

NoSTalgia, an AtariST emulator for the Apple Macintosh  
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### **What is it ?**

NoSTalgia is an AtariST emulator for Macintosh. You can use it to run your AtariST software on your Macintosh.

### **How to use it ?**

The emulator needs a copy of the AtariST ROM to function. An Atari utility (tosdump.prg) will enable you to transfer the ROM contents to a MS-DOS 720Kb floppy-disk. The file needs to be renamed TOS.IMG and placed in the same folder as NoSTalgia in order to be recognized by the emulator.

TOS 1.x and 2.x can be used with this release of the emulator.  
TOS 1.0

is recommended for running games. Original AtariST floppy-disks cannot be read directly by the Macintosh. 'Dust' (by Marcus Philips) is able to build disk images which can be used by NoSTalgia.

The emulator automatically inserts the disk images named 'disk1.st' and 'disk2.st' when you run it.

The emulator will boot on the hard drive (C:) if no disk-image is inserted in drive A:

The joysticks are activated with the Caps-Lock key:

- Joystick 1: fire=ctrl, directions = kolm
- Joystick 2: fire=option, directions = gyjh

The right button of the ST mouse is emulated by apple-clicking and the help key by F12.

**WARNING !** Using version 2.2 of PC Exchange (coming with MacOS 8.1) to transfer files to the Atari hard disk can seriously damage its root directory. It is best to use an earlier version (like 2.05).

Mac OS X does not seem to damage hard disk images.

### **Minimum configuration:**

- Power Macintosh,
- 8 Mb free RAM,
- Système 8.0 with Carbon support or Mac OS X.
- 256-color display.
- Quicktime 2.5 for MIDI OUT.

## **The following functions are supported:**

- MC68000,
- ST Ram from 512Kb to 14Mb.
- Video shifter (320\*200, 640\*200 and 640\*400),
- VDI mode 640\*400\*16.
- MFP (Timer a-d),
- ACIAs,
- IKBD: keyboard, mouse and 2 joysticks,
- All interrupts with priorities,
- FDC supporting .ST and .MSA format disk images,
- Rasters (Low and Medium resolution),
- Overscan low.
- Blitter,
- Hard Disk Drive in DiskCopy format (TOS 1.4 needed),
- RTC.
- MIDI via QuickTime (OUT only).
- Printer port.

## **The following is not emulated:**

- Serial port,

## **Version 1.1**

- Fixed the control key.
- Fixed the disk menu.
- Added 14 Mb memory option (restart of the emulator needed for OSX, adjust the memory of the emulator and a restart are needed for Mac OS 8/9).
- Added ST mouse driver for Apps using LineA/VDI (GEM apps), only one cursor (cart.img needed).
- Fixed the memory info in the freeze format (1.0 saved states are not compatible with NoStalgia 1.1)
- Fixed the Fullscreen mode (Mac OS 9/8)
- Fixed Harddisk partitions creation.
- The 'Auto frames' option is now in the 'frame rate' menu.

## **Version 1.0**

- This version runs on OS X (Carbon) or System 8.x/9.x.
- Added overscan low.
- Added "freeze" , "unfreeze" functions.
- Fixed MFP/new code (Captain blood rasters, Interphase,...).
- Fixed MFP vector (fix lot of programs).
- Removed OMS support.
- Fixed bug in CPU, instructions timing.
- New Audio support (no samples yet).
- Fixed shifter timing.
- Better control of the emulation speed.
- Added an 'Auto frame' option to help the emulator when the CPU is too slow.
- Fixed several bugs in the FDC emulator (Drakken,...)
- Fixed the keyboard synchro code.
- Fixed the real time clock (Captain Blood).
- Most of the code has been rewritten.

#### Notes:

- Direct screen drawing is still present (and much faster) but is NOT recommended under OS X.
- You cant 'hog' all the CPU under OSX.
- Quickdraw performances are not great with OS X, NoSTalgia runs faster under OS 9 in Quickdraw mode.
- NoSTalgia is too slow in 'Millions Colors', switch to 'thousands Colors'.
- The emulator may be slower when 'max speed' is enabled because it doesnt skip any frame in this mode.
- There is no 'Full screen mode' with OS X.
- You cant hide the Mac mouse with OS X.

#### **Version 0.7**

- Multiple partions (TOS 1.4 or better).
- New IKBD code preventing data overrun in the emulated code.
- New hard disk driver (Ver 0.4)
- Improved stability.
- Bugs fixed in the pending interruptions routines.

- Fixed internal debugger.
- Run MagiC 6 and NAES 2.0 (with some limitations).

### **Version 0.6**

- Mode VDI 640\*400\*16 colors.
- Added CPU cycles counting.
- Correction bug TimerD.
- Navigation Service Support (Système 8.5).
- Apparence Manager Support (Système 8.0).
- More precise mouse.
- New Hard disk driver.
- Configurable Joystick.
- Bugs corrections.

### **Version 0.52:**

- NoSTalgia 0.52 runs MagiC, the multitasking OS for the ST.
- Better speed control.
- Better mouse handling .
- Extended Bus Error and Address error detection.
- Real Time clock.

### **Version 0.5:**

- MIDI via QuickTime (OUT only) and via OMS (IN & OUT).
- New MFP Emulator (better rasters).
- Printer Port redirected to a file.
- Mixed Mode (Low/Medium) for Magnetic Scroll games.
- Raster in medium resolution.
- Bug correction in the MSA extractor.
- Better Shifter Emulator (Lemmings,...).
- IKBD Mode 'Mouse Key' de l'IKBD for Defender of the Crown.
- Option 'Slow FDC'.
- Better stability of NoSTalgia.
- Bugs corrections.

### **Known bugs:**

- Some sampled sounds are not played.
- It may be necessary to restart the ST after having activated the sound.

### **Software status:**

This application is **freeware**, but feel free to send something in order to encourage me to keep development going. For example:

- Technical docs,
- A postcard,
- A bottle of wine or beer.
- \$10.

The software can be freely duplicated and distributed provided that the present 'readme' file is included. If you wish to distribute this software on CD-ROM, please contact me first so I can send you the latest version of NoSTalgia.

The hard disk driver ('hdd.prg' and 'cart.img') is **shareware**: if you use it, please send me \$10.

### **How to contact me:**

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