

# History

**COLLABORATORS**

	<i>TITLE :</i> History		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		March 1, 2023	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

## History

### 1.1 History

- Development History of PointerX -

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## 1.2 1.0

1.0 No information.

## 1.3 2.0

2.0 First version I owned.  
 ~~~~~  
 \textdegree{} Only works on kickstart 2.x (Sometimes)  
 \textdegree{} Written by Steve Tibbett.

## 1.4 3.0

3.0 28-Sep-94 Released only to Beta testers  
 ~~~~~  
 \textdegree{} I (Dave Jones) took over.  
 \textdegree{} Some obvious optimisations were made.  
 \textdegree{} Now works on WorkBench 3, as I now patch the  
 Intuition/SetWindowPointerA() function as well as the  
 Intuition/SetPointer() function.  
 \textdegree{} Added auto-detatch code, no more need to 'RUN ←  
 PointerX'.

## 1.5 3.01

3.01 23-Oct-94 First Full Public Release - Appeared on AUI coverdisk

```
~~~~~
\textdegree{} Fixed NewSetWindowPointer().
    It no longer causes Enforcer hits.
\textdegree{} If you now run PointerX twice, it'll Uninstall ↔
    itself.
\textdegree{} Uses FastMem if available.
\textdegree{} Improved auto-detatch code.
\textdegree{} Various small optimisations.
```

## 1.6 3.02

3.02 27-Oct-94 Not publically released. Released only to Beta testers

```
~~~~~
\textdegree{} More PC relativity added.
\textdegree{} Some obscure optimisations added.
```

## 1.7 3.03

3.03 7-Nov-94 Not released : personal test version

```
~~~~~
\textdegree{} Code is now 100% PC Relative.
\textdegree{} Code has had loads of optimisations made, both for ↔
    speed
    and size, and is now as small and fast as possible.
\textdegree{} Fixed a harmless bug in the auto-detatch code.
\textdegree{} Removed some redundant code.
\textdegree{} Finally removed some spelling mistakes in this doc!
    previous versions stated I was 21, Hmm.. too much Vodka..
    (or maybe not enough ;-)
```

## 1.8 3.04

3.04 8-Nov-94 Second public release.

```
~~~~~
\textdegree{} Removed an enforcer hit that's been there since ↔
    ?????
    My serial lead was broken, so my terminal wasn't getting
    the enforcer hit messages! Sorry!
\textdegree{} Some more small optimisations, removal of duplicate ↔
    code.
\textdegree{} Now uses minimal amount of CPU time even when in the
    'busy' state. - Virtually nil when not 'busy'.
\textdegree{} Corrected several mistakes in the docs, which ↔
    referenced
    MoveVBR (One of my other programs) that's what you get
    for being lazy, and modifying another doc. ;-)
```

## 1.9 3.05

3.05 26-Dec-94 Third public release - Uploaded to AmiNet.  
 ~~~~~  
 \textdegree{} Uses an optimised SegSplit routine, 4 bytes saved! ←  
 ;^)  
 \textdegree{} Now includes a rather nice icon.  
 \textdegree{} More spell checking done on docs ;-P  
 \textdegree{} Funky new icon by Kirem Rahmani. [Spe3Kdr@Cardiff.ac ←  
 .uk]

This version seems to be the most spread version of all.  
 Aminet rules! It has also appeared on the Amiga Shopper  
 Subscribers disk, which Future Publishing kindly sent me  
 a copy of. This is more like it! Take note AUI!

## 1.10 3.06

3.06 6-Feb-95 Internal Birthday version just to Beta-Testers/Close Friends.  
 ~~~~~  
 \textdegree{} Some typos in docs removed. (And probably, some more  
 introduced! ;-)  
 \textdegree{} Removal of Sprite Garbage bug. Perhaps ;-P  
 Doesn't seem to appear anymore.  
 \textdegree{} Removed a bug which caused random crashes since v3 ←  
 .02  
 I Was taking stuff off the stack in reverse order to what  
 I was shoving them on in the Initialisation routine!  
 Anything which relied upon a2/d2 after setting the  
 busypointer crashed!  
 \textdegree{} Changed interrupt priority from 136 to 10 !  
 The pointer now seems to animate at a slighty faster  
 speed than before, but still uses the same amount of  
 CPU-Time ;-)

## 1.11 3.07

3.07 29-Mar-95 Beta-test release.  
 ~~~~~  
 \textdegree{} Supports Hires sprites (Sometimes) ;-P  
 This version as far as I know, wasn't released, but I  
 may have inadvertantly sent it to a few people. (oops! ;-)

## 1.12 4.0

4.00 15-April-95 Fourth public release. PointerX is now Giftware!  
 ~~~~~  
 \textdegree{} Changed interrupt priority from 10 to -1  
 (Uses less CPU time - Hurrah! - Virtually nil when not in use)

```

\textdegree{} Added HiRes Support. Ta-da!
  To All who requested it: Sorry it took so long, I got
  a little lazy, and almost abandoned this project (Argh!)
\textdegree{} User can now select Sprite resolution via a shell ←
  Arg
\textdegree{} Now uses Spaces instead of Tabs in the doc/guide to
  prevent looking ugly on non topaz font based Amiga's.

```

## 1.13 4.01

```

4.01 28-Aug-95   Fifth public release. (Quite a lot of work this time!)
  ~~~~~
\textdegree{} Docs Spell Checking. (Again ;- )
\textdegree{} Guide file now works (Sorry! Don't know what ←
  happened
  in v4.0! Guess I forgot to test it before release?)
\textdegree{} Misc code re-arranging. (Improved logic)
\textdegree{} As usual, a few optimisations!
\textdegree{} Added constant recognition string for VirusKillers
\textdegree{} Changed of busy-detection from word arithmetic to ←
  long.
  (Should stop some instances of PtrX activating when it
  shouldn't.)
\textdegree{} Patches are now made between a Forbid()/Permit() ←
  pair.
\textdegree{} Added SINGLEHAND option.
\textdegree{} Some programmers call SetPointer() with a zero for
  the address of PointerData in order to blank the pointer
  (For picture viewers e.t.c.) This was causing a few
  problems since ..? Now Fixed)
\textdegree{} Added recognition for some other busy-pointers.
  > Resource's SandGlass
  > Model 4D's Zzz Cloud
  > GBRoute's Watch
  > Personal Paint 4's No-Entry Sign
  > DPaint 3's 1.3 Cloud
  > Sound FX's 1.3 Cloud
  *NB - Note, that these cloud busy-ptrs may be used
  in other software too, and will therefore be
  automatically recognised.
\textdegree{} Completely re-wrote Seg-Split routines. Improvements ←
  :
  - No longer crashes Mungwall on removal
  - Now works from WorkBench or SHELL (How come no-one
  reported that it never worked from WorkBench before?)
  - Can now (For eg) be started from shell, and then quit
  by running from WorkBench (Or vice-versa)
  - Slightly more structured than the previous incarnation.
\textdegree{} Older versions allocated too more chipram for the ←
  sprite
  than what was actually needed. (144 Bytes) Now, I alloc
  the correct amount (just a miniscule 68 Bytes)
\textdegree{} There is an Exec/CopyMem() call in the startup which ←
  dates
  back to Steve Tibbett days. I assumed it was the correct

```



```

value, and so carried on. I now discover that it was
copying 64 bytes of busypointer data instead of 16.
So now PointerX init's a few CPU cycles faster!
\textdegree{}~Now reads Window/WD_Screen instead of GfxBase/ ←
  ActiveView.
  Should be friendlier to the OS.
\textdegree{}~Now sets Sprite-Resolution prior to setting ←
  SpriteData.
  No more brief flickers of the Lo-res pointer when in
  Hi-res mode.
\textdegree{} No longer any chance of crashing while IPrefs ←
  changes the
  screenmode e.t.c., Also removed a possible Enforcer hit.
\textdegree{} Uses approx 4k less memory! Now uses a 200 byte ←
  stack instead
  of a 4K one, plus some startup code has now been moved, so it
  no longer stays in memory.
\textdegree{} Some people suggested I change the interrupt ←
  priority to 0
  so I did. Hope it makes you feel better ?!
\textdegree{} Added Super hires switch for DBLPAL users.

```

## 1.14 4.01b

4.01b 06-Sep-95 Bug fix release

```

~~~~~
\textdegree{}~Fixed a bug, which meant that 4.01 crashed when run ←
  from
  WorkBench.
\textdegree{} Removed a mungwall crash when quitting PointerX.
\textdegree{}~Spelt a name wrong in the thanks (Sorry Ronny! ;^)

```

## 1.15 4.02

4.02 17-Nov-95 This time, I removed more code than I added!

```

~~~~~
\textdegree{}~Done away with the task which sits around waiting ←
  for a Ctrl-C signal. Now you have to reload PtrX
  to remove it from memory.
\textdegree{} Moved everything into one hunk, cut down executable ←
  size.
\textdegree{} Better memory allocation.
  Uses less than 2k overall mem usage!
\textdegree{} 120 Bytes shorter than v4.01b!
\textdegree{} Improved Sprite-mem alignment.
\textdegree{} Change Pointer HotSpot to centre of sprite.

```

## 1.16 4.03

4.03 26-Nov-95

```
\textdegree{} Added some Workbench tooltype reading code.
  currently supports SPRITERES and SINGLEHAND tooltypes.
\textdegree{}~One or two small optimisations.
```

## 1.17 4.04

4.04 3-Dec-95 Bug Fix Release

```
~~~~~
\textdegree{} Reorg was displaying a busy-pointer when it wasn't ←
  busy.
  I Added some code which ignores the 'Delayed-busypointer'
  tag, and it now seemed to work. It doesn't work as it should,
  (It should wait a while, then display a busy pointer, but
  maybe that's for later!) I'm a little too busy right now,
  so this is an intermediate bug-fix release.
\textdegree{} Removed the .doc from the distribution
  I decided it was a waste of space.
\textdegree{} Added 'commented-out' tooltypes to the Icon.
```

## 1.18 4.05

4.05 9-Mar-96 It's back!

```
~~~~~
\textdegree{} Improved instruction pipelining for 68020+
\textdegree{} No longer has the full $VER: string in the interrupt
  name (I forgot to null terminate !)
\textdegree{} Changed the graphic data slightly, now the clock is
  completely symmetrical. [To my eyes anyhow!]
\textdegree{} Added some more icons! Thanks to Graham Maddox.
\textdegree{} File size shrunk a little due to hunk manipulation.
```

## 1.19 4.06

4.06 13-Mar-96 Slight optimisation.

```
~~~~~
\textdegree{} Changed interrupt code so that it only redraws a ←
  frame of
  animation if the busy pointer is currently visible.
  This was wasting loads of CPU time previously.
  Wish I'd only thought of it earlier.

  I'm unsure if I actually sent this to anyone! Oops!
  if not, I guess you'll never ever see it!
  Consider it a Pointer-X 'Rarity' ! ;^)
```

**1.20 4.07**

4.07 19-Mar-96 Fixes, Optimisations e.t.c....  
 ~~~~~  
 \textdegree{} Each time the hands were drawn, they were both read ← ←  
 from  
 tables, inverted, and anded together.  
 I've now setup the tables as inverted data, so I don't  
 need to invert them in real-time. This also meant that I  
 had a spare scratch register free in my interrupt code,  
 and no longer had to push & pull d2 ! ;^)  
 What this means to you, the end user, is that your PtrX  
 executable is shorter, and yup, you guessed it..  
 a few nano-seconds FASTER!! (Only when actually busy)

\textdegree{} No longer has the full \$VER: string in the interrupt  
 name (I forgot to null terminate !) Again!  
 (See v4.05)

**1.21 4.08**

4.08 14-Apr-96 Released at the 'World Of Amiga show'.  
 ~~~~~  
 \textdegree{} One or two sneaky tricks to speed things up a little ←  
 .  
 \textdegree{} Removed an enforcer hit that sneaked in in  
 v4.06  
 \textdegree{} Removed a problem when removing ←  
 PointerX, it reused some  
 memory after freeing it, which sometimes caused a crash.

For the second time, PointerX made it onto the Amiga Shopper  
 Subscribers disk, which Future Publishing kindly sent me a  
 copy of. - Thanks!

**1.22 4.09**

4.09 30-Apr-96 Speeed!  
 ~~~~~  
 \textdegree{} Even more sneaky tricks to use as little CPU time as  
 possible. (Especially the interrupt code)  
 \textdegree{} Removed some redundant code  
 \textdegree{} Restructured some spaghetti code... yeuch!  
 \textdegree{} Removed a bug, SINGLEHAND made both hands disappear!  
 This was introduced during  
 v4.07!

**1.23 4.10**

4.10 13-May-96 More Speeed!  
 ~~~~~  
 \textdegree{} Aligned interrupt code, and both patches to 32bit ↔  
 boundaries  
 which will decrease CPU usage on 68020+ machines ;^)

## 1.24 4.11

4.11 22-May-96 Bugs `n' speed!  
 ~~~~~  
 \textdegree{} Changed Memory allocations:  
 - Now sets Memf\_Reverse to minimise memory fragmentation  
 - Also sets Memf\_Public, so that my code doesn't get  
 swapped out to virtual memory! (Was potentially dangerous)  
 \textdegree{} Sprite is now aligned to 32bit boundary for enhanced ↔  
 video  
 throughput on AGA machines  
 \textdegree{} Removed PGP support, as no-one requested my keyfile, ↔  
 I guess  
 not everyone is as paranoid as me ;^)

## 1.25 4.12

4.12 29-May-96 Another new option (Oooh!)  
 ~~~~~  
 \textdegree{} Added an option NORESETHANDS (ToolType and shell arg ↔  
 )  
 which prevents PointerX from resetting to 12:00 every time  
 it's active.  
 Quite a few users requested this, and it was only a few  
 lines of code, so I thought.. what the hell ;^)

## 1.26 4.13

4.13 18-Jun-96 Zzz.. Bug fix..  
 ~~~~~  
 \textdegree{} If someone called OpenWindowTaglist() with the ↔  
 WA\_Busypointer  
 tag in the taglist, the pointer wouldn't animate.  
 I now patch OpenWindowTaglist() to fix this.  
 \textdegree{} Slight optimisation in the SetPointer() patch.  
 \textdegree{} Moved the hot-spot of the busy pointer.  
 \textdegree{} Rewrote the sprite resolution changing code.  
 Should kill some reports, that the res code didn't work 100%  
 on every set-up.  
 \textdegree{} Removed the anger section of the docs, as someone ↔  
 took  
 offence to what I had written, which is not what I intended.

**1.27 4.14**

4.14 Not released.  
 ~~~~~  
 \textdegree{} Small optimisations in the interrupt code.  
 \textdegree{} SetBusyPointer was using Longs, now uses Words, as ←  
 the  
 upper 16 bits are ignored anyhow.  
 \textdegree{}~Rewrote the registration form. Not that it gets used ←  
 much.  
 HINT HINT... Thanks to Maxine Gamboni for pointing out the  
 spelling mistakes. Also, apologies to Timo Rossi, as I sort  
 of stole the form from the FileMaster distribution, and  
 altered it a little, and ahem.. kept his mistakes intact ;^)

**1.28 4.15**

4.15 28-Sep-96 Darn then bugs...  
 ~~~~~  
 \textdegree{} Removed a possible bug in the library open code.  
 \textdegree{} Replaced the resolution changing code, that somehow ←  
 got  
 removed.  
 \textdegree{} Small optimisations.

**1.29 4.16**

4.16 02-Oct-96 The stupid mistakes are always the last to be found.  
 ~~~~~  
 \textdegree{} Since time began, there has been a bug in PointerX, ←  
 which  
 rears it's ugly head once every 10,000,000 runs.  
 Today I got it appearing several times in a row, after  
 writing myself a simple test tool.  
 And now at last I found out why. I wasn't telling the system  
 about the patches I had applied, so the next time the lib was  
 checksummed, a guru would appear. Six lines of code added,  
 to checksum the intuition.library when installing/removing  
 the patch were all it took, to nail this bug DEAD! FOREVER!  
 May it's bits Rest in Pieces.