

QuakePPC

COLLABORATORS							
	TITLE :						
ACTION	NAME	DATE	SIGNATURE				
WRITTEN BY		February 14, 2023					

REVISION HISTORY							
NUMBER	DATE	DESCRIPTION	NAME				
	1						

QuakePPC

# **Contents**

1	Qual	kePPC	1
	1.1	QuakePPC	1
	1.2	QuakePPC	1
	1.3	QuakePPC	2
	1.4	QuakePPC	2
	1.5	QuakePPC	3
	1.6	QuakePPC	4
	1.7	QuakePPC	5
	1.8	QuakePPC	5
	1.9	QuakePPC	5
	1.10	QuakePPC	6
	1.11	QuakePPC	7
	1.12	QuakePPC	8
	1.13	QuakePPC	9
	1.14	QuakePPC	9
	1 15	OnakePPC	a

QuakePPC 1/9

## **Chapter 1**

## **QuakePPC**

### 1.1 QuakePPC

QuakePPC - The 3D Game for PowerPC

Part A: Introduction

Part B: Installation

Part C: Configuration

Part D: Possible problems

Part E: Speed

Part F: History and Future

Part G: Authors
Part H: The GUI

#### 1.2 QuakePPC

QuakePPC - The 3D Game for PowerPC

The GUI

QuakePPC comes with a comfortable GUI. It is recommended to use this GUI, since you then do not need to bother about setting stacksizes or typing long cryptic command line parameters. Of course, you can switch the GUI to "No Popup" if you do not want the GUI to pop up each time you start Quake.

QuakePPC's GUI supports having several Game-Icons; one for the Base-Game and several of them for every Quake-Addon you play, so that all Addons can have different configuration files.

The GUI of QuakePPC uses the following Tabs:

Gfx

Audio

Misc

QuakePPC 2/9

#### Net

#### Game

Additionally it supports several Tooltypes.

To use different configs, just save under a different filename...

### 1.3 QuakePPC

OuakePPC - The 3D Game for PowerPC

Tooltypes

Every option within the GUI will save its state as a tooltype within the icon file.

While any of the tooltypes can be changed by using the Workbench info command, it

is strongly recommended that the GUI be used for this.

A few tooltypes, detailed below, require to be set from the icon information command:

SHOWGUI: Set this to TRUE to make the GUI popup, FALSE to

make it not popup

QUAKENAME: Specifies the name of the Executable.

QuakeWOS means WarpUP,

QuakePPC means PowerUP

Quake68k (recommended for 68k systems, as QuakeWOS and QuakePPC

obviously require a PowerPC) is for 68k.

By defining an Icon where this points to GLQuakeWOS or the

appropriate filenames for QuakeWorld you can also use the

GUI for GLQuake or QuakeWorld

### 1.4 QuakePPC

QuakePPC - The 3D Game for PowerPC

The Gfx Tab

Here you can specify the following options:

+ Gfx Type:

Chunkyppc - use the chunkyppc.library (see below)

Cybergfx - use CyberGfx (requires a GFX Board)

AGAc2p - use direct AGA c2p for an AGA machine

The Default Mode is Chunkyppc.

+ Use WPA8

If you specify this, no direct Memory Accesses will be done

for the Display Code. Be warned, this is slower, and on

AGA even incredibly slow. If Gfx Type is Chunkyppc this

setting will be ignored.

OuakePPC 3/9

#### + Particles

The maximum number of particles on screen can be specified here.

A value of (0) indicates that the quake internal value should be used,

otherwise the number entered here will be used as the partical limit.

The checkbox next to the number entry gadget can be used to enable or

disable particles; Users of slower systems should disable particles to

improve performance.

#### + Chunkyppc options

These options are only available if you specified the Gfx Type Chunkyppc.

For WarpUP you also need to install chunkyppc.library which is included

in this archive. You should use at least V27.

WB Window - Display in a WB Window instead on a Screen

PubScreen - Display on a PubScreen (you also need to set WB Window for Window Mode)

P96 PIP - If your GFX Board has PIP Hardware and Picasso 96, you can display

the game in a Workbench Window which is as fast as a Screen Display.

The Picasso IV and the CV/3D for example support PIP.

PIP resize - The PIP supports scaling in hardware. Try to give this a value

of for example 1.5 for 150% scaling... play around with this setting

if you have PIP capable hardware.

DblBuffering - Doublebuffering has usually advantages against Single Buffering

on high resolutions.

TriBuffering - Similar to Doublebufffering, but faster. What is faster, Single

or Double or Triplebuffering depends very much on your hardware.

Not all WB Emulations support Triple Buffering. But all support

Doublebuffering. Singlebuffering is used if neither Double-

nor Triplebuffering is selected.

Note: To change to a higher resolution you \*have\* to use the Video Options.

You can specify a default Resolution also (yes, this finally works:) ).

The default Resolution in your config.cfg will be overwritten if you use

the current GLQuake Beta. There will be a GLQuake with Video Options later,

of course.

## 1.5 QuakePPC

OuakePPC - The 3D Game for PowerPC

The Audio Tab

Here you can enable or disable Sound and CD Audio, and set the options for CD

Audio, in case you use it.

+ Disable sound - Select this to disable sound

QuakePPC 4/9

- + Disable CD audio Select this to disable the playback of audio tracks from
- a CD. This option will enable/disable the following two gadgets when appropriate.
- + CD unit Specify the unit number to use for reading CD audio files
- + CD device Specify the device name to use for access to your CD drive

### 1.6 QuakePPC

QuakePPC - The 3D Game for PowerPC

The Misc Tab

Here you can control various memory, cpu and input/output options.

- + Disable mouse Select this to disable support for the mouse
- + Enable MMU hack Select this to enable the MMU hack on 68K CPU systems.

This can improve performance slightly.

+ Disable stdout - This option should always be selected, otherwise lots of text will be streamed to your default output window.

(This must also be set if using GLQuake)

+ LC040 CPU - This option must be set if your 68K CPU does not contain a working FPU.

If you only have an LC-CPU (even if you have a PPC Board !!!) you must specify this, otherwise QuakePPC will crash when sound has been enabled.

+ Memory - The amount of memory quake should reserve for its use, specified in Megabytes. The default value of 16 is adequate for most users, but systems with limited amounts of free memory may have to reduce this value to 8 (or similar).

+ Surface cache - Do not change this value from the default of 0!! This option controls the surface cache size to use, specified in Kilobytes; the quake internal default value will be used when (0) is entered.

+ Set zone - Do not change this value from the default of 0!!

This option controls the size of zone to use, specified in

Kilobytes; the quake internal default value will be used when

- (0) is entered.
- + Minimum memory Setting this option will request quake to use as little memory as possible. (This automatically disables the above 3 gadgets when selected)

OuakePPC 5/9

#### 1.7 QuakePPC

QuakePPC - The 3D Game for PowerPC

The Net Tab

Here you can set up some network options. It should be noted, that QuakePPC currently only supports TCP/IP Networking, so some of the options are as of now just "dummy options". This might change in a future version. You need to use a Listen Server, if you want to play with more than 4 players. In that case you also need to specify +listen 16 in the Game Tab. A dedicated Server is usually faster than playing without a dedicated Server. Listen and Dedicated can be combined.

### 1.8 QuakePPC

OuakePPC - The 3D Game for PowerPC

The Game Tab

Here you can specify different Game Settings:

- + Playback Mode Start game in Playback mode; Plays "quake.vcr"
- + Record Mode Start game in Record mode; Records to "quake.vcr"
- + Rogue Enables Rogue extensions (Quake Mission Pack 2).
- + Hypnotic Enables Hypnotic extensions (Quake Mission Pack 1).
- + Game dir Specify a Game Dir, for example if you enter fortress here, this is as if you would have typed
- "QuakeWOS -game fortress" in the Shell.
- + Search path Add one (or more) search paths for quake pak files.
- + Miscellaneous Miscellaneous Options; Here the same Option names which are used on the PC can be entered. For example +listen 16 for a Listen-Server with 16 Players, +MLOOK for Mouselook, or +map fqrotpst to start on map fqrotpst (in that case you probably would insert fq in "Game dir" as fqrotpst is the Start Map of the Game Addon Fantasy Quake, which can be downloaded at ftp.cdrom.com).

#### 1.9 QuakePPC

QuakePPC - The 3D Game for PowerPC

Introduction

Quake is simply the most famous 3D Game at all. For a long time only a 68k version (by ClickBOOM) was available. But in December 1999,

OuakePPC 6/9

the authors of Quake, ID Software, released the Quake Source Code under

GPL License (means: Everybody can port it or copy it, perfectly

legal, as long as with all ports the source code is provided).

The Data Files of Quake are not GPL, but you can either get a copy

from Amiga Firms like ClickBOOM or Alive Software, or you can just

use the Data Files from PC. Datafiles from Amiga (either PowerPC

or 68k) and even from PC are fully compatible. (What can not be

said about the Mac Version, BTW... several Game-Addons fail to

work under MacQuake...).

This Quake Port comes from the Quake Porting Effort from Frank

Wille (frank@phoenix.owl.de), Steffen Haeuser (MagicSN@Birdland.es.bawue.de)

and Massimiliano Tretene (glquake@.libero.it). The GUI was done

by Martin McKenzie (marty@cadtech.demon.co.uk).

Finally you can get a legal QuakePPC Port !!!

If you run it from the Shell specify at least 500000 Stack,

but we recommend to use the GUI.

Executables in all our ports are provided for WarpUP, for PowerUP and for 68k.

The Source Code is available in separate archives. For development we used

the vbcc compiler (vbcc-WarpUP for WarpUP, vbcc-PowerUP for PowerUP, vbcc68k

for 68k) and the StormC compiler (for GLQuake). The Code also compiles

with StormC, but only if compiled C-only, as our ASM Optimizations are

done for the vbcc/pasm combination specifically and do not work with

StormC/PowerASM. It should not be too difficult to adapt them to PowerASM,

though.

We also recommend having a look at the nice Quake Addons on ftp.cdrom.com in the planetquake Directory. Especially Fantasy Quake, Team Fortress and QuakeRally are VERY nice.

#### 1.10 QuakePPC

QuakePPC - The 3D Game for PowerPC

Installation

You need the following Software installed:

- WarpUP V3 (powerpc.library V15) for QuakeWOS
- ppc.library V46 for QuakePPC (PowerUp)
- Warp3D V3 for GLQuake
- chunkyppc.library (only required for the WarpUP version)
- lowlevel.library (if you want Joypad support)

People who have a "PSX Port Device" can use Playstation Joypads (even analogue

OuakePPC 7/9

ones) also, if they have the psxport.device installed.

To install the game, copy all executables into one Directory. Then be sure that the ID1 directory from your Quake Datafiles (which you have to buy from a software reseller) is present (For example ClickBOOM or Alive Software sell these Datafiles). Alive Software will also soon sell the Data-CDs bundled with our Quake Port.

Before you play, I suggest configuring the GUI as to your needs. You can make it "no Popup" also (see: GUI).

If you do not use the GUI be sure that you set the stack to at least 300000, and if you have a LC040/LC060 in your Computer (even on a PPC Board), use the option -no68kfpu. You can set this in the GUI also, though, on the Misc Tab.

#### 1.11 QuakePPC

QuakePPC - The 3D Game for PowerPC

Configuration

Most of the Options of QuakePPC are self-explanatory, and can be set up in the GUI or in the Quake Menu. There are some interesting "Quake Console Variables" though (you enter the console in the game when pressing the '~' key). They will be saved when quitting the Game. You can set a Quake Console Variable like this in the console:

joy\_force1 GAMECTRL

The following Console Variables are most interesting are:

joy\_force0 to joy\_force3

Some Joysticks/pads are not correctly recognized by lowlevel.library (Bug in lowlevel.library apparently). If this happens for your Joypad/Stick you can set it manually. After changing you need to restart the game for the Options to take effect.

Possible Values:

GAMECTRL - CD 32 Compatible Gamepad

JOYSTICK - Joystick

MOUSE - Mouse

AUTOSENSE - Use Autorecognition (does not work for all pads)

joy\_psxonly

If this is set to 1, lowlevel.library Joypad code is disabled, and only PSX Port Code (if a PSX Port Device is present) is used. This might result in a minor speedup for owners of PSX Port Devices. sensitivity

QuakePPC 8/9

This changes the sensitivity of the movement of the analog pads of a PSX

Port Pad and the mouse. A sensible value (IMHO) is 1.5. This depends very

much on what you like, though.

joy\_forwardsensitivity

This changes the sensitivity of the forward movement of a digital joypad

(PSX or lowlevel.library). The normal value is -1.

joy\_pitchsensitivity

This changes the sensitivity of the turning using a digital joypad (PSX or

lowlevel.library). The normal value is 1.

joy\_sidesensitivity

This changes the sensitivity of the sidestepping using a joypad (PSX or

lowlevel.library). The normal value is -1.

If you do not use the GUI, you can change the other options of QuakePPC by

(but it is much easier using the GUI:))

CD Audio: env:quake1/cd\_unit and env:quake1/cd\_device

WB Window Mode: env:quake1/wb

PIP: env:quake1/pip

PIP Resize: env:quake1/resize

Doublebuffering: env:quake1/dbuf and env:quake1/oldstyle both set

Triplebuffering: env:quake1/dbuf set only (note that Triplebuffering

is not supported by all WB Emulations)

PubScreenname: If wb is set: env:quake1/pubscreenname

rtgmaster: If env:quake1/rtgmaster is set to 1, the rtgmaster screenmode requester

is used

#### 1.12 QuakePPC

QuakePPC - The 3D Game for PowerPC

Possible Problems

1: Termination problems with QuakeWOS

Deinstall ppc.library, and install BPPCFix and ppc.library Emulation

2: Game does not work on CV/PPC or BV/PPC

Do:

echo >env:powerpc/force "1"

echo >envarc:powerpc/force "1"

echo >env:powerpc/gfxaddr "\$e0000000"

echo >envarc:powerpc/gfxaddr "\$e0000000"

4: Stackproblems

Use the GUI or set the cache manually. If you use the GUI, stack is handled

QuakePPC 9/9

automatically. Note: For some systems it seems the RunCommand function of dos.library does not work (an "evil system patch" active ?) They should raise the stack manually

5: Crashes during Sound Init

You might have no 68k FPU. Try -no68kfpu Option.

6: The GLQuake Beta crashes

Call it like this:

GLQuakeWOS -width 640 >NIL:

#### 1.13 QuakePPC

QuakePPC - The 3D Game for PowerPC

Speed

Non-GL Quake on a 150 MHz 604e: 28 fps in Lowres.

233 MHz 35 fps. 603e CPUs are a bit slower.

## 1.14 QuakePPC

QuakePPC - The 3D Game for PowerPC

History

V1.0 - Initial Aminet release

### 1.15 QuakePPC

QuakePPC - The 3D Game for PowerPC

Authors

Quake is copyrighted by ID Software. This Amiga PowerPC+68k port

was done by

Frank Wille - frank@phoenix.owl.de

 $Steffen\ Haeuser\ -\ Magic SN@Birdland.es.bawue.de$ 

 $Massimiliano\ Tretene-glquake@libero.it$ 

The GUI was done by:

Martin McKenzie - marty@cadtech.demon.co.uk