Z-code Text Adventure Collection #4 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 - Ozmoo.

I decided to create a collection of some great Z-code games for the Commander X16. All in all, this collection holds ten games, which were initially released in 1995-2023.

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/ . Or you could play Carpathian Vampire, which is part of this collection. It starts off in Tutorial Mode, meaning it'll try to help you figure out how to play.

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!

Fredrik Ramsberg, June 2024
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The Games

All Roads

Folder name: ALLROADS
Genre: Historical / Time Travel
Year: 2001
Release / Serial No: 1 / 011119
Author: Jon Ingold
Link: https://ifdb.org/viewgame?id=4s7uohdncurgqb0h

"Supernatural espionage thriller set in a quasi-medieval Venice (oh, that old genre again). You jump around in space and time through a series of apparently disconnected scenes, and eventually, if you're paying enough attention, things come together. Largely puzzleless, in the conventional sense; there's one puzzle toward the beginning of the game, but most of the rest of the story pretty much flows by. In another sense, though, the whole game is a puzzle, and it's a pretty clever one--the game drops progressively more obvious clues as you go along and fills in some, but not all, of the blanks at the end. You'll probably need to replay, and think a good deal, to figure everything out). Pleasantly confusing, though very much on rails--there's only one path through the game, and not much deviation is allowed for. Unusual and rewarding."
[--Duncan Stevens' review on Baf's Guide]

Jon Ingold has moved on from his hobbyist roots in interactive fiction to co-founding Inkle Studios where he is also the narrative director. He has been involved as a writer in critically acclaimed games such as 80 Days, Heaven's Vault and Overboard!

The Baron

Folder name: BARON
Genre: Fantasy
Year: 2006
Release / Serial No: 1 / 060329
Author: Victor Gijsbers
Link: https://ifdb.org/viewgame?id=weac28l51hiqfzxz

"An evil nobleman, a kidnapped daughter and a father who wants to rescue her at any cost--that is not the way life works. Something much darker, something much more human, lies underneath."
[--blurb from IFDB]

Carpathian Vampire

Folder name: CARPATH
Genre: Horror
Year: 2022
Release / Serial No: 1 / 220501
Author: Garry Francis
Link: https://ifdb.org/viewgame?id=csifbneujfswnlqe

"Deep in the Carpathian Mountains, the Romanian villagers tell tales of the strigoi. The strigoi are said to be troubled spirits that have risen from the grave. They are attributed with the abilities to transform into an animal, become invisible and to gain vitality from the blood of their victims.

There have been recent reports of peasant children dying mysteriously in the local village. Their bodies had been drained of blood and they had puncture wounds in their necks. The villagers believe that a recently deceased count is responsible. They believe he's a strigoi. In Western culture, we would call him a vampire.

The villagers have hired you to kill the vampire. After a long journey, you have arrived at the former count's castle. A cold shiver runs down your spine. Killing vampires is never easy. Why should this one be any different? But hurry. You don't want to be his next victim!"
[--blurb from IFDB]

Carpathian Vampire was built to help guide players new to text adventures.

The Impossible Stairs

Folder name: STAIRS
Genre: Fantasy / Surreal
Year: 2022
Release / Serial No: 2 / 220706
Author: Mathbrush
Link: https://ifdb.org/viewgame?id=85jr6xdzreuac9e

"Getting ready for a party can take a lot of time. Help CJ navigate a text adventure of temporal trials.

Merciful puzzlefest. Parser or point-and-click, as you please.

Authorized sequel to The Impossible Bottle, by Linus Åkesson. The games are only loosely tied together, and can be played in either order or separately."
[--blurb from IFDB]

Mathbrush has written several acclaimed IF games.

Jigsaw

Folder name: JIGSAW
Genre: Time Travel / Historical / Romance
Year: 1995
Release / Serial No: 3 / 951129
Author: Graham Nelson
Link: https://ifdb.org/viewgame?id=28uhmejlntcbccqm

"New Year's Eve, 1999, a quarter to midnight and where else to be but Century Park! Fireworks cascade across the sky, your stomach rumbles uneasily, music and lasers howl across the parkland... Not exactly your ideal party (especially as that rather attractive stranger in black has slipped back into the crowds) - but cheer up, you won't live to see the next."
[--blurb from The Z-Files Catalogue]

The Moonlit Tower

Folder name: MOONLIT
Genre: Eastern
Year: 2002
Release / Serial No: 1 / 020927
Author: Yoon Ha Lee
Link: https://ifdb.org/viewgame?id=10387w68qlwehbyq

"A beautifully-written game based on Asian mythology. To explain the premise would be difficult, but that's not really an issue -- the best thing about this game is simply enjoying the setting, which is full of rare and lovely imagery. The puzzles are occasionally a bit elusive, but the built-in hint system helps somewhat with that problem. There are also multiple endings and an extensive set of notes describing the game's background -- quite a lot of polish for a (relatively) brief piece."
[--Emily Short's Review on Baf's Guide]

Not Just an Ordinary Ballerina

Folder name: BALLERIN
Genre: Seasonal
Year: 1999
Release / Serial No: 1 / 991128
Author: Jim Aikin
Link: https://ifdb.org/viewgame?id=cg4j40i7wq34ggo1

"Despite the off-putting title, Not Just An Ordinary Ballerina is an absolute treasure for puzzle-lovers. You are a harried mother who has been given an impossible assignment: finding an incredibly rare toy for your daughter on Christmas Eve. The game begins as you arrive in the parking lot of the only mall left that still has one.

While most of the dozens of puzzles are fair, there are a couple of mathematical riddles and visualization puzzles that had me tearing my hair out. It also contains some cultural references that may make it difficult for nonnative English speakers. Nevertheless, the game's sheer density (and the strength of its adaptive hints system) make this the best puzzle game I've seen since Curses."
[--R. Serena Wakefield's review on Baf's Guide]

Suveh Nux

Folder name: SUVEHNUX
Genre: Fantasy
Year: 2007
Release / Serial No: 1 / 150314
Author: David Fisher
Link: https://ifdb.org/viewgame?id=xkai23ry99qdxce3

"An entry in the 2007 One Room Game Competition. You play a magician's servant who gets trapped in your master's vault; you'll need to learn some of his tricks if you want to get out."
[--blurb from IFDB]

Varicella

Folder name:VARICELL
Genre: Alternate History / Intrigue
Year: 1999
Release / Serial No: 1.14 / 9339
Author: Adam Cadre
Link: https://ifdb.org/viewgame?id=ywwlr3tpxnktjasd

"Twisted, bleak, and filled with dark humor, Varicella is perhaps the most disturbing work of IF ever written--but it's also one of the best. You're the Palace Minister in an Italian court, the king has just died, the prince isn't yet ready to take power, and you have to cement your hold on power by bumping off your fellow aspirants to the throne. The PC is a fascinating character, a cross between Machiavelli and an interior decorator, and while the various NPCs aren't quite as interesting--most of them run the gamut from very evil to very very evil--unraveling the various palace intrigues makes for plenty of nasty fun. Varicella is not, however, meant to be solved in one try; there are so many things to do in so little time that saved games are unlikely to be useful (though it's not a major drawback, since the game lasts less than 100 moves). The writing is top-notch, the puzzles are ingenious, and the game's world is vividly conveyed, but it's the ending, which forces the player to take another look at everything that's come before, that makes this an instant classic. Unedifying, to be sure, but brilliant."
[--Duncan Stevens' review on Baf's Guide]

Adam Cadre has written several acclaimed IF games.

You Are Standing

Folder name: STANDING
Genre: Game Within a Game
Year: 2023
Release / Serial No: 3 / 240105
Author: Aaron A. Reed
Link: https://ifdb.org/viewgame?id=8krn2lj9iob8cz36

"A bonus text game created specifically for the Ultimate Collector's Edition of 50 Years of Text Games; initially, available exclusively to backers on 3.5" floppy disc and/or as a download. The game was designed to fit in the less than 90K of space remaining on the floppy disk after the text of the book was added. It uses the PunyInform library and a number of space-saving authoring techniques to achieve this goal.

The game explores six different styles of text games from across the medium's history, and tells a story about legacies and love."
[--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 - Ozmoo.

Ozmoo and instructions on using it can be found at https://ozmoo.online

To use Ozmoo, 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, Ozmoo 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.