Z-MIM

A Z-machine interpreter to allow the classic Infocom works of interactive fiction to be played on the Colour Maximite 2.

Written in MMBasic 5.05 by Thomas Hugo Williams in 2019-2020

• Z-machine technical advice was provided by Fredrik Ramsberg, co-author of Ozmoo.

'How do I run it?

- Copy all the files to A:/ZMIM/
 - to run from a different directory you need to edit the INSTALL_DIR string in src/main.bas.
- run "/zmim/zmim.bas"

'Story Files

The games/adventures for Z-machines are called "story files" and come in several versions z1, z2, z3, .. z8

Z-MIM currently only supports .z3 format as used by the classic 1980's Infocom games.

Z-MIM is distributed with four free story files that Infocom created:

- tutorial.z3 Introduction to interactive fiction and a little bit of Zork I
- minizork.z3 A nice big chunk of Zork I that was given away with the British Commodore users' magazine "Zzap! 64" no. 67. in 1990.
- sampler1.z3 Samples of Planetfall, Infidel, and The Witness.
- sampler2.z3 Samples of Zork I, Leather Goddesses of Phobos, and Trinity

Other story files can be found legitimately on the internet:

- hhgg.z3 The Hitchikers Guide To The Galaxy
 - http://www.douglasadams.com/creations/hhgg.z3
 - o link is to a file on the official Douglas Adams website.
- curses-r10.z3 Curses, An Interactive Diversion by Graham Nelson.
 - https://ifarchive.org/if-archive/games/zcode/old/curses-r10.z3
 - this is highly regarded.
- advent.z3 Adventure aka Colossal Cave, the original 350 points version ported to ZIL by Jesse McGrew, based on earlier work by Graham Nelson and Dave Baggett, with some elements of the original Fortran version restored.
 - https://ifarchive.org/if-archive/games/zcode/advent.z3
- catseye.z3 Cat's Eye, Miniventure #2 by Dave Bernazzani, release 3. "When your uncle Xevion asks you for a favor, you simply can't refuse. But what mysteries lie in his strange house?"
 - https://ifarchive.org/if-archive/games/zcode/catseye.z3
- dejavu.z3 Deja Vu, An Interactive Demonstration by Graham Nelson.
 - https://ifarchive.org/if-archive/games/zcode/dejavu.z3
- gussdeath.z3 Guss's Death, an Exercise in Interactive Fiction, by Kyle Frownfelter.
 - https://ifarchive.org/if-archive/games/zcode/gussdeath.z3

- moonglow.z3 Moonglow, Miniventure #1 by Dave Bernazzani, release 3. "What do you do when a mysterious orb crash-lands in your field? It's not your typical day at the farm!"
 - https://ifarchive.org/if-archive/games/zcode/moonglow.z3

The z3 compatible Infocom classic stories are:

- ballyhoo.z3 Ballyhoo
- cutthroat.z3 Cuthroats
- enchanter.z3 Enchanter
- hollywood.z3 Hollywood Hijinx
- Igop.z3 Leather Goddesses of Phobos
- lurking.z3 The Lurking Horror
- planetfall.z3 Planetfall
- plundered.z3 Plundered Hearts
- seastalker.z3 Seastalker
- sorcerer.z3 Sorcerer
- spellbrkr.z3 Spellbreaker
- wishbringer.z3 Wishbringer
- infidel.z3 Infidel
- zork1.z3 Zork: The Great Underground Empire Part I
- zork2.z3 Zork II: The Wizard of Frobozz
- zork3.z3 Zork III: The Dungeon Master

These files can be extracted from the several anthologies that have been published over the years, e.g. "The Lost Treasures of Infocom"

^¹Limitations

Z-MIM currently has the following limitations:

- 1. Only works with .z3 format stories.
- 2. No status bar:
 - type *status to see current location, score and moves made.
- 3. Non standard support for scripts:
 - user is prompted to write a script when the story starts.
 - type *replay to play-back a script.
- 4. No split screen, as used (optionally?) by Seastalker.
- 5. No sound support, as used (optionally?) by The Lurking Horror.

'FAQ

1. What is a Colour Maximite 2?

The Colour Maximite 2 is a small self contained "Boot to BASIC" computer inspired by the home computers of the early 80's such as the Tandy TRS-80, Commodore 64 and Apple II.

While the concept of the Colour Maximite 2 is borrowed from the computers of the 80's the technology used is very much up to date. Its CPU is an ARM Cortex-M7 32-bit RISC processor running at 480MHz and it generates a VGA output at resolutions up to 800x600 pixels with up 65,536 colours.

The power of the ARM processor means it is capable of running BASIC at speeds comparable to running native machine-code on an 8-bit home computer with the additional advantage of vastly more memory and superior graphics and audio capabilities.

More information can be found on the official Colour Maximite 2 website at http://geoffg.net/maximite.html

2. Will you be supporting the original Colour Maximite / Mono Maximite ?

Perhaps.

I started developing this on the original Colour Maximite and when I switched to the CMM2 I tried to ensure I kept the memory footprint small and used only backward compatible features (or those that could be easily translated).

However a good Z-machine implementation needs to run at more than 1000 Z-machine instructions per second. Currently Z-MIM runs at about 650 instructions per second on the CMM2 and early tests on the original Colour Maximite suggest that can only manage about 20 instructions per second. In conclusion it may be possible to port back, but most likely will be unplayable ... or at least comparable to playing it over a very slow dial-up modem.

3. Will you be supporting .z4, .z5, etc. story formats?

Perhaps. It depends on whether anyone finds this useful, or how bored I get.

4. What possessed you to write this in BASIC?

This is currently the only option on the Colour Maximite 2 unless you want to rewrite/replace the firmware to include an ARM Z-machine implementation.

5. How do I play these games?

Try playing "tutorial.z3" or read something like https://www.z-machine-matter.com/playing.html

6. How do I find out more about Interactive Fiction?

Visit https://intfiction.org/

7. How do I find out more about the Z-machine?

The Z-machine standard documents can be found at https://www.inform-fiction.org/zmachine/standards/

8. How do I contact the author?

The author can be contacted via:

- https://github.com as user "thwill1000"
- https://www.thebackshed.com/forum/index.php as user "thwill"