Cartograph

By Arkanix Labs

What is Cartograph?

Cartograph is a native Commodore 64 application created for designing tile-based maps/levels. This versatile tool allows you to create maps and levels for your games, matrices and data for demos and tools and much more.

It works by importing a standard 2 kilobyte character set created with the user's favorite editor, and allows the user to create a level as small as 40x25 (1x C64 screen) all the way up to 256x128. It supports both hires and multicolor 8x8 pixel tiles.

This application was created as an internal devtool for Arkanix Labs. We're using Cartograph extensively with our Crimson Twilight Trilogy (tile-based CRPG) and Damned: Out Of Hell (side scroller).

Distribution of Cartograph

Cartograph is 100% free and may be distributed by any ftp/forum/website as long as the software remains unchanged and in its original .d64 file along with all help/example files. A link referring back to our website would be appreciated but isn't required.

Credits

Coding: Dustin "Fuzz" Chambers (compression based on algorithm by Robin "Macbeth" Harbron)
Testing & Ideas: Ray "Warlock" Lejuez, Jon "Moloch" Mines

Found a bug? Report it to cartograph@arkanixlabs.com

Want to learn more? Visit the Cartograph Forum at http://www.c64dev.com/forum

ARKANIX LABS
PO Box 55118
Shoreline, WA 98155-0118

http://www.arkanixlabs.com

Members:

Jon "Moloch" Mines
jon@arkanixlabs.com

Dustin "Fuzz" Chambers
dustin@arkanixlabs.com

Ray "Warlock" Lejuez
ray@arkanixlabs.com

Petar "Carcass" Strinic
petar@arkanixlabs.com

Andy Vaisey
andy@arkanixlabs.com

Cartograph Editor

Animations
Shift + A to set animation zone 1 (Row 4, Tiles 1-9)
Control + A to set animation zone 2 (Row 5, Tiles 1-9)
Shift + S to set animation zone 3 (Row 8, Tiles 1-9)
Control + S to set animation zone 4 (Row 7, Tiles 1-9)

Auto Fill
Shift + F fills with the tile(s) selected in the tileset window
Shift + R does a random will with the tile(s) selected in the
tileset window
Auto Fill may be used in conjuction with cursor mode

Changing Colors
Joystick fire + move up/down to cycle through foreground colors
Joystick fire + move left/right to cycle through background colors (multicolor mode after seventh color)

Color Modes
Shift + C toggles between hires and multicolor modes
In multicolor mode you need to change the tiles created for multicolor to the eighth through fifteenth color to have the multicolor feature turned on. This is handled this way so you can have hires and multicolor together on one map.

Cursor Mode
F1 sets the cursor to 1x1 mode
F2 sets the cursor to 2x1 mode
F3 sets the cursor to 2x2 mode
F4 sets the cursor to 1x2 mode

Data Mode
Shift + D toggles between regular editor mode and data editor mode
Shift 1 – 9 specifies a value for the highlighted character
C= 1 – 6 specifies additional values for the highlighted character

In data mode, highlight a character in the tileset window with the cursor and assign it a value by pressing shift/C= and a number on the keyboard. This data can be saved in a file and used by a programmer however they wish. Above is a table which shows the value assigned to a character based upon which color it appears in the editor

Editing Map
Joystick fire places objects on map
The current object being plotted is highlighted in the tileset window
Joystick moves the editing cursor around the map/level
Pressing numbers *1-4* will move the cursor to each corner of the window
Pressing *5* will center the cursor on the window
Pressing *6* will jump to the exact center of the map
Pressing *A – Z* will type the corresponding letters on the screen
Pressing *Space* will erase a character on the screen

Font Mode
Shift + X scrolls through the three available fonts: uppercase ROM charset, lowercase ROM charset, and custom charset

Menu
Shift + M to open the menu

Preview Mode
Shift + P to start preview mode
Use *Joystick* to move around map
+/- keys control animation speed
Press ✚ to escape preview mode

REU Support
Shift + B backs up the current map into an REU (if one is present)
Shift + R restores the backup to the C64 memory (if an REU is present)

Switching Windows
Press ✚ or in tileset window hold *Joystick fire* for half second
The cursor pulsates to let you know which window you are working in

Cartograph Menu

Exporting The Map
Press "X" to export your map from the Cartograph type to a smaller file. By default, Cartograph saves all maps in 256x128 format

Using the Export feature will convert the map to whichever size
is selected under the Preset Sizes and save it to disk

Shift + X will export the map the same was as above but will also compress it
with an RLE algorithm (a,b,a,b format.. a is character, b is # of times repeated)

WARNING: The map in memory WILL be deleted if no REU is present
Please save your work before exporting

Loading Options
Press "L" to load your tileset
Press "1" to load map (extension "tmap.")
Press "2" to load colors (extension "cmap.")
Press "3" to load data (animation info/map size, extension "data.")
Press "4" to load 40X25 (text screen only, extension "4025.")
Press "5" to load project (loads map, colors, and data all at once)
Press "T" to load data mode values (a value of 1-15 for each char, extension "type.")
Press "P" to load CartographPC map (extension "cgpc.")

Return To Editor
Press ✚ to escape the menu

Reset Map
Press "R" to clear map
WARNING: If you have a map in memory this will completely erase it

Saving Options
Press "6" to save map (extension "tmap.")
Press "7" to save colors (extension "cmap.")
Press "8" to save data (animation info/map size, extension "data.")
Press "9" to save 40x25 (text screen only, extension "4025.")
Press "0" to save project (saves map, colors, tileset and data all at once)
Press "Y" to save data mode values (a value of 1-15 for each char, extension "type.")
Press "O" to save CartographPC map (extension "cgpc.")

Selecting Map Size
A for 256x128
B for 256X25
C for 128x128
D for 64x64
E for 40X128
F for 40x25
G for customized map size

Setting Map Size
Press "S" to enter a custom map size
Use *+/-* and *Return* to select your customized map size
A map must be between 40x25 and 256x128 characters in size

View Directory
Press "$" to display a directory of the current disk inserted/attached to drive #8. During directory listing, hold down space to pause the screen output.

REU Autobackup
Press "" to* toggle the use of REU Autobackup on or off. If on, before doing a fill, a copy of the map will be saved in the REU
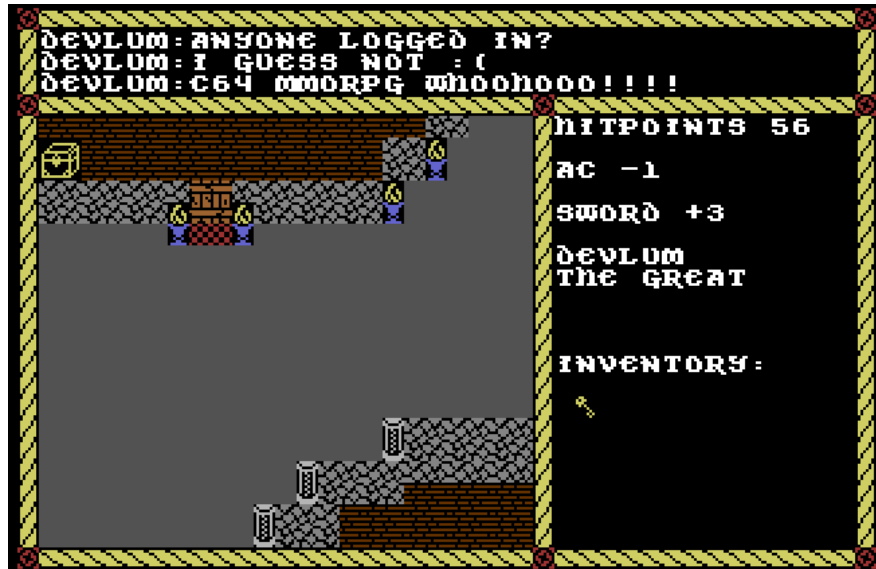(this feature is not available if no REU is present – it will remain grayed out)

NOTE:
Load/Save Project use an in-built extension for each file saved; because of this you're limited to eleven characters in your filename.

Examples created using Cartograph

Pac-Man

2D Side Scroller

Examples created using Cartograph
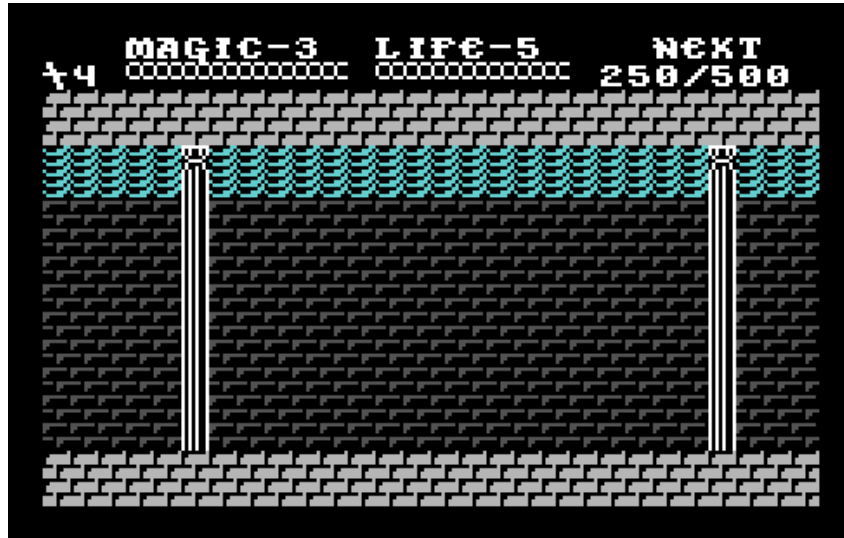
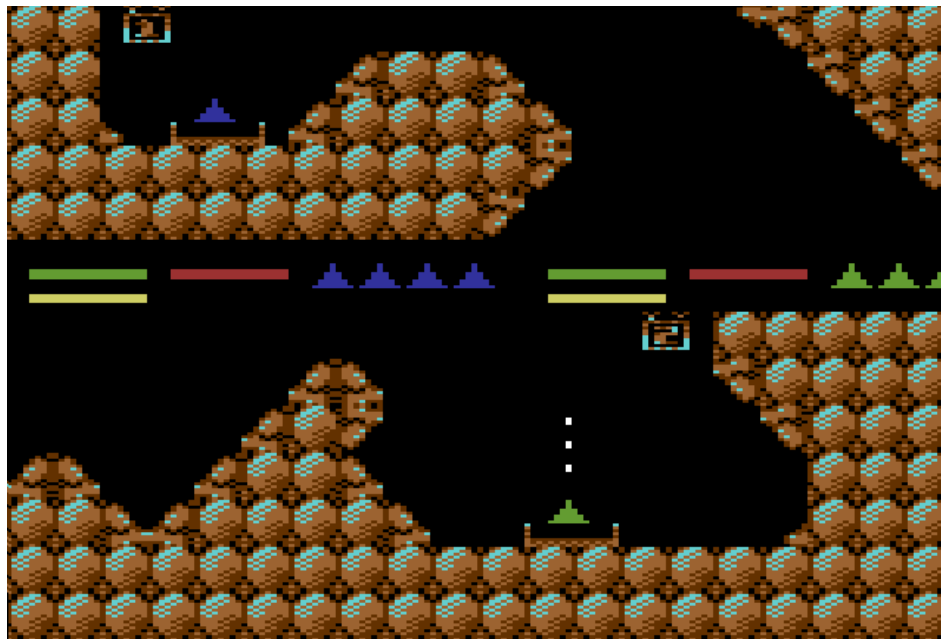**Zelda on C64?**

MMORPG on C64?

Isometric

Examples created using Cartograph

Tile Based CRPG

Havok by Arkanix Labs