

CWMM & TimidityMCD

Netlabs CWMM

svn.netlabs.org/repos/cwmmclasses/trunk

TimidityMCD

<https://github.com/Greggk/MM-SOUND-TiMidity-MCD>

CWMM Tools

- ➔ Visual age 3.08 compiler
 - Nothing else will work because it uses Direct to Som
 - The exes use to be built with EMX but now are also built with VAC
- ➔ Som Compiler (Som toolkit)
 - emitc.dll is broken toolkit version needs to be back leveled
 - https://hobbes.nmsu.edu/download/pub/os2/dev/tools/toolkits/SOMObjects_Toolkit_2-11.zip
 - ECS disk 2

CWMM Tools

- ⇒ Kbuild make
 - Netlabs RPM repo
- ⇒ IBM toolkit
 - Netlabs RPM repo
- ⇒ Lxlite
 - Netlabs RPM repo

Libraries

➔ GBM.lib (only non-toolkit library)

- https://hobbes.nmsu.edu/download/pub/os2/dev/runtimes/graphics/GBM_1-76.zip
- Use the version in the lib.vac directory

Generate the SOM hh files

- ➔ somhh.cmd found in som\bin will generate these when run in som\include
- ➔ You need to set SOMBASE first
 - You can edit somenv.cmd in som/bin to fit your layout and run it.

Workplace Shell hh files

- ➔ wpabs.hh wpclsmgr.hh wpdataf.hh
wpfsys.hh wpppgm.hh wpshadow.hh
wpfolder.hh wpobject.hh need to be
generated somewhere in the include path
- `sc -%% -S100000 -shh -mnoqualifytypes -musexhpass -`
d. path to idl file
 - Either generate them in toolkit\h or in the CWMM include directories
 - I generated them in the som\include directory by copying the idls there and running sommhh.cmd in that directory

Building

- ➔ Set the variables in LocalEnv.cmd.tpl rename it LocalEnv.cmd and run env.cmd
- ➔ Review make.inc (in the root) changing paths as necessary
- ➔ Run Make.exe and it should all build

Known issues and fixes

- ➔ It fails to play Icecast streams
- ➔ <http://trac.netlabs.org/cwmmclasses/report/1>
 - These are the outstanding tickets 5 or 6 of the “fit and finish” ones have been addressed
- ➔ CD Digital audio is now supported Thanks Lars
- ➔ Support modern video formats (requires installing FFmpeg or Mplayer/SMplayer)
- ➔ Got TimidityMDC working again
- ➔ Modified an existing config tool for the ini settings

CWMM INI Settings

➔ Players ini keys

- CWMM->audioplayer
- CWMM->aviplayer
- CWMM->mpgplayer
- CWMM->mp3player
- CWMM->m3uplayer
- CWMM->mvidplayer

➔ Editors ini keys

- CWMM->audioeditor
- CWMM->m3ueditor
- CWMM->imageeditor

➔ They each take a string that is the executable file name (full path if not in PATH)

CWMM INI Settings 2

➔ UI ini keys

- CWMM->mmClsNoExtendedIconTitles->1
- CWMM->bNoPlayCtrlBlinking->1
- CWMM->mfldrMBoxDisplayTime-><time in milli seconds>
- CWMM->bNoMediaFolderTemplateShadow->1

➔ Drive scanning ini keys

- CWMM->useNewImgClsFeaturesOnCD->1
- CWMM->mmClsDontCheckDrives-><drive list>
- CWMM->mmClsDontReadID3OnDrives-><drive list>

➔ Misc ini keys

- CWMM->nomodvid->1

TimidityMCD tools

➔ Compilers and linker

- GCC 9.2 (Netlabs)
 - `cpp gcc gcc-c++`
 - `gcc-wlink gcc-wrc`

➔ Make Utility

- `Kbuild-make`

➔ Os2tk45

➔ git

- `git-core git-core-doc`
- `perl-error perl-git`

TimidityMCD Libraries

➔ libc-devel

➔ libcx-devel

- exceptq-devel

➔ libstdc++-devel

➔ os2me

- https://hobbes.nmsu.edu/download/pub/os2/dev/libraries/multimedia/MM4EMX_1-1.zip
- EMX developer kit
- Use the os2me.a library

Building TimidityMCD

- ➔ Open SH in the root run `./configure`
- ➔ Don't run automake
- ➔ Run `MCD.cmd` after editing it to make the paths match your layout. `Usr\include` must come before `toolkit\h`.
- ➔ Run Make
- ➔ To build the installer `cd warpin` and run `Build_Timidity.cmd`

Problems with getting it to work

- ➔ Timidity caused a restart of the desktop but no popup log entry and no trap dump. How to debug?
- Inability to get logging to work
 - This occurred when building with emx
 - Finding and opening files didn't work
 - Solution build with gcc 9.2 & add PMPrintf
 - Adding PMPrintf required generating an a.out import library (PMPrintf.a) using `emximp [-m] -o pmprintf.a pmprintf.lib`
- Couldn't find its config file.
 - Add an environment variable it could query to get the path
- Finally got a trap dump of sorts and determined there was a stack overflow
 - Enlarged the stack and it works

Installing

➔ TimidityMCD-2-10-4-1.wpi

- Place timidity_eawpats_r12.wpi in the same directory to install eawpats which are actually what creates the sounds
- <http://www.altsan.org/programming/ports/>
- The installer runs the multimedia installer and modifies config.sys
- Don't open Multimedia Setup until after a reboot
- Go to Multimedia Setup it should contain a sequencer tab. Select the tab and check the box Default sequencer. A desktop restart may be needed
- Open the sound folder and double click on a midi and it should play

Thank you

➔ Contributors

- Lars Erdman
- Steven Levine
- Alex Taylor

➔ Questions