## MacWB

Daniel Balster

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## **Chapter 1**

## MacWB

#### 1.1 MacWB 0.2 Documentation

MacWB 0.2

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Introduction What is it all about ?

README ME NOW You have been warned !!

English ? Grammar and Rules Distribution Legal Information Requirements Describes your system requirements Installation How to install and uninstall Configuration How to prepare your system Gadgets & Windows Explains the gadgets and window functions Technical Information The magic behind it.. Note to developers Read this if you want to add things Future What to do in the future Known Bugs :-( take a look at this :-( Author How to contact the author History Changes since the last version Versions Versions for...

#### 1.2 Introduction to MacWB

Introduction to MacWB

If you have to work with your computer every day and you see every morning the same picture on the screen - you will get sad of it. I'd like to work with an amiga, but I like also very much the design of the Apple System 7.x window shapes, the complete GUI design of Windows 95 (but only the GUI elements design - the OS below is absolute sh\*t) and so on. Several months ago I've invented Workbench95; a silly system hack that introduces the Windows 95 style partially to your Workbench. Based on that code I've started last week a quick and happy coding session with the result of MacWB. MacWB is the successor of Workbench95 and is more stable than the old hack. It completly replaces the well known window shapes of the Workbench windows and changes the design slightly to a ... Mac window.

#### 1.3 Legal Information

Software Category = Freeware

Distribution

This package may be freely distributed through any non-commercial channels. All software resellers that charge an extra fee for the file transfer to you are not allowed to distribute this software, except the following: Aminet, Fred Fish, Meeting Pearls. This includes all types of media, like CDROM, DISK, NET, BBS, ... If you want to sell this software, please contact the author for a written permission.

## 1.4 Warning

#### WARNING

AS TO THE NATURE OF THIS PROGRAM YOU HAVE TO BE INFORMED THAT THE AUTHOR WILL TAKE NEI-THER ANY WARRANTIES NOR ANY RESPONIBILITY FOR ANY DAMAGE AND/OR LOSS OF DATA/EQUIPMENT RESULTING FROM THE USE OF THIS SOFTWARE. THIS SOFTWARE IS PROVIDED "AS-IS" AND IT "WORKS AT MY PLACE".

## 1.5 Requirements

Requirements

- Versions for 68000, 68020 and 68020+fpu are available (extra heavy optimized versions also available, but I don't trust optimizers at all)

## 1.6 Installing Instructions

Installing to the system

First, there is no installer script as you should not just click and install this program without thought.

MacWB consists only of one executable binary. Copy it to a location in your path, I suggest C: is a good place for it. If you want to use it permanently, edit your S:USER-STARTUP file and add this lines:

;BEGIN MacWB hack run <>NIL: MacWB ;END MacWB hack

There is a font included in this archive, YOU NEED this font or MacWB will refuse to work. Just copy the contents of the "fonts/" drawer to one of your FONTS: location. Read on here about the font! Removing from the system

Just delete the binary and remove the S:USER-STARTUP entry, then reboot. It is possible to remove the hack from the system while its running: Just install PatchControl or SetMan and signal a CTRL-C to the program. WARNING! YOU HAVE TO CLOSE ALL WINDOWS USING MAC-GADGETS BEFORE OR YOUR SYSTEM \*WILL\* CRASH! Removing a patch from the system is not a wise decision - better delete its invocation and reboot.

## 1.7 Configuration

Preparing your system for the use with MacWB

MacWB is a hack and does not like to interfere with other hacks. Check the following list and try to fix all this topics before using MacWB:

MacWB does not like slider patches for the Workbench:

- If you are using MCP you have to switch off the "SysIHack/Props" (MCP V1.11)
- I'm sure sysihack/urouhack etc. will confuse MacWB. Please tell me! I haven't tested it...
- MacWB should be the last hack of Intuition hacks
- MacWB DOES NOT WORK TOGETHER WITH WORKBENCH 95 !!!!!!
- Because it is possible to start MacWB twice or more you should avoid this.
- Read the BUGS section

## 1.8 Gadgets and Windows

How this art gallery works

Each button starts a MultiView utility with a picture. You should have MultiView in SYS:utilities or you won't see anything. All launched MultiView's are new processes, so you can launch as many as you may want to launch. (You have to close all these MultiView's manually).

Have a look at the "original"

The pictures A to C are showing snapshots of an original macintosh environment. Picture A is showing an activated window with scaled sliders. Have a look at the top placed titlebar: you see a centered title, the small rectangle to the left is the CLOSE gadget and the gadget in the opposite direction is for ZOOMing the window. The whole striped area of the titlebar is known as the dragbar; click into it and move the mouse to drag the window. The window is active; this means it has high detail rendering. Just compare it to picture C! The small gadget in the lower right corner is known as the SIZE gadget.

A An active Macintosh window with sliders B An active Macintosh window without sliders C An inactive Macintosh window (gadgets aren't rendered)

Now some impressions of what it looks like"

And now your first looks to the amiga versions. Note that the sliders are not ready yet and that not everything matches exactly the macintosh original! MacWB removes the arrow gadgets, this is not a bug. The sliders also are getting 'pumped', so they are a bit bigger than the original (the mac has fat sliders, too).

D The Workbench RENAME dialog box (active) E The Workbench RENAME dialog box (inactive) F The Workbench EXE-CUTE dialog box (active) G The Workbench EXECUTE dialog box (inactive) H An active Workbench window with full sliders I An inactive Workbench window with full sliders J An active Workbench window with scaled sliders K An inactive Workbench window with scaled sliders

Some additional information pictures

The following pictures are showing miscellaneous features or bugs I've encountered. This list will grow in the future (not the number of bugs, the number of pictures! :-)

L The Workbench DELETE dialog box (using RTPatch) M This was the hidden patch (removed)

### 1.9 Technical Informations

#### **Technical Informations**

Several patches to intuition gadgets are available. They all patch the sysiclass, intuitions image generator. Instead of let sysiclass create the images, the patches create them.

I'm patching the OpenWindowTags() function of Intuition and comparing the taskname to "Workbench". If and only if the calling task is the Workbench, I'll start scanning the parameters and start changing it a little bit. The new gadgets are private BOOPSI classes; the old gadgets were intercepted. After deleting/filtering the parameters I call the original function and AddGadget() the BOOPSI objects to the window (I could use the WA\_Gadgets tag for this). All additional data is stored in a special memory node which is linked to the window's RastPort->RP\_User. Extensive checkings and experiments to a possible O(1) location ended in this pointer (for the first). The sliders are getting pumped, arrow gadgets being removed, and so on.

However, it is not very clever to assume undocumented things. But since the Amiga is dead (officially :-) we could not expect a new version of intuition.library and so for now its behaviour is deterministic.

#### 1.10 Developer Informations

**Developer Informations** 

I've included the sourcecode in this archive, mainly for debugging reasons. Please tell me what you think and what should be changed.

I'm also searching for some guys writing me some BOOPSI classes for custom gadgets, in other words:

- send me code that draws a nice image (search for IM\_DRAW in the code)
- send me pictures with nice ideas of a future amiga OS (try to put the pictures onto a web page and send me the links, please)

- send me QUICK filling routines. I'm searching for some LR-gradient code, that could fill a rectangle with a LR-gradient using a supplied set of pens (I want to fill the titlebar with gradients...)

- more ideas...

As this hack should be general enough to change the workbench windows to each possible style, it would be nice to think about an external module system for different kind of styles.

#### 1.11 Bugs

Hard weighted bugs

- if the WB screen has an incorrect ratio (like WB in "Lores") the prop sliders are mangled

- the "secret patch" made the patched software unusable :-(

Soft weighted bugs - sometimes the CLOSE/ZOOM gadget aren't refreshed (just reactivate the window)

- the old window title sometimes flickers through the gadgets (intuition tries to render the title :-(

- EasyRequestArgs requesters (DELETE, COPY-REPLACE, ..) have cosmetical errors.

- reqtools requester look ugly (not my fault...)

#### 1.12 Contact

Contact the Author

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Please: emails should have a topic beginning with "MACWB -"!

#### 1.13 About the font

#### THE CHICAGO FONT

I'm not quite sure who created this font, it lives since 1990 on my harddisks. It was named "palatin" (surely the wrong name) and I renamed it into "chicago". This font has no german "Umlauts"! I was to lazy to insert them. If you could do this for me and send me the font back...

#### 1.14 Language

Do you speak english ?

Sorry, english is my third language - please excuse all the bugs. If someone could fix them and send this documents back to me.. ?

#### 1.15 Future

Future

- Optimize the WUD node and remove unnecessary things from it

- Overwork the color allocation
- Remove all absolute coordinates/dimensions from the code to provide a real scalability
- Optimize the rendering, Try using Polygone routines

- Export all custom classes to external libraries (or one class library using a Which(ULONG) function). Since this would make no sense, this runs on low priority

- Start the slider rework (lets check if they are created using BOOPSI)

### 1.16 History

History

Version 0.2

- "secret patch" removed (was nonsense at all) - extensive MungWall/Enforcer testing - Some pointer checking added (causing ENFORCER-READ hits) - changed the location of the WUD pointer to Window->RastPort->RP\_User - some chapters to the guide added (dist/hist) - intuition deadlock removed

Version 0.1

\*\* initial release \*\*

#### 1.17 Versions

Versions

- MacWB.000 plain 68000 - MacWB.000+optimized with heavy optimizing - MacWB.020 68020 and higher - MacWB.020+fpu FPU support - MacWB.020+optimized 020+, FPU and heavy optimizing