

Heretic

COLLABORATORS

	<i>TITLE :</i> Heretic		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		August 7, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1	Heretic	1
1.1	Heretic	1
1.2	Main Page.	1
1.3	Requirements for Heretic.	2
1.4	Parameters to be used in Heretic	2
1.5	Thanks to people!	3
1.6	Author of Heretic	4
1.7	Keys	4
1.8	History of Heretic	5
1.9	What's Next?	8
1.10	Known Bugs?	8
1.11	Speed	8
1.12	Heretic Launcher	9
1.13	Plugins	10

Chapter 1

Heretic

1.1 Heretic

Heretic Amiga Port v0.935 (68k & PPC)
Sebastian Jedruszkiewicz (elf^venus art)

Original sources for this game can be found at:
www2.ravensoft.com/source

68k version is not very fast at this moment, but I am working on this.
PPC version gets about 30 fps on my system (603/200 AGA). So it is fast enough. But don't think, I will not work on some optimizations ;)
In 68k version stack is automagically increased, in PPC version you should do this yourself (200000 should be enough).

· [Go to main page](#) ·

1.2 Main Page.

· [Requirements](#) ·
· [Parameters](#) ·
· [Thanks](#) ·
· [Author](#) ·
· [Keys](#) ·
· [History](#) ·
· [Next](#) ·
· [Known Bugs](#) ·

- Speed •
- Launcher •

1.3 Requirements for Heretic.

Requirements:

- AGA
- CGFX
- 8(??)Mb of mem.
- ~To play this game, you will need either shareware wad file (available for example on <ftp.cdrom.com/pub/idgames/idstuff/heretic>) or registered wad file.

1.4 Parameters to be used in Heretic

Parameters to be used in Heretic:

- asl Use asl requester to select screen mode. Default is PAL|LORES or 320x200 cgx mode. starting from v0.7 asl should be used to get bigger resolution than 320x200. In hicolor mode, you should select 15 depth screen mode (filter hook has been removed)
 - nodoublebuffer Turns off double buffering.
 - window Display results in window on workbench screen. Workbench must have at least 15 bit depth. Doublebuffering does not work on window. Works also on AGA, but is slow as hell.
 - directcgx Use fast copy routines instead of writepixelarray. Does not work with window mode.
 - lbhack Should be used like this: -lbhack x, where x is number of frames to render in one combination of LockBitMap and UnlockBitMap. This should make the game faster (aspecially on PPC, due to huge amount of context switches). By default x is 1 (every frame bitmap is locked and unlocked). Try different values here, I bet something like 15 will be best choice. This is a hack (bitmap should not be locked for a long time) so use on your own risk. Number of frames to skip should be >= 1. Should be used together with -directcgx.
 - fps Shows online fps counter.
 - mouse Turns mouse on.
 - music Enables music.
-

- nosfx Disables sound fx effects.
- nosound Disables music and sfx (no sound at all).
- hicolor Enables hicolor rendering.
- bilinear Enables bilinear filtering in hicolor mode.
Take a look at bilinear.iff, to see the difference.
- joy Enables joystick support.
- ham6 Sets display in hicolor on AGA to ham6.
- ham8 Sets display in hicolor on AGA to ham8. Default is ham6.
- lowdetail Turns on low detail floor and ceiling rendering.
Low detail can be also switched on/off with
'l' key during game.
- scaledgui Enables GUI scaling routines. Otherwise all GUI elements
(menus and texts) will be just copied to screen.
Can be also turned on/off during game with 's' key.
- bus Sets bus clock. Should be used with care. If Heretic
runs too fast, you can use this switch. After heretic starts,
It prints actual bus clock. This value should be beetwen 50-70 Mhz.
If it is really low (like 30Mhz or lower) type -bus 60000000 to get
60Mhz bus clock. Try different values here (but with care!!!).
Only available in PPC version.
- c2p Should be used with name of external c2p module:
-c2p c2p/c2p_noe for example. With this feature, it is possible ←
to add
c2p modules for differents cpus, and also to play heretic in ←
higher
resolution than 320x200. (Now only 320x200 c2p module exist (←
by noe))
(This is only available in 68k version on AGA).
By defaut, heretic open c2p/c2p_noe module.

1.5 Thanks to people!

Thanks:

- Special thanx must go to Sebastian Krawczuk. He let me test Heretic on
CVisionPPC, PPC 604/233, 128Mb machine.
"Mam nadzieje ze wybaczysz mi zniszczenie systemu ;)"
- Lorens Johansson for this amigaguide doc.
- And of course all people that has shown me their support, send me
suggestions and bug reports.
- Mark Smith for his NewIcons.

- Jaromir Platek for another icons.
- Tim Kovack for another icon.

1.6 Author of Heretic

Author of Heretic:

You can always contact me at:

Name: Sebastian Jedruszkiewicz (aka elf^venus art)

E-Mail: bjsebo@jota.ii.tuniv.szczecin.pl

Note, that I got a lot of emails, about heretic. I am trying to answer all of them, but sometimes I dont answer at all. Forgive me that, but answering for so much mails, 'eat' a lot of time. I'd rather spend this time for programming. But I read all letters carefully, and I am takeing all bugs report, and suggestions seriously.

1.7 Keys

Keys:

Heretic Keys. Can be changed in heretic.cfg (excepts fly and look (up down center)) keys, and Special Keys(which are not stored in heretic.cfg).

Special Keys:

- F5 = bilinear filtering on/off in hicolor mode.
- 0 = Saves screenshot to file ScreenShotx.iff
Where x is a number of screenshot taken.
It is saved as iff 24bit picture.
- 1 = turns low detail on/off (does not work in hicolor)
- s = turns gui scaling routines on/off.

Standard Keys:

- cursor up = forward
- cursor down = backward
- cursor left = turn left
- cursor right = turn right
- 1-6 = weapon
- tab = automap
- When automap active:
 - f = follow
 - g = map grid off/on
 - + - = zoom map in/out
- [or] = show inventory
- When inventory active:
 - [or] = inventory left or right
 - enter = select artifact
- When artifact selected:
 - enter = use artifact
- ctrl = fire

- space = use
- alt = strafe
- shift = speed
- esc = menu
- del = gamma corection
- help = pause
- strafe left = .
- strafe right = /
- (strafe can be also performed with left or right keys and ALT)
- 7(num key pad) = look up
- 4(num key pad) = look center
- 1(num key pad) = look down
- 9(num key pad) = fly up
- 6(num key pad) = fly center
- 3(num key pad) = fly down

1.8 History of Heretic

History of Heretic:

new in v0.935

- Probably introduced a lot of new bugs in cgfx display routines (dunno if this version is working on cgfx or not) Maybe it will be fixed, maybe not - who knows?
- Fixed framerate calculations in -playdemo & -timedemo
- removed -turbo switch. It was only needed to simulate 'very fast' game, reported by some people. Now -bus fixes this bugs, so there is no need to keep -turbo. However, it can be simulated on PPC, with -bus switch and very low bus_clock value.
- added couple of asm-optimized functions in 68k version.
- Removed sound precacheing. 'Eated' lot of memory (some people don't have 64Mb ,like I do ;) and caused some problems. Actually it has been removed already in v0.89, but I forgot to mention.
- renamed DoomSound.library to HereticSound.library. It is not compatible with doomsound.library.
- Added new c2p module (c2p_highres) which can be used on AGA to get higher resolution. It is damn slow anyway.
- fixed high reslution. Weapon is now rendered correctly as well as all texts and graphics elements.
- added -scaledgui switch. See
Parameters
-
- renamed config file to va_heretic.cfg (No more problems with other ports).

new in v0.89

- fixed almost all routines, to use any resolution. However, there still may be some places, where heretic will show big mess in higher resolution than 320x200.
- new DoomSound.library. Rewritten by NOE. It has better mixing routines. Version has been bumped to 38. Heretic NEEDS this version of library to run with sound.
- Stereo panning works!
- Sound volume is now much higher.

- Grid in automap has been activated. See
Keys
 - New faster HAM6 c2p (PPC).
- Timedemo bugs fixed. Now -timedemo switch works perfectly.
- Fixed this ugly two little sprites on status bar in hicolor mode.
- New faster timing routines in 68k version.
- fixed HereticLauncher, to allow using ':' and other chars in 'Other Options' gadget.
- fixed joystick support.
- added support for external c2p modules (68k). See
Plugins
 - added -c2p switch See
Parameters
- added two IconSets. See
Thanks
 - , to see who made it.
- screenshoting now works also in 256 colour mode. However, pictures are saved as 24bit IFF.
- Fixed sky wrapping bug in high resolution.

new in v0.8

- new, faster rendering routines in 68k version.
- new timing routines. This code was taken from ADoom PPC, with some additional optimizations. Added -bus switch. See
Parameters
for more info.

new in v0.7

- mouse support has been changed. Now it works like this:
left/right mouse movements turns player left/right
left mouse button is used to fire.
right mouse button is used to move player forward.
middle mouse button (if you got one) is used for opening/closing doors, and stuff like that.
forward/backward mouse movement moves player forward/backward.
 - added -lbhack switch. It is used to speed up rendering in directcgx mode. See
Parameters
for more info.
 - High resolution. There is a lot of limitations:
 - It does not work on AGA in 68k version
 - It does not work on AGA in hicolor (on both PPC and 68k)
 - A lot of things will probably look weird, I am working on that.
 - It actually can be only used in full screen game, A lot of code still need to be patched.
 - Fixed hicolor in cgfx.
 - added -lowdetail switch, lowdetailed are only floor and ceiling. Can be changed during game with 'l' key. This speeds game a bit (aspecially on 68k). Does not work in hicolor mode.
 - added
Heretic Launcher
, for easy access to all switches and options.
 - added -turbo options. Some people reported, that this game runs too
-

fast on their computers. Now I know why - but I don't know how to fix it ;(If you dare, try to finish 1st level, in nightmare + turbo mode ;)

new in v0.6

- Jacek Cybularczyk (Noe) joined to the team ;)
- I screwed a lot of things in v0.5. Sorrry for that.
- added -hicolor (enables 15bit rendering) and -bilinear (enables bilinear filtering in hicolor) switches. Bilinear filtering can be switched on/off during the game with F5 key. Bilinear filtering works only on walls, floors and ceilings. Sprites are filtered only vertically.
- Added -ham6 and -ham8 switches. ham6 is default for aga.
- at least fixed sound routines. It works ok now (at least on my machine ;)
- Fixed AGA Window mode.
- Hicolor rendering on cgfx has not been tested. So it may not work.
- Added joy support. My joystick is broken, so I don't know if it works.
- Added code to make screenshots. Only in hicolor so far.

new in v0.5

- Fixed some bugs in sound replay routines.
- All sounds are now precached at start.
- Heretic now works in window also on AGA. This feature is very buggy at the moment.

new in v0.4

- Sound. I have used doomsound.library which was used in ADoom PPC. This library was created by Joseph Fenton. All I have made was pragma file with proper libcall's for 68k version of Heretic. This also allow to use music (you will need MIDI_Instruments from ADoom to hear music). Three new switches:
 - music enables music
 - nosfx disables sound fx
 - nosound disables all sound (music and sfx)
- Fixed all (as always only hopefully ;) bugs in cgfx display routines.
- There is no need to use -asl switch on cgfx anymore. Heretic will try to find best screen mode automagically.
- Heretic now automagically pauses, if heretic screen or window has been deactivated.
- Added mousewheel support. Mousewheel simulates look up and look down keys.

New in v0.3:

- Added code to darken display, if menu is active.
 - all keyboard bugs has been fixed. See keys.txt for available keys.
 - some minor speedup made to 68k version, and also for
-

- PPC.
- hopefully fixed all bugs with cgfx.
 - Sound and network does not work at the moment.

Programmers notes:

Removed on NOE request.

1.9 What's Next?

What's Next?:

- Sprites bilinear filtering.
- More bugs (removed of course ;)
- Speed, gimme more speed...
- Net support.

1.10 Known Bugs?

Known Bugs::

- Sometimes, a little white dots, can be seen on walls. Aspecially in higher resolution.
- Save Games from 68k cannot be loaded in PPC version. The same for PPC savegames on 68k. I know how to fix this, but fixing this will cause, that old 68k savegames will not work anymore.
- Transparency code in hicolor+bilinear is wrong. To be fixed soon.
- In level 8, shooting green pods cause crash.
- hicolor HAM6 routine does not work on AGA in 68k version.

How to send me bug report? Specify your machine, heretic version you are using, type of wad (commercial, shareware), options you are passing to heretic. If game craches always in the same moment, please do save game, and send me this file. It will help me a lot.

1.11 Speed

Speed results.:

- CPU: PPC603
 - MHz: 200
 - Display AGA
 - Resolution 320x200
 - Options: -timedemo demol -nosound -nodoublebuffer
 - Average Frame Rate: 36.107595

 - CPU: MC68040
 - MHz: 25
 - Display AGA
-

- Resolution 320x200
- Options: -timedemo demol
Average Frame Rate: 7.940153

- CPU: PPC603
- MHz: 200
- Display AGA (HAM6)
- Resolution 320x200
- Options: -timedemo demol -nosound -nodoublebuffer -hicolor -ham6
Average Frame Rate: 17.355196

- CPU: PPCC603
- MHz: 200
- Display AGA (HAM6)
- Resolution 320x200
- Options: -timedemo demol -nosound -nodoublebuffer -hicolor -ham6 -bilinear
Average Frame Rate: 13.402952

(from Francesco "Cetti" Giachetti)

- CPU: MC68030
- MHz: 50
- Display AGA
- Resolution 320x200
- Options: -timedemo demol
Average Frame Rate: 2.899503

(from Tim & Lora Kovack)

- CPU: MC68060
- MHz: 66
- Display CGX (under Picasso IV)
- Resolution 320x200
- Options: -timedemo demol
Average Frame Rate: 19.455561

How to create speed test results? type something like that:
 Heretic.elf -timedemo demol -nosound -nodoublebuffer
 Of course -directcgx and other options are not prohibited ;)
 But please include informations about all parameters you have used.
 Make sure, that display is fullscreen + status bar. (max-1)
 After Heretic quit, you will see line like this:
 "Frames rendered: 326, Average frame rate: 29.655235"
 Send me you configuration and output results. I will include
 it in next release. Thank you.

1.12 Heretic Launcher

Heretic Launcher v0.1.:

Starting from version 0.7, Heretic Launcher is distributed together with Heretic. It requires MUI, and gives you easy access to all heretic options. I don't think I should explain all the options, but some things are important:

- The "other options" string gadget in misc section, can be used to specify any options from original game (like -playdemo demol)
- If you want HereticLauncher to remember your settings, use Save button before quit.

- Load button does not work ;)

Preferences are saved in hereticlauncher.cfg file.
Heretic Launcher can be used for both 68k and PPC version.
Not all of the switches I've added to heretic are available from
Heretic Launcher, that is why "other options' gadget exist ;)

1.13 Plugins

External Heretic Modules.:

Right now, only external modules are c2p functions.

see c2p/c2p_skeleton.s how to write c2p module.

You will find there c2p_noe.s (which were written by NOE,
and rewritten by me (ELF))

I hope some skilled c2p-writers will write fast c2p replacements
for heretic ;) If you don't want to share your sources - no problem,
executable is all I need.

NOTE:

c2p module idea is taken from DoomAttack. But only idea ;)

Of course it looks similiar, aspecially c2p module layout,
but it was not stolen ;) (excepts idea of course ;).
