

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

December 10, 2022

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.....	3
2.2 ROM File.....	3
2.3 HFS Files.....	4
3. Putting Everything Together.....	5
Questions?.....	5
Appendix A.....	6
Option 1: X11.....	6
Option 2: Second Display.....	6
Option 3: VNC.....	6

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 Mac(intosh) is a series of PCs. We will instead 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

Copyright © 2016-2022 Prince of Persia modding community

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts.

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 years. 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

We'll use kanjitalk755's more up-to-date fork. Either download or clone; your choice.

To download:

```
$ wget https://github.com/kanjitalk755/macemu/archive/master.zip
$ unzip master.zip
$ mv -i macemu-master macemu
```

To clone:

```
$ git clone https://github.com/kanjitalk755/macemu.git
```

1.2 Compile

We will modify the preferences of Basilisk II via its GTK user interface.

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

The application does *not* support GTK versions later than 2.x.

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`.

First, remove the old system version, if it is installed.

```
$ sudo apt remove basilisk2
$ rm ~/.basilisk_ii_*
```

Then, compile and install Basilisk II.

```
$ cd macemu/BasiliskII/src/Unix
$ NO_CONFIGURE=1 ./autogen.sh
$ ./configure --enable-standalone-gui --with-gtk --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 System 7, ROM and HFS Files

Download the following files.

2.1 System 7

IMPORTANT: This document mentions the `System70_boot.dsk` boot disk. This floppy does *not* provide audio. To get audio, obtain+install+use a full System 7 instead.

Example download locations to obtain `System70_boot.dsk`:

- https://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 to obtain `PERFORMA.ROM`:

- https://www.redundantrobot.com/sheepshaver_files/roms/1mbMacrom.zip
- <https://github.com/macmade/Macintosh-ROMs/blob/main/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 (1)

https://www.popot.org/get_the_games.php?game=1_Mac ([PoP1.hfs](#), [mirror](#))

Prince of Persia 2

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

PoPMap

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

The Persia Cheater

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

Prince of Persia Editor

https://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 Basilisk II:

\$ BasiliskII**GUI**

- On the Volumes tab, add ("Add...") System70_boot.dsk and all HFS files.
- On the Memory/Misc tab, add ("Browse...") PERFORMA.ROM.
- On the Graphics/Sound tab, set the Window Refresh Rate to 60 Hz.

Press the "Start" button in the lower left.

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

Edit ~/.config/BasiliskII/prefs (older versions: ~/.basilisk_ii_prefs) and set displaycolordepth to 8.

Then restart the application, and once again "Start" emulation.

Questions?

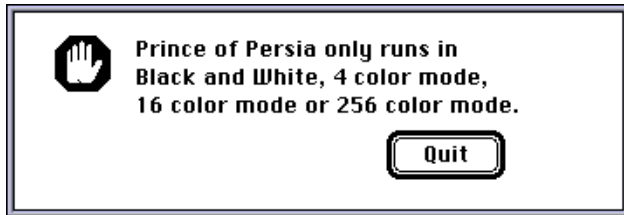
Use the Princed forum to ask questions about running *Prince of Persia* for System 7 on GNU/Linux: <https://forum.princed.org/viewforum.php?f=63>

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

Appendix A

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

Prince of Persia:



Prince of Persia 2:



Workaround 1: X11

One solution might still be to manually create `/etc/X11/xorg.conf`. Add a Section "Screen" where you set `DefaultDepth 8`, plus in its SubSection "Display" set `Depth 8`. Then restart X.

Workaround 2: Second Display

Another solution might be to start a second display.

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

Or, after `$ sudo apt install xnest`:

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

Then, from the first display, start the emulator:

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

Workaround 3: VNC

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

```
$ sudo apt install tightvncserver xtightvncviewer
```

Create an 8-bit display.

```
$ tightvncserver -pixelformat bgr233
```

Then connect to the new display.

```
$ vncviewer -bgr233 :1
```

To later stop the server, use: `$ tightvncserver -kill :1`