

ASwarm

Markus Illenseer

COLLABORATORS

	<i>TITLE :</i> ASwarm		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Markus Illenseer	January 31, 2023	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1 ASwarm	1
1.1 ASwarm II V2.0 - Manual	1
1.2 ASwarm/Synopsis	1
1.3 ASwarm/Description	2
1.4 ASwarm/Source	2
1.5 ASwarm/Copyright	3
1.6 ASwarm/Author & Support	4
1.7 ASwarm/Changes	4
1.8 ASwarm/Purpose & Theory	5
1.9 ASwarm/Version	6
1.10 ASwarm/Starting	7
1.11 ASwarm/Arguments	8
1.12 ASwarm/Tool Types	9
1.13 ASwarm/Hot Keys	10
1.14 ASwarm/Config Window	12
1.15 ASwarm/Config Window/Commodities Options	14
1.16 ASwarm/Config Window/Display Options	14
1.17 ASwarm/Config Window/Options	14
1.18 ASwarm/Rexx Interface	15
1.19 ASwarm/Config Window/Pop Key	16
1.20 ASwarm/Config Window/Blank Key	16
1.21 ASwarm/Config Window/Timeout	16
1.22 ASwarm/Config Window/Client Timeout	17
1.23 ASwarm/Config Window/Final Timeout	17
1.24 ASwarm/Config Window/Joystick	17
1.25 ASwarm/Config Window/Speed	17
1.26 ASwarm/Config Window/Wasps	18
1.27 ASwarm/Config Window/Bees	18
1.28 ASwarm/Config Window/Tightness	18
1.29 ASwarm/Config Window/Velociry	18

1.30 ASwarm/Config Window/Color Cycling	19
1.31 ASwarm/Config Window/Aim Mode	19
1.32 ASwarm/Config Window/Mouseblank	19
1.33 ASwarm/Config Window/Blank	19
1.34 ASwarm/Config Window/Hide	20
1.35 ASwarm/Config Window/Quit	20
1.36 ASwarm/Online Help	20
1.37 ASwarm/Config Window/Screenmode	21
1.38 ASwarm/Commodities Exchange	21
1.39 ASwarm/Display Modes	21
1.40 ASwarm/Known Problems	23
1.41 ASwarm/MUI	26
1.42 ASwarm/Credits	26

Chapter 1

ASwarm

1.1 ASwarm II V2.0 - Manual

ASwarm II V2.0 - Manual

I. [Synopsis](#)

II. [Description](#)

III. [Source](#)

IV. [Copyright](#)

V. [Authors & Support](#)

VI. [Changes](#)

VII. [Purpose & Theory](#)

VIII. [Version](#)

IX. [Starting](#)

X. [Arguments](#)

XI. [Tool Types Entries](#)

XII. [Hot Keys](#)

XIII. [Config Window](#)

XIV. [ARexx Interface](#)

XV. [Online Help](#)

XVI. [Commodities Exchange](#)

XVII. [Display Modes](#)

XVIII. [MUI System](#)

XIX. [Known Problems](#)

XX. [Credits](#)

1.2 ASwarm/Synopsis

NAME

SYS:WBStartup/ASwarm

Synopsis

ASwarm

CX_PRIORITY/N/K =<System Priority>
CX_POPKEY/K =< Hot Key Description String >
CX_POPUP/S =<No parameter>
BLANKKEY/K =< Hot Key Description String >
SECONDS=TIMEOUT/N/K =<1 - 3600>
CLIENTTIMEOUT/N/K =<1 - 60>
DISPLAY/K =< Display Resolution >
CYCLE/S =<YES | NO>
AIM/S =<YES | NO>
WASPS/N/K =<1 - 10>
BEES/N/K =<1 - 500>
SPEED/N/K =<1 - 4>
TIGHTNESS/N/K =<1 - 10>
VELOCITY/N/K =<1 - 15>
MOUSEBLANKMETHOD/K =<Hardware | Window>
JOYSTICK/S =<YES | NO>
FINALTIMEOUT/N/K =<0 | 1 - 3600>

1.3 ASwarm/Description

Description

A Screenblanker with high security which does not burn in the graphic into the screen when CPU is really busy.

It's funny to watch, runs only under Amiga OS

Release 2.04 or newer. Needs the **MUI** User-Interface.

1.4 ASwarm/Source

Source

The source code is included, it can be compiled with SAS-C 5.10a (or newer) or with the registered version of Dice V2.06.54 (or newer).

The source is included to give you a chance to use the Client/Server model of ASwarm II, or to look how we've done the Commodity Interface. Please don't spread your improved versions of ASwarm II under the name of ASwarm, because this may confuse the public and it's not fair.

1.5 ASwarm/Copyright

Copyright

Copyright 1991,1992,1993 and 1994 by the Authors.

ASwarm II V2.0 is freely distributable.

ASwarm II V2.0 is free to be spread on public-domain and shareware disks especially on Fred Fish's AmigaLibDisks, as long as they are sold for a reasonable charge that is less than US \$6 or DM 8.- .

ASwarm II V2.0 may be distributed on freely available CD-ROM. This CD-ROM should not be used for commercial obstinacles like professional copyiing. The price of the CD-ROM is not important.

For use in commercial products the permission of the authors is required.

ASwarm II V2.0 may be copied and distributed via electronic networks such as the Internet, also it may be held available on anonymous ftp-servers, mail-boxes or BBS's.

ASwarm II V2.0 may not, or is not allowed to be used by any military institution or any civil institution which makes any research or products which is used by military institutions.

The Copyright is still by the Authors.

The source may be changed or improved. Please DON'T spread your own version of ASwarm II under the name of ASWARM, this will produce too much confusion (such as we had with ASwarm III, which is not our product). Just send us a note what you've changed, and if you really think it's necessary to spread your own version, use another name.

The authors are not responsible for anything which may happen to you, while using ASwarm II. Especially for any hypnosis trauma...

1.6 ASwarm/Author & Support

Author & Support

Markus Illenseer # Graphic routines

Kurt-Schumacherstr. 16 # Documentation

33615 Bielefeld # Dice Support

Germany

INTERNET: markus@techfak.uni-bielefeld.de

Z-Netz : markus%techfak.uni-bielefeld.de@uucp.zer

IRC: ill

Matthias Scheler # Server-Client model

Alter Milchhof 10 # User Interface

48145 Münster # SAS/C Support

Germany

INTERNET: tron@lyssa.pb.owl.de

tron@uni-paderborn.de

FIDO : Matthias Scheler@2:2432/360.10

Z-Netz : tron%uni-paderborn.de@uucp.zer

IRC: Tron

SUPPORT FTP ADDRESS:

ftp.uni-paderborn.de [131.234.2.32] anonymous access.

(Thus any AmiNet site around the world)

Please first refer to **KNOWN PROBLEMS**

below, before you contact us for a Bug-report, any comment is welcomed of course. Feel free to send a donation, some flowers or a postcard.

1.7 ASwarm/Changes

Changes

V2.0 fixes some more bugs and involves the feature

'Velocity' as for a nicer look. This was done due to a high public demand.

ASwarm II 2.0 introduces two new Features which are for sure a novum under the screenblankers!

New feature 'Final Timeout' was added, which supports new, modern type of monitors, which power themselves off when nothing happens on the screen.

After the blanker was activated, this Countdown is

activated, after which then the screen is fully disabled.

Also - finally - joystick-support was added. Hence ASwarm detects activity on the gameport and doesn't blank. This is only possible because we use the direct hardware interface, not very elegant - because not safe for future releases of Amiga-DOS - but the Commodities-Interface has no joystick-support.

Finally this version is fontsensitive and is aware of given Workbench Fonts. This is very usefull for Systems with High- Resolution Workbench. For this we use the new **MUI-System** Interface.

Also, a Rexx Interface was added to ASwarm II V2.0, so that you may easily disable and enable ASwarm.

If you start ASwarm in the "SYS:WBStartup" drawer (or Workbench in general), please have a closer look to the new **Save Config** -routine which is able to update the Tool Types of ASwarm's icon automatically.

1.8 ASwarm/Purpose & Theory

Purpose & Theory

ASwarm is a screenblinker. The graphic during blanking phase is loosely based upon Jeff Buterworth's "XSwarm" for X Windows.

A screen blanker's goal should be to blank (disable) the screen output in order to prevent burning images into the monitor's phosphor.

As it is boring just to disable the screen, and as the Amiga can handle multitasking, we could also draw some funny stuff while blanking the screen. The only problem about that: when we draw something, we must take care that our animations don't burn themself into the monitor.

This usually happens, when the screenblinker has not enough time to draw, so the graphics rest on the same place. When the screenblinker was not given enough CPU time, it's because there is another CPU-intensive programm, such as a raytracer or C-compiler, running.

As the screenblanker isn't important for the user, we found a way to manage both cases: Screenblanker has CPU time or

not. When he has CPU time, the blanker draws the funny graphics, when he hasn't, the screenblanker-draw routine is disabled and the screen is really blanked (black) until he gains back CPU time (...is allowed to have CPU time, remember, we have preemptive multitasking).

This is done with a simple server-client model. The server runs with a normal priority, but just has a WaitPort()-loop (No real CPU-use !) to detect the time-out and to detect the amount of CPU time. The client is started when the server reached the TIMEOUT, the client runs with a low priority. When the server reached the CLIENTTIMEOUT and remarks that the client wasn't able to draw anything, then the screen is really blanked. Please do not try to change the priority of the client.

There was a discussion on comp.sys.amiga.misc (Usenet) for screenblankers, at all, we found that ASwarm completely fits on the demanded features and requirements.

1.9 ASwarm/Version

Version

To prevent a Version War, we renamed ASwarm to ASwarm II. There are some other versions of ASwarm or Swarm available, such as ASwarm as IPC-Port-Blanker for DMouse, written by Markus Illenseer (written in KickPascal, available with Source on demand), or Swarm by Christian von Roques, with assembler subroutines for drawing, unfortunately not with the multiple-swarm option (yet ?) (also for DMouse). There is also a Swarm-Modul for 'Shadow-Master' and 'SuperDark'. As ASwarm can be compiled with DICE _and_ (or) SAS/C, you can detect the Version with: (CLI) "Version ASwarm FULL" It will show you the used compiler. Default is SAS-C. Also the size of the binary should differ:

18540 Bytes for the DICE version.

15568 Bytes for the SAS/C version.

Unfortunately Jake Rose 'improved' our ASwarm II V1.0, renamed it to ASwarm III (which is correct, it's a new version of ASwarm).

Please DON'T use ASwarm III, it has too many Bugs (Sorry Jake, not your fault). Those Bugs are fixed in our ASwarm II V1.1 or V1.2, but still exist in Jake's version. It is possible that ASwarm III (and of course our old ASwarm II V1.0) crashes your machine.

1.10 ASwarm/Starting

Starting

ASwarm II is a COMMODITY, therefore it only runs under WB Release 2.0 (V37.175) and newer.

From version 2.0 of ASwarm on, the Magic User Interface MUI must reside in version 1.4 or newer on your system, see ReadMe.mui and **MUI**.

Provided in the archive is an Installer-Script for use with the Installer-Tool from Commodore. This tool can be found on AmiNet, on Fred Fish's AmigaLibDisk 911 and should reside on your Workbench 3.0 system discs. The Installer should be in the search.path of the Workbench.

A Commodity is usually started in the "SYS:WBStartup" drawer. So it will be automatically started on the workbench startup (LoadWB, usually in "S:Startup-Sequence").

If you don't have the Installer-Toolm, just copy "ASwarm" and "ASwarm.info" to "SYS:WBStartup", or click and move (drag) the icon to the drawer.

To get ASwarm started without rebooting now, double-click the icon. If the Tool Types weren't changed yet, a window shows up. Double-click once more, if the window doesn't show up.

This is the **Config Window** of ASwarm.

Now click on the Gadget 'Hide' or the 'Close-Gadget' to close the window.

ASwarm is now started. After 60 seconds the screen will be blanked, of course only when the user doesn't touch the keyboard or the mouse (or other Input-event's occur).

You can start ASwarm from the CLI or another Shell. For example you can start ASwarm in the S>User-Startup:

```
Run >NIL: <NIL: ASwarm
```

ASwarm II now supports ReadArgs().

For a small help on the command line arguments, start ASwarm with a '?' as Parameter.

1.11 ASwarm/Arguments

Arguments

As every good Commodity, ASwarm supports Tool Type entries.

Click the ASwarm.info and press "Right Amiga i" (or use the Workbench Menu Item 'Information') to change or add a Tool Type entry.

In fact this is no longer necessary, as we do support a

Save Config now, which does save all parameters

into the Tool Types of the icon. You must start ASwarm from the Workbench to enable this feature.

In the ToolType list there are (per default) entered:

DONOTWAIT # Tell WB to not wait on a return

CX_PRIORITY =0 # Priority in "commodities.library"'s queue

CX_POPUP # Show up the window on start

CX_POPKEY =ctrl alt s # Config Window Hot Key

BLANKKEY =ctrl alt b # Immediate Blank Hot Key

TIMEOUT =60 # Time after which ASwarm blanks

CLIENTTIMEOUT =5 # Time after which the Client is disabled

DISPLAY =PAL:Hires # The Resolution of the Display

CYCLE =YES # The Color-Cycling is enabled

AIM =NO # The Aim-Mode is disabled

WASP =2 # Number of Waps is 2

BEES =25 # Number if Bees is 25

SPEED =4 # Speed is set to Speed-Mode 4

TIGHTNESS =5 # Tightness of Bees is set to 5

VELOCITY =5 # How fast the Bees accelerate, lenght of them.

MOUSEBLANKMETHOD =FreeSprite # What way to use for Mouseblanking

JOYSTICK =NO # Enables Joystick support

FINALTIMEOUT =0 # Toggles Final Timeout

These Tool Types are the normal way to give arguments for Commodities and pure Workbench programs. Please refer also to your AmigaDOS Manual (Section Workbench Programms especially chapter "The WBStartup Drawer") to get an idea of the Tool Types entries.

1.12 ASwarm/Tool Types

Tool Types

DONOTWAIT

When started from WBStartup, let WB know that it doesn't have to wait for ASwarm. Is not a Tool Type entry for ASwarm, but for te WB.

CX_PRIORITY=<-128 - 129>

Priority in "commodities.library"'s input-queue

CX_POPUP=<NO>

When ASwarm is started, the **Config Window** may show up when set any (!) other String than 'NO' is used.

CX_POPKEY=<Hot Key>

Please see below for the **Hotkeys** . The hot key opens the **Config Window** of ASwarm.

BLANKKEY=<Hot Key>

Please see below for the **Hotkeys** . The hot key immediatly blanks the screen.

TIMEOUT=<1 - 3600>

This is the timeout counter in seconds. During this time NO input from the user must occur in order to start the blanker. Usual time is about 60 secs.

CLIENTTIMEOUT=<1 - 6>

After this time, the server disables the screen, he has then remarked that the client can't draw anything due of CPU time. Usual time is about 5 secs.

DISPLAY=<Display Type>

Please see below for the Display Types DISPLAY}. Here you can change the size of the screen on which ASwarms draws.

CYLCE=<YES | NO>

Disable the Colorcycling of the Bees.

AIM=<YES | NO>

Search-the-nearest-Wasp mode enabeld.

WASPS=<1 - 10>

The number of drawn Wasps.

BEES=<1 - 500>

The number of Bees.

SPEED=<1 - 4>

Slow down ASwarm. 4 is maximum speed.

TIGHTNESS=<1 - 10>

Indicates how close the Bees may come to the Waps. The higher, the closer.

MOUSEBLANKMETHOD=<Hardware | Window>

From within version V1.3 of ASwarm II the mouse pointer is being switched off using the DMA hardware flags.

This works fine with normal graphic modes, but it doesn't work fine on one of these VGA Gfx boards. You should use the Software Method 'Window' on them (slightly slower).

VELOCITY=<1 - 15>

The Bees and the Wasps accelerate with a steady velocity. The higher the value, the faster they accelerate, and the larger they become.

FINALTIMEOUT=<0 | 1 - 3600>

The final Countdown, which is counted when the blanker was activated (by TIMEOUT). After this time, the blanker is completely shut down (screen goes black).

A value of 0 leaves this feature aside.

JOYSTICK=<YES | NO>

Toggles the joystick support. Detects joystick movements as user-activity.

NOTE:

The Tool Type Entries should be written in upper-cases.

NOTE:

For compatibility reasons, we also support the Tool Type 'SECONDS', which is equal to 'TIMEOUT'. If you use the

Save Config option, 'TIMEOUT' is used.

1.13 ASwarm/Hot Keys

Hot Key

Refer to your AmigaDOS Manual (Section The Extras Programs, The Commodities Drawer) to get a valid list of the available hot keys, the following may obsolete on a new "commodities.library" version.

The Hot Keys can be edited with the String-Gadgets in the **Config Window** of ASwarm. The syntax and

correctness is checked.

One word for typing the Hot Keys:

In the String-Gadget a description of the Hot Key in textform is being asked, not the Hot Key himself. Thus the Hot Key 'left Amiga Key + q' would be typed in as 'lcommand q' (all ten chars inclusive the space). After the Key was added to the Commodities Queue, the Hot Key can be activated by pressing and holding the left Amiga Key followed by pressing and releasing the 'q' Key and releasing the left Amiga Key.

SYNOPSIS: [<qualifier> [<qualifier>...]] <key>

Qualifier keywords (Press and hold one or more qualifier)

alt either Alt key

ralt right Alt key

lalt left Alt key

shift either Shift key

rshift right Shift key

lshift left Shift key

capslock Caps Lock key

rcommand right Amiga key

lcommand left Amiga key

control Control key

numericpad Enables the use of a key on the numeric keypad

rbutton Click (and hold) the right mouse button

midbutton Click (and hold) the middle mouse button

(only avail for mice with a connected third button!)

leftbutton Click (and hold) the left mouse button

newprefs Preferences changed

diskremoved Disk removed

diskinserted Disk inserted

Keys (to be pressed and released, only ONE Key can be chosen)

a .. z, 0 .. 9, etc. Normal keys

f1 .. f10 Function keys

up, down, left, right Cursor keys

help Help key

del Delete key

return Return key

enter Enter key

(MUST be combined with 'numericpad'!)

backspace Backspace key

esc Escape key

space Space key

comma Comma key

upstroke Upstroke key

Examples

lalt ralt return

rcommand f10

alt x

lalt numericpad enter

NOTE: Choose your hotkeys carefully, because

Commodities have a high priority in the input events

chain (i.e. will override existing definitions). Also

some hotkeys don't make sense or do collide with other

tools or functions of the WB.

NOTE: The Workbench screen (or the default PubScreen,

if this one has activated the Shanghai-mode) will be

moved to front before starting the tool via HotKey.

NOTE: When a combination of qualifiers and keys is

illegal, ASwarm will start, but the Hot Key won't work.

Example for illegal combinations:

lalt a b # Two keys specified

control rcommand lcommand # Reboots the System, Oops!

lbutton # No key specified

If you edit the Hot Key's in the **Config Window**,

the Combination will be checked. If invalid, the old Hot

Key is still used.

NOTE: Due to a bug in the commodities library, it is

impossible to use a Mousebutton w/o a Qualifier and a

Key.(ParseIX() doesn't set

the ix_QualMask field right)

NOTE: The hot key description strings have been changed

under Release 3.0 of Workbench.

1.14 ASwarm/Config Window

Config Window

When the CX_POPUP is set and ASwarm is being

started or when the hot key was pressed, a window shows

up on the Workbench. Normally, the workbench is moved to the front.

We've tested ASwarm's Config Window under many circumstances, please give us a short note when you have a problem with it.

You will see some Gadgets and a Scroll-List.

The values inside the Text-Gadgets are via default set to the supplied Arguments in the Tool Types or CLI-Parameters. On a wrong Enter, the value will be reset to the old value.

On a an enter in the hot key gadgets, the entered string will be checked and if the string is not valid as hot key, the old or the default string will be returned.

You will notice, that some Gadget have names with one character underlined. The underlined character refers to the key on the keyboard and will alter the entry.

Use Shift to alter the entry in the other direction.

Gadgets:

Keys in bold type are short-cuts. With them you can access the gadgets with the keyboard w/o moving the mouse. In Slider- and Cycle-Gadgets, the short-cut key will move the slider to the right, use Shift and the key to move the slider to the left.

[T]imeout **[P]**op Key

C[I]ent timeout **B**lank **[K]**ey

[F]inal Timeout **[J]**oystick

Swarm Options: Display Mode:

[S]peed **S**creenMode

[W]asps

B[e]s

[V]elocity

T[i]ghtness

[C]olor **C**ycling

[A]im Mode **[M]**ouse **B**lank

[H]ide **[B]**lank **[Q]**uit

menu items:

Menu items can also be used via the keyboard, use the shown Command Keys.

Project-Menu:

Load Config : Only available on Workbench-Start (either Double-Click or Sys:WBStartup-drawer). Loads the Configuration stored in the Tool Types in the Icon.

Save Config: Only available on Workbench-Start. Saves the actual (!) configuration in the Tool Types of the Icon. This will overwrite all existing Tool Type Entries. It's no longer necessary to edit the Tool Type Entries.

About: Shows up the version and Copyright.

Hide: Hides the Config Window.

Quit: Exit Aswarm.

Edit Menu:

Reset To Defaults: Resets all parameters to buildt-in Default Values.

[Overview](#)

1.15 ASwarm/Config Window/Commodities Options

Config Windows/Commodities Options

Commodities Options:

[\[T\]imeout \[P\]op Key](#)

[C\[I\]ient Timeout Blank \[K\]ey](#)

[\[F\]inal Timeout \[J\]oystick](#)

[Overview Config Window](#)

1.16 ASwarm/Config Window/Display Options

Config Window/Display Options

Display Options:

Display Modi

[\[M\]ouseblank](#)

[Overview Config Window](#)

1.17 ASwarm/Config Window/Options

Config Window/Options

Swarm Options:

[\[S\]peed](#)

[\[M\]ouse Blank](#)

[\[W\]asps](#)

[B\[e\]es](#)

[\[V\]elocity](#)

[T\[i\]ghtness](#)

[\[C\]olor Cycling](#)

[\[A\]im Mode](#)

[Overview Config Window](#)

1.18 ASwarm/Rexx Interface

Arexx Interface

From version 2.0 of ASwarm II on an Arexx Interface is offered to communicate with ASwarm without opening the Edit Window. This allows you to temporarily disable the blanker, to open the Config Window, and of course to quit the blanker.

This is usefull, when a programm is started, which does not like ASwarm as a screenblanker. This could be a game (best example: Wing Commander) or a programm which uses a copperlist rather than a real screen and does not know how to deal with ASwarm, when ASwarm pops up the blanker screen to front.

The similarities to the commands to those in the Commodities Exchange Tool are done for purpose.

The ARexx-port is called 'ASWARM' and does have the following commands:

OPENWINDOW - Opens the Config Window of ASwarm.

CLOSEWINDOW - Closes the Config Window, if it was open.

ENABLE - Switches the blanker on. From now on all preferences will be active.

DISABLE - Switches the blanker off. The blanker will not be startet. The Rexx-Port will be left accessable.

This point is important for games and other programms, which do not like screenblankers popping up a screen to the front.

BLANK - Immediately starts the blanker.

The MUI system offers you other commands:

QUIT - Stops ASwarm completely.

HIDE - Close or iconify the Config Window.

SHOW - Open the Config Window.

INFO - Shows you some Information about ASwarm,
please read the MUI-Dokumentation/ARexx.

HELP - Shows all Rexx-Commands of ASwarm (needs an
output window, ie. CLI)

SHOW and HIDE do only function in the presumed way when the
Config Window was already opened once. Elsewise only the
Icon will be opened and closed. Onced opened, the Config
Window will be iconified with HIDE. ASwarm be closed with
QUIT, but the Icon will be de-iconified, the Window
re-opened and then everything will be shut down. Looks like
a Bug in MUI, it isnt, we want MUI when it is really needed,
not before.

1.19 ASwarm/Config Window/Pop Key

Config Window/Pop Key

[P]op Key=<Hot Key>

Please see below for the [Hotkeys](#) .

The hot key opens the Config Window of ASwarm.

[Overview](#) [Other Options](#) [Config Window](#)

1.20 ASwarm/Config Window/Blank Key

Config Window/Blank Key

Blank [K]ey=<Hot Key>

Please see below for the [Hotkeys](#) .

The hot key immediatly blanks the screen.

[Overview](#) [Other Options](#) [Config Window](#)

1.21 ASwarm/Config Window/Timeout

Config Window/Timeout

[T]imeout: <1 - 3600>

This is the timeout counter in seconds. During this
time NO input from the user must occur in order to start
the blanker. Usual time is about 60 secs.

[Overview](#) [Other Options](#) [Config Window](#)

1.22 ASwarm/Config Window/Client Timeout

Config Window/Client Timeout

C[L]ient timeout: <1 - 60>

After this time, the server disables the screen, he has then remarked that the client can't draw anything due of CPU time. Usual time is about 5 secs. THE feature of ASwarm II !

[Overview](#) [Other Options](#) [Config Window](#)

1.23 ASwarm/Config Window/Final Timeout

Config Window/Final Timeout

[F]inal timeout: <0 | 1 - 3600>

The time which will be counted down, after which then the blanker will be closed. The screen will be black then. A value of 0 will not enable this feature.

[Overview](#) [Config Window](#)

1.24 ASwarm/Config Window/Joystick

Config Window/Joystick

[J]oystick: <Yes | No>

Toggles the ckeck for joystick activity. Only usefull for some rare purpose, ie. games which are system conformant, but don't like a screen popping up (or you will loose some highscores :-)

[Overview](#) [Config Window](#)

1.25 ASwarm/Config Window/Speed

Config Window/Speed

[S]peed:

Slow down ASwarm. This gadget depends on your used CPU (68000 up to 68040). Runs from 'Slow Moiton' to 'Incredible'. The speed of the bees and the wasps is influenced.

[Overview](#) [Other Options](#) [Config Window](#)

1.26 ASwarm/Config Window/Wasps

Config Window/Wasps

[W]asps: <1 - 10>

The number of drawn Wasps. The more you choose, the more swarms will form. In conjunction with Aim-Mode it is possible that the one or the other wasps has no surrounds at all.

[Overview](#) [Other Options](#) [Config Window](#)

1.27 ASwarm/Config Window/Bees

Konfigurations-Fenster/Bees

B[e]es: <1 - 500>

The number of Bees. The more bees you choose, the more bees will run on the screen. As every bees searches it's own path to the nearest wasp, it is possible that the computer is heavily busy. In conjunction with the Aim-Mode it is quite possible to see some neat effects.

[Overview](#) [Other Options](#) [Config Window](#)

1.28 ASwarm/Config Window/Tightness

Konfigurations-Fenster/Tightness

T[i]ghtness: <1 - 10>

Indicates how close the Bees may come to the Waps. The higher, the closer. Depends also on the speed.

[Overview](#) [Other Options](#) [Config Window](#)

1.29 ASwarm/Config Window/Velocity

Config Window/Velocity

[V]elocity: <1 - 15>

The Bees and the Wasps accelerate with a steady velocity. The higher the value, the faster they accelerate, and the larger they become.

[Overview](#) [Other Options](#) [Config Window](#)

1.30 ASwarm/Config Window/Color Cycling

Konfigurations-Fenster/Color Cycling

[C]olor Cycling:

Disable the Colorcycling of the Bees. There are 32 colors which are cycled through the bees. But don't worry, ASwarm uses only 2 Bitplanes.

[Overview](#) [Other Options](#) [Config Window](#)

1.31 ASwarm/Config Window/Aim Mode

Config Window/Aim Mode

[A]im:

Switch Search-the-nearest-Wasp mode. Will certainly have some genius effects!

[Overview](#) [Other Options](#) [Config Window](#)

1.32 ASwarm/Config Window/Mouseblank

Config Window/Mouseblank

[M]ouseblankmethod=<Hardware | Window>

From within version V1.3 of ASwarm II the mouse pointer is being switched off using the DMA hardware flags.

This works fine with normal graphic modes, but it doesn't work fine on one of these VGA Gfx boards. You should use the Software Method 'Window' on them (slightly slower).

[Overview](#) [Other Options](#) [Config Window](#)

1.33 ASwarm/Config Window/Blank

Config Window/Blank

[B]lank:

Blank immediately. All the new entered values will be activated.

[Overview](#) [Config Window](#)

1.34 ASwarm/Config Window/Hide

Config Window/Hide

[H]ide:

Hide the window. All the new entered values will be activated on the next blank. Of course ASwarm is still active.

[Overview Config Window](#)

1.35 ASwarm/Config Window/Quit

Config Window/Quit

[Q]uit:

Exit ASwarm. (Use 'Hide' to close the 'Config Window')

[Overview Config Window](#)

1.36 ASwarm/Online Help

Online Help

From Version 2.0 of ASwarm II on it is possible to have an aktiv online help for all gadgets when the Config Window is open.

To make this feature available, you need to copy the file "ASwarm.guide" (for instance the german or the english version) to the directory where ASwarm is started in (mostly Sys:WBStartup or ProgDir:).

The Installer-Script will do this for you.

Alternatively you can add an entry in ENV:AmigaGuide/Path (and the pendant in ENVARC:) to have AmigaGuide look at "<ASwarm/English>".

Or "Docs:" and copy ASwarm.guide there. See more in the AmigaGuide Manuals.

After this small installation, you can point with the mouse onto a gadget (do not click) and press the help-key on the keyboard. Then AmigaGuide or Multiview should show up and display a helpline about the requested gadget.

It is therefore necessary that the Workbench has AmigaGuide or Multiview in its search path (normally SYS:Utilities/AmigaGuide).

1.37 ASwarm/Config Window/Screenmode

Config Window/Screenmode

Choose your desired Screenmode, which should be used during the blank phase, here. Use the scroll border to see possible more modes, this depends on the used system.

If you only see the system default mode, you haven't installed your Amiga system correctly. Please see more in your Amiga Dos Manual under 'Monitors'.

[Overview Resolutions](#)

1.38 ASwarm/Commodities Exchange

Commodities Exchange

With the Exchange Tool, you can temporarily stop ASwarm with DISABLE, restart it with ENABLE, remove ASwarm with KILL (as would do a Quit in the Config Window), SHOW up the Config Window, and HIDE the Config Window.

The Exchange Tool is a comfort way to remove or dis/enable ASwarm.

Please refer to the AmigaDOS Manual (Section AmigaDOS Reference and Workbench Programms) for further docs on Exchange Tool.

1.39 ASwarm/Display Modes

Display Modes

Please, please, please have care here !!!!"

We are NOT responsible for ANY

user-error. The given list depends on the used System.

All newer Amigas, such as A500+ , A3000 do have the ECS Denise for extended Screen Modes (Not all Amiga's with Kick 2.0 on ROM do have a ECS Denise..). Of course you can start the desired Modes, but not all modes are available on all MONITORS ! Please do refer to your Manual of the Monitor and to the AmigaDOS Manual (Section Workbench Programms, AddMonitor) for more informations.

Why ? Simply because you can DESTROY your

Monitor!

Here is a list of the (normally given) ECS Display

Modes: This list may be obsolete when a new workbench is released.

NTSC:Lores

NTSC:Hires

NTSC:SuperHires

NTSC:Lores-Interlaced

NTSC:Hires-Interlaced

NTSC:SuperHires-Interlaced

PAL:Lores

PAL:Hires

PAL:SuperHires

PAL:Lores-Interlaced

PAL:Hires-Interlaced

PAL:SuperHires-Interlaced

VGA-ExtraLores # -

VGA-ExtraLores-Interlaced #

VGA-Lores #

VGA-Lores-Interlaced # Multiscan Monitor needed

Productivity #

Productivity-Interlaced # -

A2024_10Hz #

A2024_15Hz # A2024 needed.

Other Modes are available from 3rd. Party, but not mentioned.

Overscan is used for all modes, adjust your

Overscan-size with the ScreenMode Preference Tool.

This list will only be available if the icon called

"Mode_Names" supplied with Workbench 2.0 is in the WBStartup directory of your boot drive.

This Mode_Names may also be obsolete in new versions of the workbench.

NOTE:

DON'T use VGA-Modes on a NON-Multisync or

NON-VGA-Monitor DON'T even test Modes if you

aren't sure about your Monitor-capabilities.

As the original XSwarm runs on a X-Workstation, and as those ones have high graphics resolutions, I prefer

SuperHires, as this Mode comes near to them. ASwarm II uses 4 colors.

NOTE:

Again, be careful please. We don't offer ANY warranty.

NOTE:

The above list will be COMPLETELY different if you use WB 3.0 on one of the new AGA Amigas (A1200/A4000).

1.40 ASwarm/Known Problems

Known Problems

We do know of some problems and strange behaviours, some of them aren't strange anymore, when you read this:

- Some of the might be caused by the for its variety famous MUI system. Sometimes it is usefull to delete all those files in "ENV(ARC):Mui/ASwarm.#?" and to start the MUI preference tool to reset the defaults of ASwarm.

- Are your running ARQ 1.66 or below ? (A replacement Tool for the system requestors). Then you may try this: Change the timeout to a low value, e.g. 5 secs, then type in the CLI: wait 10 <RETURN> (do not wait for the prompt)

dir bafasel: <RETURN> (device blafasel: nonexisting)
ASwarm will blank as usual, but then ARQ pops up a requester ON the ASwarm-Screen !! You can't close the Screen until you click on 'Abort'. And ASwarm can't blank the screen either anymore ! (It's ScreenClose() Command waits for the succesfull return...)

This is a BUG in ARQ ! It's dangerous in some cases.

It may burn in the requestor... Get the newest version of ARQ (V1.78) and the problem will vanish.

- You are running a C-Compiler or a raytracer. ASwarm goes blank, but doesn't show any swarm, and during disk-access ASwarm comes up for a while.

This is not a Bug, this is the FEATURE of ASwarm !! This is the way ASwarm blanks when high Cpu-use happens on the startup. And during disk-access the Cpu-time is usually less, so ASwarm may find time to draw something.

- Collision with other Blankers. Well, in fact you can run as many Blankers as you want. Such as DMouse, Spliner, FracBlanc. ASwarm does always try to move it's screen to front, when it detects to be behind some other screens.
 - When a disk is inserted, ASwarm closes the screen (dis-blanks). This is normal. Disk-replacement is detected as an input Event. As all input events shall disable the Blanker this one should, too. And this event is obvious, the user is alive :-)
 - The window doesn't open if the hotkey is pressed. Perhaps you have supplied a wrong hotkey description. Use the Commodities Exchange Tool to open the Edit Window" Link EDIT}. The Hot Key will appear in the Gadget 'Pop Key'. You can test the hotkey there. If an incorrect hotkey was submitted, the old hotkey will reappear.
 - ASwarm shows up the window though the Tool Type CX_POPUP is set to 'NO'. This happens when ASwarm is started twice. (Double-click (or call from CLI) = start, another double-click (or call from CLI) opens the window). Please do also check the entries in the MUI Preferences.
 - ASwarm is damn slow. Huh .. sorry :-) The Authors have fast machines.. Try to reduce the swarm-size (BEES) and the amount of swarms. Or use another, less big screen. YOU can rewrite the client-code if you want...
 - ASwarm makes noise when it blanks the screen. This may happen when a Display Mode is choosen, which is not of the size of the since then activ screen. Nothing dangerous. Hardware.
 - ASwarm makes flickers on the Monitor when it blanks the Screen. This happen when ASwarm blanks on a PAL-Screen, but the since then or then active Screen is or was NTSC. (Or vice versa) The Monitor needs a bit time to synchronize again. Nothing dangerous.
 - There is a 70Hz hack. This hack has problems with the productivity Environment. No Bug of ASwarm. WB 3.0 and WB 2.1 offer a "Euro 72" monitor which will make ASwarm
-

It work with 70HZ without any problems.

- There are some guys who don't start the workbench, those may wonder that they only can start a Hires-Screen. No magic here, the WB must read the Mode_Name in order to get the right resolutions. The screenmode-preferences tool seems to have hard-coded resolutions. As we want only to use the supported screenmodes, you have to use the workbench. Don't tell me about some 30 Kb the Workbench uses!

With WB 2.1 and 3.0 this problem has vanished, too.

Just add the monitors to your system.

- The bees don't form nice swarms. This is not a bug, but a optimisation error. Has been improved now.

- The Config Window does not open when the Pop Key is pressed. Maybe you have used the wrong Hot Key. Use the Commodities Exchange Tool to open the window. In the gadget 'Pop Key' you can enter a Hot Key. If the Key description is wrong, the old (may be default) Hot Key is displayed and used. Please do also check the MUI Preferences.

- Some of those Power- Pro- and whatever-Tracker have serious problems, when ASwarm blanks. In fact they do have problems with all blankers. As for PowerTracker i know for sure, it's it's own fault, because this programm does NOT open an Intuition-Screen, but a CopperList. And then it believes it does own the whole system.. *sigh*

- The 'DOMINO' Graphics Board didn't allowed to blank the mouse-pointer during the blank times. This was done due to the emulation of the Workbench of the DOMINO, as that one didn't check for the DMA-Bit. Has been surrounded with the MOUSEBLANK option.

- The 'RETINA' Graphics Board had the problem, that none of the MOUSEBLANK options from V1.3 did work. Has been surrounded now.

(I wonder what happen, when we see RTG one day...)

- The Commodity 'Cycle2Menu' did not work. Is fixed, we use MUI :-)

- The Online-Help does not show up. Well, this can have several reasons: Mostly the AmigaGuide-Programm is not in the search-path of the workbench. Otherwise it could be that AmigaGuide cannot find the ASwarm.guide in the directory HELP:english or where ASwarm is started from.

1.41 ASwarm/MUI

MUI

For ASwarm II V2.0 the Magic User Interface (MUI) system from Stefan Stuntz was used, which helps the programmer saving a lot of time developing the GUI. Also, the user has a wide range of influence to the GUI now.

MUI is a shareware product worth using. It can be found on the AmiNet or other PD- and Shareware series.

Without registering MUI the only feature which is not available is that you can't save but change the preferences.

Thus MUI _is_ usable even without registration.

Please do read the file 'ReadMe.MUI', which should be in the Archive.

We have decided to release ASwarm II 2.0 as MUI application, because MUI involves a new and usable standard for graphical user interfaces which we never would have achieved without serious programming, which would have exceeded the surrounding of a simple commodity.

Already the work needed to make that one window fontsensitive (we have an internal version working, but we WONT release it) is not justified to continue with GadTools, at least not, when working non-professional. ASwarm II 2.0 using GadTools with the features of MUI would have been 5 to 10kb larger (not to speak from the source code) as a version made with MUI - and we still haven't copied all the features MUI provides... And we only make use of the MUI-library when we open the window, thus we don't need the library at start time. And nowadays there are so many nice tools written for and with MUI, that the MUI library is not needed for ASwarm alone.

Your mileage may vary, we love it.

1.42 ASwarm/Credits

Credits

Jeff Butterworth for his xswarm routine available for X windows. ASwarm II has improved so much, that we must say it's only loosely based upon XSwarm. If you ever happen to

be on an X windows System with xswarm, try it: 'xswarm -t10'

Matthew Dillon for DICE. So we could make ASwarm be compilable in the most common low-cost C-Compiler for Amiga (Only registered version). BTW, welcome to IRC, Matt!

[Hm, havent seen Matt for a long time on IRC now]

Greetings to Stefan Becker, who couldn't be convinced to use ASwarm II ... yet :-) ! [Stefan is no longer responsible for DICE in Europe, because he graduated latey, and has no time anymore, congrats!]

SAS/C group for well done work. As yet the SAS version of ASwarm is still faster and shorter...

Jörg 'Skull' Bublath, having the idea for the Aim-Mode. Markus 'Corwin' Stipp, for helping us with DICE, and reporting the problems with Kickstart 3.0's interleaved bitmaps.

Fred Fish, Mr. Public Domain, hope you like this enough to place it onto one of your new 'Fishes'. Permission hereby given. Includes your Fresh Fish CD.

Andrew 'Guardian' Denton for telling us that Jay Miner likes our Blanker and for having new ideas for future versions of Blankers. Andrew, you are still welcome to visit... [Jay Miner - the father of the Amiga - is very sick, lets wish him the very best!]

Dr. P. Kittel for allowing us to test ASwarm II under Workbench 2.1 on the CeBIT (March) '92. It does still work correctly, and even with the new features it has. [Well, ASwarm does even run on WB3.0 on an A4000/40, let us wonder why WB 2.1 was made available in Germany in October '93 only.]

Jake Rose for putting some nice features in ASwarm III which we implemented in ASwarm II, too (We didn't take one line of his code ...). If only he had suggested those features to us before he created a clone ...

[Some other clones have been reported, i.e. GBlanker has a multi-module named ASwarm (and uses our original code), and even for some Windows-machines a 'ASwarm' was reported, I wonder why they named it 'ASwarm' and not 'WSwarm' :-)]

Rickard 'Richie' Olsson for telling us, that his cat 'Pixel'

likes our ASwarm II, and ASwarm convinced him to use a
Screenblanker at all :-)

[He was the first telling us that cats seems to like ASwarm,
and almost ever get a static shock when trying to catch a
bee :-)]

Roger 'Budda' Westlund, for the Bug-Report of the 70Hz Hack.

Roger, feel free to visit one more time :-)

Roland Bless for helping us with some Bugs in the
ReadArgs-Stuff.

Michael 'massa' Janich for detecting a !^@#-Bug in the
Blankkey-Routine.

Holger 'hal' Lubitz for the nice article about ASwarm II in
the (german) Amiga Plus Magazin 11/92.

Last, but not least Stefan Stuntz for his saves-lives MUI !

Various Net-Freaks for their suggestions and (strange)
Bug-Reports.

Markus Illenseer

Matthias Scheler

January 1994
