07e609c0-0

Tinic Urou

COLLABORATORS

	TITLE : 07e609c0-0		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY	Tinic Urou	March 1, 2023	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

07e609c0-0

1.1   TinyMeter V4.0 AmigaGuide documentation

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 |  | | |__|  |____|__|__|  |____| |  |  | |____|__|  |     |__||_||____|
  `__’ `__’  `__’       `__’     `__’       `__’
----------------------------------------------------------------------
```

```
              ~~Introduction~~~
                What’s that thing?

              ~~~What’s~new?~~~
                New Features and bugfixes in 4.0!


              ~~Requirements~~~
                Ya need a Draco!

              ~~Installation~~~
                How to get it on your harddisk

              ~~~~~~Usage~~~~~~
                How do I use TinyMeter

              ~~~~~~Tips~~~~~~~
                Some instructions for the configuration

              ~Troubleshooting~
                If you’re having some problems

              ~~~~~~Bugs!~~~~~~
                They’re always in...


              ~~~~The~Author~~~
                That’s me
```

```
        ~To~Do~/~Future~~
           TinyMeter will become the ultimate tool!

        ~~~~Thanks~to~~~~
           Greets and used software.

        ~~~~~History~~~~~
           Very interesting!

        ~~~Legal~Stuff~~~
           Hey this is EMailWare!
```

```
--------------------------------------------------------------------------
 01 Jan. 1996                                         © 1995-1996 by Tinic Urou
--------------------------------------------------------------------------
```

1.2   What is TinyMeter

TinyMeter 4.0 is a tool to show the memoryusage, the volumesusage, the
date&time and the cpu usage, with useful informations which are selectable.

Look at the preview~picture

Features:

– Shows base-ram after bootup. It is good to know how much memory
  the startup-tools take and if the applications really freed all the
  memory or if your bbs got uploads etc.

– Uses the ScreenNotify.library to automatically detect the changing
  of screenmode or font on the Workbench. On any other PublicScreen
  closing of the screen is recognized.

– Can be opened on any PublicScreen.

– snaps the actual Workbench background if desired

– many options for the design/look

– Can use a background picture via Datatypes.

– Font sensitive

– displays free memory with c-style formatting codes to be
  very flexible.

– its a commodity

– etc 8)

1.3 Installation

```
Automatic:

Use the Installer icon


Manual:

- Copy "TinyMeter" and "TinyMeter.info" to WBStartup.
- Copy "Prefs/TinyMeterPrefs" and  "Prefs/TinyMeterPrefs.info"
  to SYS:Prefs.
- Copy  the  contents  of  "Libs"  into  your  LIBS:.
- Start "TinyMeter", setup desired size  and  position.  Press
  "S" to save these settings.
- Setup the other configurations by starting "TinyMeterPrefs".
```

1.4 Usage

```
                 Usage of "TinyMeter":

MouseAreas:

    Upper left corner:      End TinyMeter
    Lower right corner:     Size TinyMeter  by  holding  the  left
                            mousebutton
    Other Areas:            Move TinyMeter  window  by holding the
                            mousebutton

Supported Keys:

(NOTE: Do not forget to click first on the TinyMeter window before
     you use these keys ! )

    "q" or "Q"              Quit TinyMeter

    "s" or "S"              Saves window-position and size

    "f" or "F"              Flushes the memory like "c:avail flush"
                            All unused libraries, fonts etc. are
                            removed from the memory.

    "p" or "P"              Start preferences program.
                            NOTE: TinyMeterPrefs must reside in
                            SYS:Prefs/ to use this function.

    RIGHT MOUSEBUTTON       redefines  base  ram  to  the  actual
                            memoryusage


Usage of "TinyMeterPrefs":


    TinyMeterPrefs supports the bubblehelp from MUI3.1. Most of
```

the gadgets have a little help.
Simply leave the mouse over a gadget for a while, and the
help will appear.

Any other questions? Write
me
.

1.5 The Author

- -- --- -- --- -- -

To contact the author email to:

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or
in5y264@public.uni-hamburg.de

(the old address tinic@tinic.mayn.sub.de is not valid anymore!)

or snail to:

Tinic Urou
Gaertnerstr. 15
20253 Hamburg
- GERMANY -

If you want to talk on IRC, leave me an email.

- -- --- -- --- -- -

1.6 Legal Stuff

TinyMeter 4.xx is GIFTWARE.

If you think this program is good and you regulary use it then simply
send me a little gift of your choice as a reward for my hard work...
I'd also like some feedback from the users via email... 8)

Copyright

TinyMeter is written and copyright © 1994-1995 by Tinic Urou. No parts
of this program may be modified (patched, recompiled) to a new program
named TinyMeter.
Ideas, techniques and the interface from this program can be freely
adopted to other programs.

Disclaimer

The author is in no way liable for any changes made to any part of the
program, or consequences thereof as he is in no way liable for damages

or loss of data directly or indirectly caused by this software.

Distribution

Neither fees may be charged nor profits may be made by distributing
this piece of software. CD Manufactures are specifically granted the
right to include this program on CD collections, as long as they are
for the Public Domain.

1.7 History

```
1.0 (10.6.1995) - First public release

1.1 (14.6.1995) - Added screennotify.library support
                - Added DOUBLEBORER
                - Added RIGHT MOUSEBUTTON-support

2.0 (24.6.1995) - code completly redone in GNU C.
                - Added Preferences program.
                - Added Prefsfile and removed Tooltypes.
                - No longer uses prepainted picture.
                - Now fontsensitive.
                - Now the window is sizeable.
                - Added "S" to save window settings
                - Added realtime window-moving and -sizing

2.1 (27.6.1995) - fixed some bugs in publicscreen-handling
                - made code smarter
                - shows now free amount of memory
                - refresh interval can be set
                - screennotify.library can be turned off

2.2 (10.7.1995) - Added Test Button
                - removed iff.library usage and replaced
                  it with datatypes.library
                - Largest block display
                - free mem display
                - removed bug displaying big fastmem values
                - optimized code
                - Added installer script

2.3 (19.7.1995) - Preferences now work on a 640x256 screen
                - Preferences texts redone
                - CANCEL button does now what he should do.
                - fixed an internal bug in the message system
                - Close button does now what he should do
                - added flush memory key
                - Backgroundcolor of gauge now selectable
                - rework on the documentation

3.0 (01.8.1995) - only works with OS3.0+ since 2.2, sorry!!
                - removed nasty bugs with 68040 processor
                - added 3D Gauges
                - added Window to Front and Window to back option
                - added NoBorder option
```

                            - Position of window can now be set manually
                            - Texts for "CHIP", "FAST" & "RETINA" can now be
                              set manually
                            - introduced c-style formatting codes for numbers
                            - Largest block & mem line removed and replaced
                              with InfoLine_1 and InfoLine_2
                            - Bordersizes selectable
                            - background color of TinyMeter selectable
                            - changed way how to display gauges completly,
                              so its now possible to make more gauges in future
                            - Total Mem gauge added
                            - Retina Memory added
                            - added tiling of background picture
                            - No Base mem display-flag added
                            - Border for gauges can be turned off
                            - Space between gauges now selectable
                            - "Q"-key added to end TinyMeter
                            - slightly optimized the code.
                            - added volumesusage
                            - added 'P'-Key to run preferences program
                            - fixed bug when screennoify was selected and
                              used
                            - added Refreshtime for volumes
                            - normal window-moving added
                            - snap from TinyMeter added

    3.1 beta 1
        (06.8.1995) - Colorrequester did not work with screen with
                              more than 16 colors, it simply crashed (Oops!)
                            - volumes which are not available are now ignored
                              no more requests!
                            - Colorrequester now uses reqtools.library IF
                              available
                            - ScreenNotify-selection-bug removed.
                            - added Digital Clock + some fonts for this
                            - all displays are now buffered using an own
                              bitmap. No flickering anymore!
                            - Gauges can now be turned off, keeping the texts
                              with throughshinig background
                            - A MinSize for the window is now defined,
                              since the machine crashes using the
                              BltBitMapRastPort with negative numbers
                            - removed some unnecessary time_requests
                            - memory, volumes and clock position can now be
                              set to: left, right, center
                            - rework on the volumes routines
                            - TinyMeter now uses himself a priority "-3"

    3.1 beta 2   - redone some of the code, now smaller
                            - tried to fix a Enforcer hit.
                            - tried to fix the trashing on a A4000/040
                            - made ClipBlit sure, all coordinates are checked.
                            - made RectFill sure, all coordinates are checked.

    3.1 beta 3   - tried to fix a Enforcer hit.
                            - splitted the source to speed up compiling.

3.1 public beta
    (30.08.95) - finished MUI-Preferences program.
                - added "o" for occupied size in the textformat.

3.2 public beta - fixed a big bug saving the prefs in TinyMeterPrefs
    (01.08.95) - "hh:mm" "hh:mm:ss" exchanged
                - added possibility to select y-size of gauges.
                - removed IDCMP_MOUSEMOVE in the main handler,
                  now temporaly activated when using Opaque-effect
                  and clicking the mousebutton.
                  That should fix some of the lockups...
                - moved color-page into design-page.
                - magicwb-demo-prefs did use my System: Assign (;^))
                  changed it to SYS:
                - Installer-script produced garbage
                - used shortrel to reduce size and to gain speed

3.3 (05.09.95) - TinyMeter is now a commodity
                  supported events:
                     · Disable/Enable
                     · Kill
                - fixed a bad behavior, when "Workbench" was selected
                  as PublicScreen, screennotify was not activated.
                  This is now checked.
                - DatatypeObject is now freed after the background
                  has been drawn. This slows down resizing,
                  but will save a bit of memory
                - painted some new icons
                - rework on the guide-file

3.31 (08.09.95) - a datatypeobject was alloced two times and only
                  freed one time, that could mean a big lost
                  of chipmemory
                - compiled with gcc 2.7.0 + option "-fbaserel". That
                  saved 2KB!

3.4 (12.09.95) - added snapping of Workbench-background, notification
                  for WBPatterns.prefs was also added, to use pattern
                  switchers like MagicSelector.
                - code for opaque-effect was removed, its not neccesary
                  I think.
                - Volume-Indent was saved wrong by TinyMeterPrefs.
                - thousand seperators now use a "," instead of a "."
                  To get a "." you'll have to use the new option "T".
                - added possibilty to select number of colums.
                  that was really a hard work!!
                - redone bacground code, TinyMeter will again not free
                  the datatype-object until TinyMeter is quitted.
                  Some persons reported a pen problem...

3.5 (17.09.95) - fixed a VERY big bug in the textdisplay routines.
                  I think, they caused the Enforcer hits...
                - added locale.library support, some work to do...

3.51 (22.09.95) - a bad PortName was created. Caused some Enforcer Hits.
                  Thanks to Chad Randall for the tip...
                - Fixed a display bug.

```
3.52 (05.10.95) - Two ports were initialized with the same name.
                  Caused problems, since I didn't checked
                  if the allocation was correct. (poor programming 8))
                  They were problems with WarpSPELL, PPaint etc.
                - clock can now be above the gauges
                - NoBaseMem-function does now work correctly
                - If TinyMeter was not running, snapping gave bad coords.

3.6  (09.11.95) - TinyMeter caused Enforcer hits, when the clock was
                  turned off.
                - added system idle gauge, code was from cpuload2
                - AM/PM format added
                - complete sourcecode added to the archive... Look at
                  the bad code 8)

3.62 (16.11.95) - Disabling the clock and date reworks again...
                - Problem with white gauges should have disappeared
                - added ShadowText (Thnx to 'Nudel' for the suggestion!)
                - Color selector reworks under MUI3. Muimaster.library
                  version 11 is checked...

4.00b(29.12.95) - Entirely rewritten. Now uses own boopsiclass for the
                  gauges.
                - Clock was removed.
                - Infolines were removed.
                - New Preferences system, supporting own settings for
                  every gauge.
                - Own Font for every gauge.
                - Gaugetypes for largest blocks added.
                - Historymeter added.
                - Bordertype "Simple" added
                - Gaugetype "Space" added
                - Penallocation system added.
                - Fixed Always to Front
                - Fixed Always to back changing it to BackDrop...
                - Worked a bit on the speed.
                - Completly new preferences program using MUI3.1 features,
                  too many news to mention them here 8))

4.01 (01.01.96) - readded a clock-function
                - Changed the design of Historymeters
                - Removed some bad Enforcer hits from TinyMeterPrefs.
                  (They caused the crashes at startup)
                - Speeded up some functions, esspecially the handler
                - Screennotify now works correctly.
                - Removed nearly all "SetGadgetAttrs" and replaced
                  them with a SetAttrs-RefreshGlist pair, because
                  it caused lockups every second. A really bad behavior
                  of gadgetclass!! Even the orginal RKM BOOPSI demos
                  contain this problem...
                - fixed memorytrashing by the gauges.
```

1.8 Bugs!

– I didn't have the possibility to remove all Enforcer hits.

– TinyMeterPrefs can't be run from TinyMeter using 'p', since
  TinyMeterPrefs does not support own stack allocation until
  now... 8((

– MUI Colors aren't supported yet. Please do not use them when you
  select the Colors with the "Pen adjust". Use instead "ColorMap" or
  "RGB"!

– There are many grammatical errors in the texts. Did them in a hurry.

If someone has any idea how to locate the errors or wants to help me,
simply contact me, or send me a corrected version. 8))

Please write
          me
          , if you find any bugs!!!

TinyMeter V4.00beta has been sucessfully tested under these configurations:

```
A2000      OS3.1   68030   6MB Ram     Picasso
A4000      OS3.0   68030   12MB Ram    AGA
A1200      OS3.1   68020   6MB Ram     AGA
```

1.9 Whats new in 4.0?

Changes since 3.62:

Main program:

– code completly redone. It should be much more stable now.
  Introduced an own BOOPSI-class for the gauges.

– Every gauge can have its own settings. Use any Font in any gauge,
  use any color in any gauge!

– Gauges can freely moved in their order!

– Intruduced new type of gauge: Historymeter. Have a look at it!

– CPU usage now can take advantage of the "Executive"-package.

– The infolines were removed, since no one really used them.

– Introduced the possibilty to use own allocated pens.

– "Always To Front" does now correctly.

– "Always To Back" was replaced with the "BackDrop" option.
  The TinyMeter window can now always stay in the background.

– Added Borderoption "Simple".

- Space between gauges can now be selected in horizontal and
  vertical direction

- Colors of dark and bright edges can now be selected.

- Background of gauges can now be throughshining.

and many more...

Preferences program:

- Code completly redone. Now takes advantage of all MUI features,
  especially the object orientied design.
  Supports some of the new features of MUI 3.1, like drag&drop,
  bubble help, the new pen system & some of the new classes.

- Gerneral Settings can now be saved ro a file. Gaugedesigns
  can also be saved. Try the menus...

and many more...

Have also look at
          History

1.10   Requirements

To run TinyMeter, you will need:

- Any Amiga with AmigaOS 3.0+

- MUI 3.1+
  MUI is only required for the Preferences program!

- enough memory 8)

1.11   Thanks to

Thanks must go to:

- Aristotelis Grammatikakis for his endless suggestions
  and for the hard testing 8))
- Matthew Wells for his Enforcer- and bug-reports
- Jens Kreiensiek for the "retina_lib.fd" and for the testing

and to all the others who did write me, hopefully the list is complete:

- Stefan Thomas Pazourek   - Garnet Graham
- Ralph Wermke   - Donald Arthur Maxwell
- Nicholas Richards   - Tom Heeren
- Ed Hoffmann   - Hendrik Hielscher
- Jens Maertens   - Feris
- Ludwig Kamphendel   - Ron Shaw

```
      - Dan Zerkle                           - Thomas Meier
      - Dirk Wrocklage                       - Patrick Breuer
      - Olaf Groener                         - Ryan Thomas
      - Randy Gault                          - Remco van Hooff
      - Gary                                 - Eugenio Gori
      - Marius Sundbakken                    - Tommy Ebbessen
      - David Bump                           - Nils Goers
      - Dan Brooke                           - Chad Randall
      - Domenico Barbetto'                   - John Hertell
      - Leo Davidson, alias 'Nudel'          - Andre Wywra
      - Bert Heise                           - Uwe Ploss
      - Daniel Schulz                        - Marcin Orlowski
      - Marius Sundbakken                    - Marco Fraatz
      - Simon Stelling                       - Gregg William Riedel
      - Louis van Breda                      - Nikolai Zizka
      - Robert J. Dennison                   - Artuu E.Kärpinlehto
      - Ivan Wheelwright                     - Fredrik Elmqvist
      - Wolfgang Loske
```

```
    TinyMeter was written using the following software:

    - gcc 2.7.0
    - DICE 2.06
    - GoldED 3.13
      ( Best programmers editor ever! )
    - Enforcer + gccfindhit
    - CodeWatcher
      ( Fine tool to detect unfreed memory, devices, fonts etc.)
    - PhxAss 4.20
      ( Nice Assembler! )
    - PPaint 2.1
      ( Nice FreeWare |^)
    - Heddley V1.1
    - MUI 3.1
```

```
    TinyMeter was developed on this system:

    - an Amiga 4000/0EC30/882/25Mhz
    - OS 3.0 (39.106)
    - 12 MB RAM ( 2MB Chip, 8MB 32Bit Fast, 2MB 16Bit Fast)
    - a GVP Host Series II - Adapter with Guru Rom.
    - a Toshiba 4101 CD-Rom ( always a Aminet CD in :) )
    - 4 Harddisk with 52MB, 240MB, 420MB and 540MB
    - a US-Robotics V.34 Sportster modem
    - a Zyxel 1496E+ modem
    - a Canon BJ200ex printer
    - a ScanDoubler (to see some nice demos, like ZIF from Parallax)
    - a shitty old VGA-monitor on which I nearly can't read a topaz.8 font.
      owned this one at "V*bis" (they're LAME there, but cheap)
    - a big television and a nice sat-receiver to look Babylon5 and Voyager.
```

1.12 To Do / Future

These are the features I want to include in future versions:

```
1      fixing bugs 8))
2.     speedoptimizations (I am really at the limit now 8-( )
3.     real commodity-hotkeys
4.     add formatting code for the differences between values,
       f.ex. the exact difference between base-ram and actual-ram.
5.     perhaps informations about other system vars, especially
       in the infolines:
           - AmigaOS version
           - number of used libraries
                       used publicscreens
                       used ports
                       used devices
                       running tasks
           - processor-type
           - co-processor-type
           - gfx chips
6.     more memorytypes.
7.     lets see...
```

1.13 Troubleshooting

These are the most asked questions:

```
Q: TinyMeter produces Revoverable Alerts on my machine.
A: 1. Check, if you really have "screennotify.library" in your LIBS:
      assign.
   2. Remove "retina.library" from your LIBS: assign if you don't have
      a Retina-GFX card.

Q: TinyMeter 4.0 produces garbage on my machine.
A: Try deleting "ENV:TinyMeter" and "ENVARC:TinyMeter" and remaking
   the prefs.

Q: The installer quits with a error when he installs the backgrounds.
   Why?
A: You surely already use one of my supplied backgrounds on your
   Workbench. Simply delete them in the ArtWork/Patterns directory
   and restart the installer.

Q: TinyMeter eats up much processor-time on my machine. I am using a
   68000.
A: Try to select a higher volumerefresh (> 30secs) and memoryrefresh
   (> 10 secs).

more to follow...
```

1.14 Configuration Tips

---   Fonts

　　　· GENERAL: If a font seems to be placed too high or too low in
　　　　the gauge, take a tool like "FED" and change the baseline,
　　　　which is not correct in many fonts. Best examples for good
　　　　baseline choice are the fonts from the MagicWB-package
　　　　(XHelvetica, XCourier, XEN etc.)

　　　· GAUGES: Preferably use fonts with a small width. Otherwise
　　　　the formatted text or the label cannot be displayed or the
　　　　Windowsize will be automatically adjusted.

　　　· GAUGES: Sometimes, the font will be drawed over borders,
　　　　which doesn't look good. Simply selected a higher height for
　　　　the gauges.

　　　· CLOCKS: Please use fixedwidthed fonts for the clock, or a
　　　　font where the numbers all have the same size, since only the
　　　　real width of the text blitted.

---   Formatting texts

　　The format specifier is scanned to determine what to show on
　　the display. Characters are copied to the output until a % is
　　encountered. %% indicates a literal '%' character. Otherwise,
　　the % is followed by a control sequence that tells TinyMeter
　　what to display.

　　Gauges and Historymeter:

　　　%[Options]d - Free bytes/amount
　　　%[Options]b - Free base bytes/amount
　　　%[Options]p - Free percent
　　　%[Options]a - total installed

　　　The options (Note, that the following order must be
　　　　　　　maintained if you use more than one option!):

　　　t - thousands seperator   3,566,345
　　　T - thousands sepeperator with a point   3.556.345
　　　k - show kilobytes   3472
　　　m - show megabytes   3
　　　o - show occupied size

　　　Examples:

　　　"%td KBytes free"   --->   3,566,345 Bytes free
　　　"%tkd free, %tkop used"   --->   3,472 free, 625 used

　　Clocks:

　　　The clock uses the "FormatDate"-function from the
　　　locale.libary:

```
%a - abbreviated weekday name
%A - weekday name
%b - abbreviated month name
%B - month name
%c - same as "%a %b %d %H:%M:%S %Y"
%C - same as "%a %b %e %T %Z %Y"
%d - day number with leading 0s
%D - same as "%m/%d/%y"
%e - day number with leading spaces
%h - abbreviated month name
%H - hour using 24-hour style with leading 0s
%I - hour using 12-hour style with leading 0s
%j - julian date
%m - month number with leading 0s
%M - the number of minutes with leading 0s
%n - insert a linefeed
%p - AM or PM strings
%q - hour using 24-hour style
%Q - hour using 12-hour style
%r - same as "%I:%M:%S %p"
%R - same as "%H:%M"
%S - number of seconds with leadings 0s
%t - insert a tab character
%T - same as "%H:%M:%S"
%U - week number, taking Sunday as first day of week
%w - weekday number
%W - week number, taking Monday as first day of week
%x - same as "%m/%d/%y"
%X - same as "%H:%M:%S"
%y - year using two digits with leading 0s
%Y - year using four digits with leading 0s
```