

Running *Prince of Persia* for Mac on GNU/Linux

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Contents

Preamble.....	1
License.....	1
1. Installing Basilisk II.....	2
1.1 Get Source Files.....	2
1.2 Compile.....	2
2. Download Boot Disk, ROM and HFS Files.....	3
2.1 System 7 Boot Disk.....	3
2.2 ROM File.....	3
2.3 HFS Files.....	4
3. Putting Everything Together.....	5
Questions?.....	6
Appendix A.....	7
Option 1.....	7
Option 2.....	7
Option 3.....	7

Preamble

This document explains how to run the Mac version of *Prince of Persia* on GNU/Linux. In the rest of this document, the words "Mac" and "Macintosh" will not be used, because Macintosh is a series of PCs. We will use "System 7" (Mac OS 7), which is an operating system used on some of these PCs. To run *Prince of Persia*, we will emulate System 7.

License

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1. Installing Basilisk II

Basilisk II is an emulator. We need a Basilisk II that includes a commit that was merged on August 19, 2016. The commit in question added the ability to customize the color depth.¹ (*Prince of Persia* requires an 8-bit display, see [Appendix A](#).) At the time of writing, Basilisk II hasn't had an official release for more than a decade. Its version number has been 1.0 since January 2002.² One way to make sure your Basilisk II is recent enough is to clone or download the source files from its GitHub repository.

1.1 Get Source Files

Either download or clone.

```
$ wget https://github.com/cebix/macemu/archive/master.zip
```

```
$ unzip master.zip
```

Or:

```
$ git clone https://github.com/cebix/macemu.git
```

1.2 Compile

We will modify the preferences of Basilisk II via its GTK+ user interface (GUI).

```
$ sudo apt-get install libgtk2.0-dev
```

Optionally, we will use ESD sound.

```
$ sudo apt-get install libesd0-dev pulseaudio-esound-compat
```

Normally, self-compiled software belongs in `/usr/local/`. However, most likely your distribution has an *ancient* version of Basilisk II that you will never use anyway. This is the reason we will run `configure` with `--prefix=/usr` and remove the old system version.

```
$ sudo apt-get remove basilisk2
```

```
$ rm ~/.basilisk_ii_*
```

Compile and install Basilisk II.

```
$ cd BasiliskII/src/Unix
```

```
$ NO_CONFIGURE=1 ./autogen.sh
```

```
$ ./configure --enable-sdl-video --enable-sdl-audio --disable-vosf --enable-jit-compiler  
--prefix=/usr
```

```
$ make
```

```
$ sudo make install
```

1 <https://github.com/cebix/macemu/commit/1bf6f4d64023851e5de17c7d3090db99c7671c04>

2 <https://github.com/cebix/macemu/commit/628533940de53caafe1bfc5cbaa05790a9fa774b> and <https://github.com/cebix/macemu/blob/master/BasiliskII/ChangeLog>

2. Download Boot Disk, ROM and HFS Files

Download and install the following files.

2.1 System 7 Boot Disk

Example download locations:

- http://www.emaculation.com/System70_boot.zip
- http://cakewalk.ddo.jp/kt753/System70_boot.dsk
- https://web.archive.org/web/20000304021436/http://www.kearney.net/~mhoffman/basiliskII/system753_tutorial/downloads/System70_boot.zip

If none of the above links work, use a search engine to search for "System 7 boot disk" (*with quotes*).

The md5sum for System70_boot.dsk:
a8aa984091834a05395918c943140afa

2.2 ROM File

Example download locations:

- http://www.redundantrobot.com/sheepshaver_files/roms/1mbMacrom.zip
- <https://github.com/macmade/Macintosh-ROMs/blob/master/Performa-580.ROM?raw=true>

If none of the above links work, use a search engine to search for "PERFORMA.ROM".

The md5sum for PERFORMA.ROM:
af343f3f1362bf29cefd630687efaa25

2.3 HFS Files

Download the HFS (Hierarchical File System) files of the games and programs you want to use.

Prince of Persia

http://www.popot.org/get_the_games.php?game=1_Mac ([pop1_12.hfs](#), [pop1_22.hfs](#))

Prince of Persia 2

http://www.popot.org/get_the_games.php?game=2_Mac ([pop2.hfs](#))

PoPMap

http://www.popot.org/level_editors.php?editor=PoPMap ([PoPMap_10b5.hfs](#))

The Persia Cheater

http://www.popot.org/other_useful_tools.php?tool=TPC ([TPC_10.hfs](#))

Prince of Persia Editor

http://www.popot.org/other_useful_tools.php?tool=sav_hof ([PoPE_10.hfs](#))

Most of these HFS files were created by unpacking the StuffIt (.sit) or BinHex (.hqx) archives, and then running:

```
$ mkisofs -hfs -hfs-unlock -probe -V "<label>" -o <file.hfs> <dir>
```

Look at the contents of HFS files on GNU/Linux with:

```
# mount <file.hfs> <dir> -t hfs -o loop
```

3. Putting Everything Together

Start the Basilisk II GUI:

```
$ BasiliskIIGUI
```

On the Volumes tab, add ("Add...") System70_boot.dsk and all HFS files.

On the Memory/Misc tab, add ("Browse...") PERFORMA.ROM.

Press the "Start" button in the lower left.

In the top menu, select "Special -> Shut Down".

Edit ~/.basilisk_ii_prefs and set displaycolordepth to 8.

Then restart the GUI and start the emulator.

If audio is not working, try:

```
$ apt-get install pulseaudio-utils
```

```
$ padsp BasiliskIIGUI
```

Or:

```
$ apt-get install alsa-oss
```

```
$ aoss BasiliskIIGUI
```

Questions?

Use the E-Maculation or Princed forum to ask questions about running *Prince of Persia* for System 7 on GNU/Linux.

<http://www.emaculation.com/forum/>

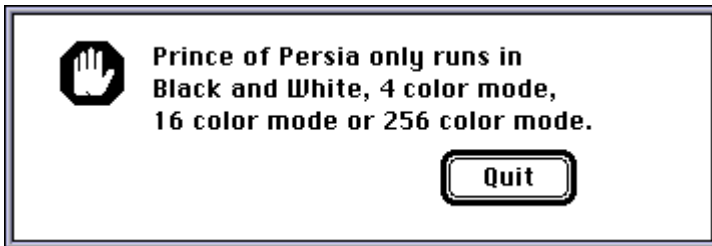
<http://forum.princed.org/viewforum.php?f=63>

To reach the author of this document, use info@popot.org.

Appendix A

If you want to use an older version of Basilisk II or a different emulator, *Prince of Persia* will still need an 8-bit display (max 256 colors). The games will show an error message if the display is not correct.

Prince of Persia:



Prince of Persia 2:



Option 1

One solution might still be to edit /etc/X11/xorg.conf. In the Section "Screen" set DefaultDepth 8, plus in its SubSection "Display" set Depth 8. Then restart X.

Option 2

Another solution might be to start a second display.

```
$ sudo startx -- :1 -depth 8
```

Or:

```
$ sudo Xnest -depth 8 :1
```

Then, from the first display, start the emulator:

```
$ BasiliskIIGUI --display :1
```

Option 3

Yet another solution might be to use a VNC client and server.

```
$ sudo apt-get install xvnc4viewer vnc4server
```

Create an 8-bit display.

```
$ vncserver :1 -depth 8
```

Or:

```
$ vncserver :1 -pixelformat bgr233
```

(To stop the server, use "vncserver -kill :1".)

Then connect to the new display.

```
$ vncviewer :1
```

Or:

```
$ vncviewer -LowColourLevel 2 :1
```