

Z-code Text Adventure Collection #2 for Commander X16

Many of us played and loved the text adventures (AKA interactive fiction) produced by Infocom in the 1980's. They were rich in story and puzzles, and contained some excellent writing. In the years since Infocom's demise in 1989, there have been a lot of good games produced using Z-code - the game format that Infocom was using. Many of these games run fine on the Commander X16, using a Z-code interpreter. There is currently only one Z-code interpreter available for the Commander X16 - Ozmo.

I decided to create a collection of some great Z-code games for the Commander X16. All in all, this collection holds nine games, which were initially released in 1997-2021.

If you want more of a background on Infocom and the game format they used, you should read the chapter about The Zork Machine at the end of this document. There is also a chapter about building other Z-code games for play on Commander X16 and, finally, a chapter about writing your own games.

If you are new to text adventures, you may want to start by reading a short guide on how to play at <https://www.microheaven.com/ifguide/step3.html> or you could start by playing The Dreamhold, which was written to guide new players. The Dreamhold is part of Z-code Text Adventure Collection #1 for Commander X16, which can be found at <https://microheaven.com/ztac/>

I created this documentation as a PDF, so that you could easily print it out and keep it nearby as you're playing the games on your Commander X16.

You will always find the latest version of this collection at <https://microheaven.com/ztac/>

Enjoy!

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The Games

9:05

Folder name: 905

Genre: Slice of Life

Year: 2000

Release / Serial No: v1.12 / 2016.0430

Author: Adam Cadre

Link: <https://ifdb.org/viewgame?id=qzftg3j8nh5f34i2>

The phone rings.

Oh, no — how long have you been asleep? Sure, it was a tough night, but... This is bad.
This is very bad.

The phone rings.

[--blurb from IFDB]

This is a short game, aimed at the experienced text adventure audience.

Anchorhead

Folder name: ANCHOR

Genre: Horror

Year: 1998

Release / Serial No: 5 / 990206

Author: Michael S. Gentry

Link: <https://ifdb.org/viewgame?id=op0uw1gn1tjqmjt7>

You take a deep breath of salty air as the first raindrops begin to spatter the pavement, and the swollen, slate-colored clouds that blanket the sky mutter ominous portents amongst themselves over the little coastal town of Anchorhead.

Travel to the haunted coastal town of Anchorhead, Massachusetts and uncover the roots of a horrific conspiracy inspired by the works of H. P. Lovecraft. Search through musty archives and tomes of esoteric lore; dodge hostile townsfolk; combat a generation-spanning evil that threatens your family and the entire world.

[--blurb from IFDB]

Anchorhead is a huge game, which deals with several dark themes - this is not for children or sensitive players.

In 2018, the author released an enhanced, commercial version of this game. It has reworked prose, 50 illustrations, and additional scenes and puzzles. It can be found at

<http://anchorhead-game.com/>

The Edifice

Folder name: EDIFICE

Genre: Historical / Science Fiction

Year: 1997

Release / Serial No: 2 / 980206

Author: Lucian P. Smith

Link: <https://ifdb.org/viewgame?id=4tb9soabrb4apqzd>

"Something new in your everyday hunter-gatherer routine: where did this strange edifice come from? Dare you enter and explore the secrets of this... thing, or do you try to face your enemies? Like you have a choice."

[--blurb from The Z-Files Catalogue]

For a Change

Folder name: CHANGE

Genre: Surreal

Year: 1999

Release / Serial No: 1 (v1.02) / 990930

Author: Dan Schmidt

Link: <https://ifdb.org/viewgame?id=t61i5akczyblx2zd>

"The sun has gone. It must be brought. You have a rock."
[--blurb from Competition '99]

The Gostak

Folder name: GOSTAK

Genre: Wordplay

Year: 2001

Release / Serial No: 2 / 020305

Author: Carl Muckenhaupt

Link: <https://ifdb.org/viewgame?id=w5s3sv43s3p98v45>

"Finally, here you are. At the delcot of tondam, where doshes deave. But the doshery lutt is crenned with glauds.

Glauds! How rorm it would be to pell back to the bewl and distunk them, distunk the whole delcot, let the drokes uncren them.

But you are the gostak. The gostak distims the doshes. And no glaud will vorl them from you."

[--blurb from Competition Aught-One]

The Gostak is recommended for experienced text adventure players, as it is very hard for someone who doesn't know the standard commands that are typically used in text adventures.

Morris

Folder name: MORRIS

Genre: Slice of Life

Year: 2021

Release / Serial No: 1 / 211121

Author: Dee Cooke

Link: <https://ifdb.org/viewgame?id=7x6fjua7uixmfn2x>

The bells. The bells!

You left it too late to leave the pub... and now THEY are here. How are you going to escape them this time?

You are in the pub... but you've stayed too long. It's the Pokey End Folk Week in Pokey End, southwest England, and the village square outside the pub has been taken over by a troupe of Morris dancers. You're terrified of Morris dancers! You can't leave the pub now!

Obviously, you can't go out the front door into the thick of the Morris dancers, so you'll need to find another way out before the barman unceremoniously turfs you out at closing time.
[--blurb from IFDB]

This is a short PunyInform game that was produced for a 3-week game jam.

Photopia

Folder name: PHOTOPIA

Genre: Slice of Life

Year: 1998

Release / Serial No: v1.30

Author: Adam Cadre

Link: <https://ifdb.org/viewgame?id=ju778uv5xaswnlpl>

"Will you read me a story?"

"Read you a story? What fun would that be? I've got a better idea: let's tell a story together."
[--blurb from IFDB]

Adam Cadre has written several acclaimed IF games. The newest version of this game is v2.01, which requires a Glulx interpreter (available online or on any modern-day computer). Go to <https://adamcadre.ac> for more information and downloads.

Shade

Folder name: SHADE

Genre: Travel

Year: 2000

Release / Serial No: 3 / 001127

Author: Andrew Plotkin

Link: <https://ifdb.org/viewgame?id=hsfc7fnl40k4a30q>

"A one-room game set in your apartment."

[--blurb from Competition Aught-Zero]

Andrew Plotkin has written a wide array of interactive fiction games, and won many awards. He has also done professional game development, including the highly polished IF game Hadean Lands which can be found on Steam.

Slouching Towards Bedlam

Folder name: SLOUCH

Genre: Steampunk

Year: 2003

Release / Serial No: 1 / 030925

Author: Star Foster and Daniel Ravipinto

Link: <https://ifdb.org/viewgame?id=032krqe6bjn5au78>

In the beginning was the Word, and it was hungry.

Enter a steampunk adventure set in a London that might have been. The year is 1885. Bedlam Hospital still stands in Moorsfield, a decaying shell used to house the poor and the hopeless. Steam-driven mechanical wonders roam the streets. Gear-wheeled analytical engines spin out reams of thought onto punched paper tapes.

And in the darkness - in the alleys and the side shops - hide secrets.

[--blurb from IFDB]

Technical Information

Here you can find a bit more information about Infocom, the game format they developed, how you can find more Z-code games and make them playable on the Commander X16, and what you need to write your own text adventure.

The Zork Machine - past and present

In 1977, a few guys at Massachusetts Institute of Technology played Adventure, which is widely considered to be the first text adventure. They decided to write their own adventure game, first called Zork, then Dungeon, then Zork again. In 1979, they started a company called Infocom, to make business software. They needed a source of income as they were starting up, and they thought Zork could provide that, if they could only get it to run on the micro computers of the time. The game was about 1 MB in size, and the computers they needed to run it on typically had 32 KB of memory. Also, the game was written in Fortran, which wasn't available for micro computers. On top of all this, there were new computer models coming out all the time, and they wanted the game to run on as many different platforms as possible.

To solve this equation, they designed a virtual machine, an imaginary computer never meant to be built, but to be emulated. The machine was called the Z-Machine (Zork Machine), and it was designed only for running text adventures. They then created their own programming language called ZIL (Zork Implementation Language), heavily inspired by MDL, the language they wrote the first version of Zork in. They wrote a compiler called Zilch, which compiled ZIL programs to Z-code, programs ready to be run on the Z-machine. They then wrote a separate ZIP (Z-machine Interpreter) to emulate the Z-machine on each platform they wanted to support. The end result was that they could, after the hard work of writing all this software was done, release their text adventures for many different platforms without rewriting any of the code.

While the Z-machine was heavily optimized to make text adventures compact in size, Zork was still too big. They split up the game into three parts, added some pieces and removed others, to make three different games, each one of them playable on a micro computer with a disk drive attached. An entire game would fit on a disk, and the computer would use virtual memory, copying the parts of the game that it needed at the moment from disk to memory. In this way, games of up to 128 KB in size could be played on a computer with only 32 KB of memory. Zork I was released in 1980, and became a commercial success. Infocom kept on making text adventures for about ten years, producing some of the finest games of the eighties.

Fast forward to the nineties. Infocom had been bought by Activision and eventually shut down. Some fans gathered together over the now emerging Internet, and started figuring out just exactly how the Z-Machine worked, by reading the machine code of the interpreters used (ZIP:s). They called themselves The Infocom Taskforce. A guy in England called

Graham Nelson saw what was happening and started to write his own programming language, compiler and text adventure programming library, based on the findings of the Infocom Task Force. He called his system Inform. While he was developing it, we also wrote his own game in Inform, called Curses. When Inform hit version 5, it had matured enough for a much wider audience to use it. Graham made Inform available for free, along with Curses.

Since Curses was using the same virtual machine as Infocom had used, it could also be played with the same ZIP:s that Infocom had produced, but soon enough other people started to write new Z-machine interpreters, for modern computers. Graham also created two new versions of the Z-machine, called version 7 and 8 (Infocom created versions 1-6), which allowed for bigger games. A version 8 game can be up to 512 KB in size, which allows for truly huge text adventures. It has been estimated that Infocom's first two trilogies (Zork 1, 2, 3 + Enchanter, Sorcerer and Spellbreaker) could be combined into a single game without hitting this limit.

Inform 5 was used to produce a dozen games or so. Then came Inform 6, which has been used to write hundreds of games. After that came Inform 7, which is very different from the earlier versions. It has been used to create hundreds of games as well. To allow for even larger games, and to make it easier to incorporate graphics and sound into text adventures, a new virtual machine, Glulx, was designed by Andrew Plotkin. Inform 7, as well as the more recent versions of Inform 6, can produce both Z-code and Glulx games.

Building Z-code games for play on Commander X16

There is currently only one Z-code interpreter for the Commander X16 - Ozmoos.

Ozmoos and instructions on using it can be found at <https://ozmoos.online>

To use Ozmoos, you go to the website, upload a Z-code file, specify your build options, and press a button. This produces a zip archive which you can then download and play on your Commander X16.

All games produced by Infocom except the four titles with graphics (Zork Zero, Arthur, Shogun and Journey) should work fine on the Commander X16.

As for Z-code games produced post-Infocom, you can generally expect all games that weren't built using Inform 7 to work well. Some lightweight Inform 7 games may also work reasonably well, but most Inform 7 games are just too slow. Inform 7 typically produces code that is very demanding for the computer, and an 8 MHz 8-bit computer isn't up to the task.

A few modern games show some Unicode characters which can't be displayed on a Commander X16. These characters will just be omitted in output when playing on a Commander X16. If you want to play a game in German, French, Spanish, Italian, Danish or Swedish, Ozmoos has you covered though, as it can use a custom font which replaces some graphic characters with the accented characters you need.

Writing your own text adventures

You can of course write your own text adventures as well. Some popular tools include Inform 7, Twine, ChoiceScript, TADS 3 and Adrift.

If you want to produce Z-code games, and have them playable on retro computers, these are the obvious options today:

- ZIL: Use the Lisp-like language used by Infocom. The compiler and some pointers can be found at <https://foss.heptapod.net/zilf/zilf>
- Dialog: A language inspired by Prolog. It's quite advanced and powerful, but the games produced are a bit too heavy to run on your typical 8-bit machine. 16-bit machines and newer machines are better suited to run these games. Find out more at <https://www.linusakesson.net/dialog/>
- Inform 6 with its standard library: Similar to C in syntax. Games produced are a bit too heavy for most 8-bit machines, but most of them run fine on Commander X16 and 16-bit machines. There is a (no longer maintained) site at <https://www.inform-fiction.org/>
- Inform 6 with the PunyInform library: With a much more lightweight library, you can produce games that run fine on all sorts of 8-bit computers for which there are Z-code interpreters (~30 different platforms). Of course, the games will also run fine on newer computers. The homepage is located at <https://github.com/johanberntsson/PunyInform>

I am a co-author of PunyInform and perhaps not surprisingly, I think PunyInform is the easiest option for writing Z-code games for retro computers. While the library is designed to be much smaller and faster than the standard library, it has most of the functionality of the standard library, plus some that the standard library lacks.

No matter which system you choose, or even before you choose a system, I recommend the friendly forum at <https://intfiction.org/> as a place to get support, encouragement, feedback, playtesters, and all sorts of useful pointers.