PoP1 for FM Towns under GNU/Linux

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This short HOWTO explains how to run the FM Towns version of Prince of Persia under GNU/Linux without the CDEmu repositories.

NOTE (loop): In case you are wondering why we are not mounting via a loop device (with -o loop), read up on hardware emulation.[1]
NOTE (Debian): CMake 2.8.5 or higher is required. Debian Squeeze has 2.8.2, so if you run Debian, make sure you're using Wheezy or newer. (In /etc/apt/sources.list change all *"squeeze"* to *"wheezy"*, then run # apt-get update; apt-get dist-upgrade.)
NOTE (kernel): If you ever change your kernel, you need to redo steps 1b, 3a and 6 and further.

1. Let's start by making sure we have all the tools and libraries required to continue.

1a. # apt-get install build-essential cmake-curses-gui libao-dev libglib2.0-dev intltool gir1.2-notify-0.7

1b. # apt-get install linux-headers-$(uname -r)

2. Download the core software and gCDEmu client source packages. Visit http://cdemu.sourceforge.net/project/#download and download *"vhba-module"*, *"cdemu-daemon"*, *"libmirage"* and *"gCDEmu"*.

3. Unpack these packages ($ tar xvjf <file>) and then compile and install them as follows.

3a. vhba-module:
$ make
# make install

3b. libmirage:
$ mkdir build
$ cd build
$ ccmake ..
press c (configure)
press c (configure) *[sic]*
press g (generate and exit)
$ make
# make install

1 See, for example: http://forum.winehq.org/viewtopic.php?t=12746

3c. cdemu-daemon:
(same as libmirage)

3d. gCDEmu:
(same as libmirage)

4. # ln -s /usr/local/lib/i386-linux-gnu/libmirage.so.9 /usr/lib/libmirage.so.9

5. # ldconfig

6. # depmod -a

7. # modprobe vhba

8. # chmod a+rwx /dev/vhba_ctl

9. $ cdemu-daemon &
(Not as root.)

10. $ gcdemu &

11. Right click the gCDEmu tray icon and right click on its *"Device #00: Empty"* to open the PoP1_FM_Towns.iso CD-ROM image.

12. Right click the CD-ROM icon on the desktop and mount it.

13. $ wine cmd

14. Find the drive that contains the Prince of Persia CD-ROM. (For me it was E: on one computer, L: on another.) Remember it for step 16. Then: >exit

15. In the Unz_0.5_L30/ directory, run: $ wine Unz.exe &

NOTE (Wine): You may want to get yourself the latest Wine. See *Appendix A*. If you get an *"intel_do_flush_locked failed: Input/output error"*, get yourself better hardware or drivers if you system properly supports OpenGL.

16. On the CD-ROM1 tab of the Unz settings (Settings menu, select *"Property..."*), in the *"Emulation type"* section, choose *"Select drive"* and select the drive letter you found during step 14.

17. Press the OK button to close Unz.

18. Restart Unz.

19. Prince of Persia starts! From the Drive0 menu, select *"Insert..."* and open floppy.bin.

20. Use the space bar to select the first option from the game's menu.

NOTE (music): If you have an ISO file with music tracks but hear no music, try the following. On the CD-ROM2 tab of the Unz settings, in the *"CD-DA volume control"* section, check *"Ignore"*. Also, make sure to increase the CD volume *after* the game has started (with, for example, alsamixer).

Appendix A: Installing Wine

Download the latest source package via:
http://sourceforge.net/projects/wine/files/latest/download?source=files

# apt-get install flex bison libx11-dev libfreetype6-dev libxcursor-dev libxi-dev libxxf86vm-dev libxrandr-dev libxinerama-dev libxcomposite-dev libglu1-mesa-dev libosmesa6-dev libdbus-1-dev libgnutls-dev libncurses5-dev libsane-dev liblcms1-dev libgstreamer0.10-dev libcapi20-dev libcups2-dev libgsm1-dev libmpg123-dev libopenal-dev libldap2-dev prelink libxslt1-dev libpng12-dev libasound2-dev libfontconfig1-dev libhal-dev libsane-dev libgstreamer-plugins-base0.10-dev ocl-icd-opencl-dev
$ make
# make install