some small speed improvements

    2-Jun-96   - added screenmode requester option
               - added file requester
                 if CyberAVI is called without a filename a requester will pop
                 up for selection


V1.2a:
    5-Jun-96   - fixed a bug that caused crashes, when CyberAVI was called with
                 non-AVI-files


V1.3:
   10-Jun-96   - added support for 32bit RGB animations
               - raised default buffer size for asynchronous reading to 64K
               - many people complained that CyberAVI did not correctly open
                 its screen. I hope this is fixed now.

   14-Jun-96   - fixed a bug in RLE8 decoding. Thanks to Steve Cutting for his
                 really BIG RLE8 animation to find this bug.

   16-Jun-96   - seems I have found a bug in MainActors AVI saver. MA saves a
                 buffersize of 0 instead of the correct value. This lead to
                 crashes before.
               - improved sound support. I hope it listens better now.


V1.4:
    1-Jul-96   - started to rewrite CyberAVI completely
                 rewrite is really necessary because the source code had become
                 very confusing and weird :)

    7-Jul-96   - why are 00xx chunks used for video data???? Very strange.
                 Much thanks to Maurizio Lotauro for the example animations
```

```
                         (swing.avi and baseball.avi).
```

11-Jul-96   - rewrite is mostly done and playback should be much more stable
               now
             - now a subtask is used to decode the video data. This sped up
               playback speed about 10% on my system. Its priority can be
               changed with the
             PRIORITY
              option
             - fixed a big bug when width or height of a video frame had to
               to be rounded to multiples of 4 or 8. Former versions did't
               allocate enough memory, so innocent memory could be over-
               written while decoding data
             - many minor bugfixes
             - removed FRAMESPERSECOND option since there was no real reason
               for it (who would play anims at eg. 2 fps??) Therefore the
               switch
             MAXFPS
              was introduced.

12-Jul-96   - now AVIs will be played "by index". If an index chunk is found
               it will be used to determine the sequence in that the
               animation will be played.
             - added
             NOINDEX
              switch to force ignorance of the index chunk

14-Jul-96   - added support for 8 bit RGB anims. Thanks to Joachim Greve for
               for the example animations.

17-Jul-96   - improved recognition of chunks. Unknown video chunks should
               not appear anymore (eg: 00xx, 00id, etc).
               Thanks to Ingo Jürgensmann for his animation with these strange
               chunks.
             - added support for startup from Workbench. All ToolTypes should
               work exactly the same way as the Shell options do.

18-Jul-96   - added
             SKIP
              switch.
               This allows skipping of video frames if necessary and possible

27-Jul-96   - fixed problem with shrug display of some animations.
               Thanks to Manuel Schlegel for his sample animations.
             - removed some MungWall hits
             - disabled audio subtask because of many problems while playback

 1-Aug-96   - I hope all sound problems are fixed now. A big "Thank you" to
               Thomas Wenzel for his great advice.
             - Wow! I spent 4 weeks on rewriting and cleaning up!! I hope I
               did a good work :)

 4-Aug-96   - put audio subtask back in, works fine now
             - again found some bugs that could lead to crashes :(

V1.5:
```

```
23-Aug-96    - finally got my CyberStrom MK2 with an XC68060/50 :))))
               GREAT speedup for the whole system :)

16-Sep-96    - started to support AGA :), but it's more difficult than I
               thought. But the worst thing is: although I now own an
               XC68060/50 displaying AVIs on AGA is slooooooooooow :(

18-Sep-96    - added option
             AGA
                             This forces use of color reduction routines used ←
                                 for AGA
             chipset
             - support for 8 bit AVIs on AGA is almost finished
               SetPatch 43.4 is needed for correct display, without it the
               display will become screwed up due to bugs in graphics.library

22-Sep-96    - finished support for AGA :)
               now it should be possible to show all supported encodings on
               AGA machines
             - CyberAVI now doesn't depend on audio.device anymore, so it
               should also run on Amiga's without audio hardware (e.g. DraCo)

23-Sep-96    - mouse pointer is now invisible during playback
             - functions keys can now be used to adjust playback speed
             - several bug fixes

25-Sep-96    - completely rewrote synchronization part. Skipping of frames
               should be better now.

26-Sep-96    - added
             STATS
              option

27-Sep-96    - rewrote synchronization part again :)
               now using EClock's instead of TimeVal's, thus timing is much
               more exact. Now skipping of delayed frames works much better,
               too. Pooohhhh :)

29-Sep-96    - removed audio subtask again :)
               I had some spare time and worked on audio support and I think
               it now works really good. Because audio data are very small
               and simple there is no need for an asynchronous audio decoder
               anymore.
             - when playing animations with palette changes in loop mode the
               original palette was not restored. This fixed now.
             - added support for PCM 16 bit mono samples
             - fixed a bad bug with PCM 8 bit stereo samples. These were
               played at half speed before.

30-Sep-96    - all truecolor decoders have been splitted in a CyberGraphX
               part and an AGA part. This may improve speed a bit.
             - a colormap is allocated only if needed


  V1.6:

   2-Oct-96    - added support for ADPCM 4 bit mono samples
```

```
                    – CyberAVI could hang if playback was aborted very very early.
                      This is fixed now.
                    – again removed some problems with sound playback

     7-Oct-96       – SetPatch 43.x is not needed anymore, but it is supported if
                      available. With SetPatch 43.x installed playback is slightly
                      faster, because no additional copy of video data is necessary
                    – switching off mouse pointer during playback caused Enforcer
                      hits. Thanks to Alexander Wild for reporting that bug.
                    – fixed some bugs when pressing keys without function

     8-Oct-96       –
                    WINDOW
                     tooltype was not recognized if started from Workbench
                    – finished Installer script

     9-Oct-96       – when playing more than one animation with and without sound at
                      a time CyberAVI could do Wait() for non-existing signals which
                      lead to deadlocks. This is fixed now.
                    – audio.device became very confused when stopping sound without
                      aborting pending requests. This lead to deadlocks before, too.

    15-Oct-96       – CyberAVI has now an
                    Argue
                     interface. At least Argue V1.3 is
                      needed.

    16-Oct-96       – again fixed some bad bugs when playing an animation with sound
                      and loop

    18-Oct-96       – added
                    GRAY
                     option for doing playback with grayscale palette

    23-Oct-96       – added some checking when reading the index with corrupted
                      offsets. Thanks to Chris Longmore for his "strange" animations


 V1.7:

    29-Oct-96       – AGA display routine now uses Peter Kunath's FastC2P algorithm
                      for chunky->planar conversion. This nearly doubled playback
                      speed with AGA!! :)

    13-Nov-96       – again a rewrite became necessary :)
                    – video subtask now completely removed, because overhead was too
                      big. By doing this playback speed again raised a bit!
                    – as there are no subtasks anymore the
                    PRIORITY
                     option is
                      obsolete now and has been removed.

    15-Nov-96       – added support for Component Video (YUV2) compression. Thanks
                      to Chris Longmore for his sample animation.

    17-Nov-96       – added support for Intel Raw (YUV9) compression. Note: this is
                      a "hacked" support. It took me nearly one complete day to
```

disassemble the YUV9 part from XAnim's Indeo module.

18-Nov-96   - added support for PCM 16 bit stereo samples

19-Nov-96   - improved skipping of delayed frames
            - fixed a small display bug when rounded width or height was
              different from original value

20-Nov-96   - added
            PUBSCREEN
             option to display truecolor animations on
             truecolor screens

21-Nov-96   - removed a Mungwall-Hit that appeared when allocating odd size
              of memory for video buffer
            - the CVID decoding routine now uses the same YUV tables as YUV2
              and YUV9.
              With this change CyberAVI should use the same CVID routine as
              the most recent version of XAnim. This is a "hacked" part, too.

22-Nov-96   - maximum possible buffersize decreased to 4096 (which means
              4MB). I think this is enough.

27-Nov-96   - some minor speed optimiziations

1.12   bugs

                Known bugs:
  - Memory usage increases when playing more than one animation at a time.
    To avoid this just start CyberAVI with only one animation at a time.

 If you should find any additional bugs or if you have any suggestions please

              contact me
               immediately.

 If you should find some Enforcer hits, please report them to
              me
              .

 Please include a capture of CyberAVI's output when started with the
              DEBUG
               option if there are any problems while playback (eg. black ←↩
                   screen, immediate
 stop after start, crashes, etc).

1.13   todo

 Very urgent things to to (maybe already finished in the next release):
   - better sound support (will this ever be finished?)

- support AHI for sound playback. This package offers much easier access to
  different types of audio hardware.
- add option to save single frames as IFF-ILBM pictures

To do:
  - support for more video and audio encodings
  - use CyberGraphX's ability to use locked bitmaps and write directly to them
    (does anybody know how this exactly works?)
  - support the Toccata audio board. I already have the developer files, but
    since audio support still isn't perfect there is no way to support this
    board. Thanks to Seuma McNally for the developer files.

1.14   xanim

The AVI encodings supported by CyberAVI are based on the source code to Mark
Podlipec's XAnim program. XAnim supports a number of other AVI video encodings,
as well as QuickTime files.

  The key differences between CyberAVI and XAnim for AVI files are:

    - XAnim is more powerful and more general than CyberAVI.

    - CyberAVI requires either a CyberGraphX compatible graphic board or AGA
      chipset. ECS is not and will not be supported!

  A gzip compressed archive of Mark Podlipec's XAnim can be obtained from:

      http://www.portal.com/~podlipec/home.html "The XAnim Home Page"


```
 /*
  * xanim.c
  *
  * Copyright (C) 1990,1991,1992,1993,1994,1995,1996 by Mark Podlipec.
  * All rights reserved.
  *
  * This software may be freely copied, modified and redistributed without
  * fee for non-commerical purposes provided that this copyright notice is
  * preserved intact on all copies and modified copies.
  *
  * There is no warranty or other guarantee of fitness of this software.
  * It is provided solely "as is". The author(s) disclaim(s) all
  * responsibility and liability with respect to this software's usage
  * or its effect upon hardware or computer systems.
  *
  */
```


1.15   argue

It was around 1992 when Commodore released their new Amiga OS 2.0. With this, there were amazing changes for developers and users. All looked a bit more professional, and a lot of things were just easy and better to handle than in former times.

Earlier, developers had to write their own argument reading system. Often it was really unpractically and difficult to understand.

The guys at Commodore knew that and thought about a new standard for argument parsing to avoid confusion about all that. What they finally got was ReadArgs(), a system function that parses arguments automatically.

Developers now only had to write a template to specify, what arguments they would like to have. A template looks like this: FILE/A,SWITCH/S...

From now on, all the users could have a look at this template by adding a question mark to the program's name to execute.

But all in all, there was a problem. Folks still had to go "down" into a shell and type in all the arguments by hand.

So there are still a lot of people that write external interfaces for a specific tool. Some of them are even shareware!

This was really annoying as there was no tool that could manage ALL tools.

In early 1996 I developed a GUI layout system called NiceGUI. It was crap, but on this way I created the first version of Argue.

Argue's job was and is to read other tool's argument templates and prepare a nice user interface where the user can decide what he would like to have as arguments. Argue 0.3 was quite bad, but it was the first basis for further development.

Some months later I invented how to write MUI applications. It was very easy, and I implemented a new version of Argue with it. This was called Argue 0.6 and released to some BBSs here in Germany.

From then on Argue made giant steps towards user friendliness and efficiency. New features were added in masses, and now, at the time of Argue 1.0, there is a (near ;) complete interface creation system.

1.16 distribution

CyberAVI is Copyright ©1996 by Thore Böckelmann.

CyberAVI may be freely distributed as long as the following conditions are met:

 - all files have to be kept together
 - no file my be modified or crunched/packed
 - the only official way to distribute this program as archive is the original
   LhA archive

1.17   credits

                    CyberAVI was written by Thore Böckelmann using Amiga Oberon 3.10 ←
                        and GCC 2.7.0

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asyncio.library was written by Martin Taillefer, Magnus Holmgren and Olaf
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                Argue
                 is ©1996 by Thorsten Stocksmeier

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1.18   disclaimer

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