## **ShowMem**

**Thomas Richter** 

ShowMem

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ShowMem

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## **Chapter 1**

## **ShowMem**

### 1.1 ShowMem Guide

ShowMem Guide

Guide Version 1.08 ShowMem Version 2.08

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### 1.3 Installation

The "Installation" of ShowMem is in fact very easy:

-> Just copy it whereever you want it.

### 1.4 Configure ShowMem

There's not much configuration to be done, but you may customize the colors used for the memory display, as well as the initial position of the window.

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Select the "ShowMem" icon, then select "Info" from the workbench menu to adjust the tooltypes; the following tooltypes are recognized by "ShowMem":

#### LEFTEDGE:

The initial left edge coordinate of the memory display window.

TOPEDGE:

The initial top edge of this window.

WIDTH:

The width of the window, in pixels.

HEIGHT:

The height of the window, again in pixels.

The next options allow to setup specific colors for the different memory types available. At least V39 of the AmigaOs is required for these options.

#### ALLOCATED:

The color to be used for allocated memory, given as red, green and blue components of the color in hexadecimal notation. 0xffff is maximum intensity of the color, 0x0000 is minimum. ShowMem will try to find the closest possible color available, which may or may not very close if the screen offers only very few available pens.

This color defaults to white.

FAST:

The color for available "fast" memory. This defaults to blue.

CHIP:

The color of "chip" memory. This is by default black.

OTHER:

The color of all other kinds of memory, defaults to red or grey.

TEXT

The color for the text in the memory display, showing the start address of the memory. This text is, by default, printed in the same color as the free memory within this memory block.

FILL:

The color under this text. By default identically to the color of allocated memory blocks.

#### 1.5 Overview about ShowMem

ShowMem is a tiny tool that shows the memory layout, i.e. shows which chunks of memory are used and which are free.

Once you have installed ShowMem, double clicking on its icon opens the memory layout window. The window itself is split into several (usually two) vertical regions, one for each type of memory available. The start address of each memory node is printed on top of it.

Below the number, the available memory chunks of this node are displayed. A (usually) white part of the window indicates a used part of the memory, a colored part encodes a free (still available) part of memory. The color used indicates the type of memory (the colors printed here are due to the CBM standard colorset of the workbench 2.0 or newer):

White: Used memory

Blue: Fast Mem Black: Chip Mem

Grey: Unknown memory.

You may also have a look at the picture.

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### 1.6 History

Version 2.00: First public AmiNet release.

Version 2.01: Added the tooltypes LEFTEDGE, TOPEDGE, WIDTH, HEIGHT for free configuration of the window and its position.

Version 2.02: The 2.01 passed illegal parameters to the gfx.library RectFill() vector. Fixed.

Version 2.03: Due to a forgotten flag, the AUTOADJUST feature of the window did not work. Passing too large parameters to width and height is now respected. Included again the picture.

Version 2.04: Fixed a stupid bug that could have caused enforcer hits in very rare cases (in case the number of MemHeaders changed while ShowMem was investigating this list). Added a dummy BeginRefresh/EndRefresh to be 100% Intuition conformal. Re-arranged the AllocMem/FreeMem patches to be able to run ShowMem with MemSniff installed. However, please note that in general MemSniff DOES NOT allow any patches on top of its own patch, ShowMem is an exception.

Version 2.05: Made the colors configurable by tooltypes.

Version 2.06: Due to round-off errors, ShowMem might have messed the window border. Fixed.

Version 2.07: The bottom border memory count could run into the window by as much as one pixel for larger fonts. Fixed.

Version 2.08: Due to some math overflows, ShowMem failed if just too much memory is in the system. This has been fixed as ShowMem uses now even 64 bit math for some calculations. Remember that this program was written in 1993....