About the DarkPlaces glquake engine

DarkPlaces engine was started because I was unsatisfied with the other engines available soon after the quake source release (which did little more than add some flashy effects), and craved modding features for my DarkPlaces mod, and wanted some real enhancements to the online gaming experience as well.

DarkPlaces engine is the result, I hope everyone likes it.

I am not very good at writing documentation, so this readme is organized as a feature list, with information on each feature, I hope it is still adequate documentation.

If you have any suggestions for features to document in detail in the readme or any other questions/comments/bugreports/suggestions/etc, send me an email with the address darkplacesengine gmail com (add @ and . characters as appropriate)

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Input Tips

If mouse movement is jerky but framerate is high, try typing "gl_finish 1" (without quotes) into the console (makes cpu wait for gpu before ending frame, which gives lousy input drivers a chance to catch up).

Graphics Tips

Visit the Color Control submenu of Options, it's near the top, fiddle with gamma (or grey level if using the color levels mode) until the grey box surrounding the white/black dither pattern matches up with the grey you see while looking at the dither from a distance, this will calibrate quake to look approximately as id Software intended, and ensure everyone sees it the same. Note: Different resolutions may be different intensities depending on monitor. Note2: ATI Radeon Catalyst 3.10 drivers seem to have a weird gamma limiting 'feature' which rejects gamma settings it doesn't like, feel free to complain to ATI about this if it gets in your way (it probably will).

Visit the Effects Options submenu of Options, and check out the options.

Networking tips

Visit the Player Setup submenu of the Multiplayer menu to configure your network speed (as well as the usual settings from quake like name and colors).

To host a server behind a router/firewall, simply set up a port forward on the UDP port you are running the server on (default is 26000), to forward incoming UDP packets on that port to the server, then people can connect.

To make your server show up on the server browser (in the Join Game menu), either set sv_public 1 in the console, or use the multiplayer new game menu and check the Public server checkbox.

Supported games

- Quake : -quake, this is active by default, gamedirs: id1
- Quake: Scourge of Armagon: -hipnotic or hipnotic in executable name or path, gamedirs: hipnotic, id1
- Quake: Dissolution of Eternity: -rogue or rogue in executable name or path, gamedirs: rogue, id1
- Nexuiz : -nexuiz or nexuiz in executable name or path, gamedirs: data

- Nehahra: -nehahra or nehahra in executable name or path, gamedirs: nehahra, id1
- GoodVsBad2: -goodvsbad2 or gvb2 in executable name or path, gamedirs: rts
- BattleMech: -battlemech or battlemech in executable name or path, gamedirs: base
- PrydonGate: -prydon or prydon in executable name or path, gamedirs: prydon

These games are considered officially supported, if any problems are seen, please make sure you are running the latest version of the game and engine, if you are, please report the problem.

Graphics features

- · Redesigned effects including smoke, blood, bubbles and explosions.
- Better looking dynamic lights.
- External texture support (see Replacement Content section below)
- Realtime bumpmapped lighting/shadowing support (r_shadow_realtime_world cvar) with many options. (note: very slow if you do not have .rtlights files installed, be sure to get some from dpmod or search on the web for rtlights files)
- .rtlights file support (improves performance/appearance of realtime lighting)
- .rtlights file editing (see r editlights help in game)
- Alpha blended sprites (instead of glquake's masked sprites).
- Interpolated entity movement and animations (both models and sprites).
- Overbright and fullbright support on walls and models (like winquake).
- Colormapping support on any q1 model (like winquake).
- Fog (set with "fog density red green blue" command)
- Skybox (loadsky "mtnsun_" will load "env/mtnsun_ft.tga" and so on).
- Sky rendering improved (no more glquake distortion).
- Sky polygons obscure geometry just like in winquake.
- Color calibration menu to ensure a proper Quake experience.
- Improved model lighting (directional shading).
- No messy .ms2 model mesh files (no glquake dir anymore either).
- New improved crosshair (team color coded).
- Improved image loading (smoother menus and such).
- Ability to disable particle effects (cl particles* cvars).
- Decals (cl decals evar to enable).
- Stainmaps (cl stainmap evar to enable).
- Sorted transparent stuff to render better.
- Improved multitexture support (r textureunits (1-4 supported), needs gl combine 1 because of overbright)
- Improved chase cam (chase active 1 no longer goes into walls)
- More configurable console background (ser conalpha and ser conbrightness)
- Optional fullbrights (r_fullbrights 0/1 followed by r_restart)
- Dynamic Farclip (no distance limits in huge maps)
- Improved gl_flashblend (now renders a corona instead of an ugly blob)
- DynamicLight coronas (more realism)
- Transparent statusbar (sbar_alpha) that does not block your view as much.
- No 8bit texture uploads (fixes 'green' walls in the distance).
- Fixed view blends (glquake was quite broken).
- JPEG texture support using libjpeg (Thanks Elric)
- Video Options, Color Control, and Effects Options menus added, and more options.
- .dlit file support (produced by hmap2 -light) for fast per-pixel lighting without shadowing.
- pointfile command is improved (for leak finding in maps when you have a .pnt file from a failed qbsp compile)
- configurable particle effects (effectinfo.txt, can be reloaded at any time by cl particles reloadeffects command for quick testing)
- fixed envmap command (makes a skybox of the current scene)

Sound features

- Ogg and wav file overrides for cd tracks (example: id1/sound/cdtracks/track002.ogg or .wav) (Thanks Elric)
- Streaming ogg sounds to save memory (Ogg sounds over a certain size are streamed automatically) (Thanks Elric)
- Ogg Vorbis sound support (all .wav sounds look for .ogg if the .wav is missing, useful for making mods smaller, particularly useful for cd tracks) (Thanks Elric)
- Stereo sound file support (useful for cd tracks)
- 7.1 surround sound mixing support (snd channels evar selects how many to use, default 2 for stereo)

Client features

- showtime cvar.
- showdate cvar.
- -benchmark option to run automated timedemo benchmarks (-benchmark demo1 does +timedemo demo1 and quits immediately when finished)
- timedemo automatically puts results in gamedir/benchmark.log
- Slightly improved aiming on quake servers (does not support proquake aiming).

- -sndspeed samplerate (default: 44100, quake used 11025)
- snd swapstereo cvar (for people with backwards SB16 sound cards)
- Saves video settings to config and restores them properly
- Ability to change video settings during game (video options menu or vid * cvars)
- showfps cvar.
- Sends 20fps network packets to improve modern play instead of one per frame. (sys ticrate controls network framerate)
- Allow skin colormaps 14 and 15 (freaky:)
- Longer chat messages.
- No more 72fps limit, cl maxfps lets you decide.
- Support for more mouse buttons (mouse1-mouse16, mwheelup/mwheeldown are aliases to mouse4 and mouse5).
- Server browser for public (sv. public 1) darkplaces servers as well as quakeworld servers.
- log file cvar to log console messages to a file.
- condump command to dump recent console history to a file.
- PK3 archive support with compression support using zlib (Thanks Elric)
- maps command lists installed maps
- tab completion of map names on map/changelevel commands
- tab completion of rcon commands
- .ent file replacement allows you to modify sky and fog settings on a per-map basis (use sv_saveentfile command in singleplayer and then edit the worldspawn entity in a text editor, for example setting "sky" "mtnsun_" to load the skybox mtnsun_ in your favorite maps, or "fog" "0.03 0.2 0.2 0.2" to put fog in the level)
- Switchable bindmaps (in_bind command allows you to bind keys in one of 8 bindmaps, 0-7, in_bindmap command allows you to select two active bindmaps to use at once, ones missing in the first are checked in the second)
- Options menu "Reset to Defaults" option works better than in Quake
- · cvarlist and cmdlist commands
- improved tab completion of commands and cvars, with default value and description listed
- curl command (downloads a URL to a pk3 archive and loads it)
- fs rescan command (allows you to load a newly installed pak/pk3 archive without quitting the game)
- saveconfig command (allows you to save settings before quitting the game, mostly useful when debugging the engine if you expect it to crash)
- gamedir command to change current mod (only works while disconnected).
- QuakeWorld support.
- ProQuake message macros (%l location, %d last death location, %h health, %a armor, %x rockets, %c cells, %t current time, %r rocket launcher status (I need RL, I need rockets, I have RL), %p powerup status (quad pent ring), %w weapon status (SSG:NG:SNG:GL:RL:LG).
- Support for ProQuake .loc files (locs/e1m1.loc or maps/e1m1.loc)
- Support for QIZMO .loc files (maps/e1m1.loc)
- Ingame editing of .loc files using locs_* commands (locs_save saves a new .loc file to maps directory)
- bestweapon command (takes a number sequence like bestweapon 87654321, digits corresponding to weapons, first ones are preferred over last ones, only uses weapons that have 1 ammo or more)
- Is and dir commands to list files in the Quake virtual filesystem (useful to find files inside paks)
- toggle command allows you to use a single bind to toggle a cvar between 0 and 1
- slowmo cvar allows you to pause/slow down/speed up demo playback (try using these binds for example: bind f1 "slowmo 0";bind f2 "slowmo 0.1";bind f3 "slowmo 1")
- AVI video recording using builtin I420 codec (bind f4 "toggle cl_capturevideo"), with automatic creation of sequentially numbered avi
 files for each recording session. (WARNING: HUGE files, make sure you have several gigabytes of disk space available! and it is only
 recommended during demo playback! You will probably want to reencode these videos using VirtualDub, mencoder, or other utilities
 before posting them on a website)
- ping display in scoreboard, even on Quake servers (on DarkPlaces servers it also shows packet loss)

Server features

- Allows clients to connect through firewalls (automatic feature)
- Works behind firewalls unlike NetQuake (must port forward UDP packets on the relevant port from the firewall to the server, as with any game)
- More accurate movement and precise aiming.
- 255 player support.
- sv cheats cvar controls cheats (no longer based on deathmatch).
- slowmo cvar controls game speed.
- No crash with the buggy 'teleport train' in shub's pit.
- Allow skin colormaps 14 and 15 (freaky:)
- sys_ticrate applies to listen (client) servers as well as dedicated.
- sv public cvar to advertise to master server.
- log file cvar to log console messages to a file.
- condump command to dump recent console history to a file.
- PK3 archive support with compression support using zlib (Thanks Elric)
- Option to prevent wallhacks from working (sv_cullentities_trace 1).
- Selectable protocol (sv_protocolname QUAKE for example allows quake clients to play, default is sv_protocolname DP7 or a later protocol)
- Automatic file downloads to DarkPlaces clients.

- Ability to send URLs to DarkPlaces clients to download pk3 archives needed to play on this server.
- rcon support for remote administration by trusted clients with matching rcon password, or external quakeworld rcon tools
- prvm edictset, prvm global, prvm globals, and prvm globalset commands aid in QuakeC debugging
- prvm_printfunction function prints out the QuakeC assembly opcodes of a function, can be useful if you can't decompile the progs.dat file
- prvm profile command gives call count and estimated builtin-function cost
- sys_colortranslation cvar controls processing of Quake3-style ^ color codes in terminal output, default is white text on windows and ANSI color output on Linux/Mac OSX
- sys_specialcharactertranslation controls processing of special Quake characters to make colored names more readable in terminal output

Modding features

- HalfLife map support (place your HalfLife wads in quake/id1/textures/ or quake/MODDIR/textures/ as the maps need them)
- Larger q1 and h1 map size of +-32768 units.
- Colored lighting (.lit support) for q1 maps.
- Q3 map support (no shaders though), with no limits.
- Q2 and Q3 model support, with greatly increased limits (256 skins, 65536 frames, 65536 vertices, 65536 triangles). (Note: md2 player models are not supported because they have no skin list)
- Optimized QuakeC interpreter so mods run faster.
- Bounds checking QuakeC interpreter so mods can't do naughty things with memory.
- Warnings for many common QuakeC errors.
- Unprecached models are now a warning (does not kill the server anymore).
- External texture support (see dpextensions.qc DP GFX EXTERNALTEXTURES).
- Fog ("fog" key in worldspawn, same parameters as fog command).
- .spr32 and halflife .spr sprites supported. (Use Krimzon's tool to make spr32, and lhfire can render directly to spr32, or just use replacement textures on .spr).
- Skybox ("sky" key in worldspawn, works like loadsky and quake2).
- Stereo wav sounds supported.
- Ogg Vorbis sounds supported. (Thanks Elric)
- ATTN NONE sounds are no longer directional (good for music).
- play2 sound testing command (ATTN NONE variant of play).
- r texturestats and memstats and memlist commands to give memory use info.
- Lighting on sprites (put! anywhere in sprite filename to enable).
- More r_speeds info (now a transparent overlay instead of spewing to console).
- Supports rotating bmodels (use avelocity, and keep in mind the bmodel needs the "origin" key set to rotate (read up on hipnotic rotation support in your qbsp docs, or choose another qbsp if yours does not support this feature), or in q3 maps an origin brush works).
- More sound channels.
- More dynamic lights (32 changed to 256).
- More precached models and sounds (256 changed to 4096).
- Many more features documented in dpextensions.qc. (bullet tracing on models, qc player input, etc)

Replacing Content

Formats supported: tga (recommended), png (loads very slowly), jpg (loads slowly), pcx, wal, lmp

Usually you want to put replacement content in either id1/ or another directory such as pretty/ inside your quake directory, in DarkPlaces you can run multiple -game options at once (such as -game ctf -game pretty -game dpmod to have texture overrides from pretty, maps from ctf, and gameplay from dpmod) or multiple gamedirs specified with the gamedir console command (gamedir ctf pretty dpmod).

All texture layers are optional except diffuse (the others are NOT loaded without it)

Replacing skins

- progs/player.mdl_0.tga diffuse
- progs/player.mdl_0_norm.tga normalmap (can have alpha channel with bumpmap height for offsetmapping/reliefmapping)
- progs/player.mdl 0 bump.tga bumpmap (not loaded if normalmap is present)
- progs/player.mdl_0_gloss.tga gloss map, also known as specular color map (the color of reflected light)
- progs/player.mdl 0 glow.tga glow map (use luma if tenebrae compatibility is a concern)
- progs/player.mdl 0 luma.tga alternate tenebrae-compatible name for glow map (use one or the other)
- progs/player.mdl_0_pants.tga pants image, greyscale and does not cover the same pixels as the diffuse texture (this is additive blended ('Screen' mode in photoshop) ontop of the diffuse texture with a color tint according to your pants color), make sure you have black pixels in the diffuse image otherwise you get 'ghosting' (washed out and too bright because both layers are being combined on these pixels)
- progs/player.mdl 0 shirt.tga shirt image, same type as pants

Replacing textures in specific maps

- textures/e1m1/ecop1 6.tga
- textures/e1m1/ecop1 6 norm.tga
- textures/e1m1/ecop1 6 bump.tga
- textures/e1m1/ecop1 6 gloss.tga
- textures/e1m1/ecop1 6 glow.tga
- textures/e1m1/ecop1 6 luma.tga
- textures/e1m1/ecop1 6 pants.tga pants and shirt layers are possible on bmodel entities with quakec modifications to set their .colormap field
- textures/e1m1/ecop1 6 shirt.tga

Replacing textures in all maps

- textures/quake.tga
- textures/quake norm.tga
- textures/quake_bump.tga
- textures/quake_gloss.tga
- textures/quake_glow.tga
- textures/quake luma.tga
- textures/quake_pants.tga
- textures/quake_shirt.tga

Replacing hud and menu pictures

• gfx/conchars.tga

Replacing models

same as in Quake, you can replace a model with exactly the same file name (including file extension), so for example an md3 player model has to be renamed progs/player.mdl, and a small box of shells in md3 format has to be renamed maps/b shell0.bsp

How to make .skin files for multiple skins on a Quake3 (md3) or DarkPlacesModel (dpm) model

These files use the same format as the ones in Quake3 (except being named modelname_0.skin, modelname_1.skin, and so on), they specify what texture to use on each part of the md3 (or zym or dpm or psk) model, their contents look like the following...

torso,progs/player_default.tga gun,progs/player_default.tga

says that the model part named "torso" should use the image progs/player_default.tga says that the model part named "gun" should use the image progs/player default.tga

says that the model part named "muzzleflash" should use the image

muzzleflash,progs/player_default_muzzleflash.tga progs/player_default_muzzleflash.tga - this is useful for transparent skin areas which

should be kept separate from opaque skins

tag_head,

says that the first tag is named "tag head" - this is only useful for QuakeC mods using segmented player models so that they can look up/down without their legs rotating,

don't worry about it as a user

tag torso, tag_weapon, second tag name third tag name

How to install a soundtrack in ogg format

These files must be in ogg or wav format, and numbers begin at 002 if you wish to replace (or install) the Quake cd music - since track 001 was the Quake data track.

quake/id1/sound/cdtracks/track002.ogg replacement track for "cd loop 2" quake/id1/sound/cdtracks/track003.ogg replacement track for "cd loop 3"

Example list of filenames

replaces the player model) quake/id1/progs/player.mdl

quake/id1/progs text file that specifies textures to use on an md3 model) /player.mdl 0.skin

quake/id1/progs /player_default.tga quake/id1/progs

texture referenced by the .skin, make sure that any special parts of this are black, like pants should be black here otherwise you get pink pants when you use a red color ingame)

white pants area of the skin, this is colored by the engine according to your color settings, additive blended

/player_default_pants.tga (which is called "Screen" mode in Photoshop if you wish to preview the layers))

quake/id1/progs /player default shirt.tga

white shirt area of the skin, similar to pants described above)

normalmap texture for player default, alpha channel can contain a heightmap for offsetmapping quake/id1/progs

(r glsl offsetmapping 1 in console) to use, alternatively you can use bump.tga instead of this which is only /player default norm.tga

a heightmap and the engine will generate the normalmap for you)

quake/id1/progs

glossmap (shiny areas) for player default) /player default gloss.tga

quake/id1/progs glowing (glowing stuff) for player default, this is fullbrights and such, be sure the corresponding pixels are

black in the player_default.tga, because just like pants/shirt this is additive blended) /player_default_glow.tga

replaces the quake logo on the arch in start.bsp) quake/id1/textures/quake.tga

quake/id1/textures same as for a player) /quake_norm.tga quake/id1/textures

same as for a player) /quake gloss.tga

quake/id1/textures/#water1.tga replaces *water1 texture in the maps, # is used instead of * in filenames)

replacement font image, this was in gfx.wad in quake) quake/id1/gfx/conchars.tga quake/id1/gfx/conback.tga replacement console background, just like in quake) quake/id1/gfx/mainmenu.tga replacement main menu image, just like in quake)

quake/id1/maps/b bh25.bsp replacement for normal health pack, for example this could be an md3 model instead)

quake/id1/sound/cdtracks

replacement track for "cd loop 2" /track002.ogg

quake/id1/sound/cdtracks

replacement track for "cd loop 3" /track003.ogg

Commandline options as of 2007-03-11

- BSD GLX: -gl driver drivername selects a GL driver library, default is libGL.so.1, useful only for using fxmesa or similar, if you don't know what this is for, you don't need it
- BSD GLX: -nogetprocaddress disables GLX ARB get proc address (not required, more formal method of getting extension functions)
- BSD GLX: -novideosync disables GLX SGI swap control
- BSD Sound: -cddev devicepath chooses which CD drive to use
- Client: -benchmark demoname runs a timedemo and quits, results of any timedemo can be found in gamedir/benchmark.log (for example id1/benchmark.log)
- Client: -demo demoname runs a playdemo and quits
- Client: -forcegmenu disables menu.dat (same as +forcegmenu 1)
- Client: -particles number changes maximum number of particles at once, default 32768
- Client: -texbrightness number sets the quake palette brightness (brightness of black), allowing you to make quake textures brighter/darker, not recommended
- Client: -texcontrast number sets the quake palette contrast, allowing you to make quake textures brighter/darker, not recommended
- Client: -texgamma number sets the quake palette gamma, allowing you to make quake textures brighter/darker, not recommended
- Client: -usegmenu causes the first time you open the menu to use the quake menu, then reverts to menu.dat (if forcegmenu is 0)
- Console: -condebug logs console messages to quonsole.log, see also log file
- Console: -developer enables warnings and other notices (RECOMMENDED for mod developers)
- Console: -nostdout disables text output to the terminal the game was launched from
- Filesystem: -basedir path chooses what base directory the game data is in, inside this there should be a data directory for the game (for example id1)
- GL: -noanisotropy disables GL EXT texture filter anisotropic (allows higher quality texturing)
- GL: -nocombine disables GL ARB texture env combine or GL EXT texture env combine (required for bumpmapping and faster map rendering)
- GL: -nocubemap disables GL ARB texture cube map (required for bumpmapping)
- GL: -nocva disables GL EXT compiled vertex array (renders faster)
- GL: -nodot3 disables GL ARB texture env dot3 (required for bumpmapping)
- GL: -nodrawrangeelements disables GL EXT draw range elements (renders faster)
- GL: -noedgeclamp disables GL_EXT_texture_edge_clamp or GL_SGIS_texture_edge_clamp (recommended, some cards do not support the other texture clamp method)
- GL: -nofragmentshader disables GL ARB fragment shader (allows pixel shader effects, can improve per pixel lighting performance and capabilities)
- GL: -nomtex disables GL ARB multitexture (required for faster map rendering)
- GL: -noseparatestencil disables use of OpenGL2.0 glStencilOpSeparate and GL_ATI separate stencil extensions (which accelerate shadow rendering)
- GL: -noshaderobjects disables GL ARB shader objects (required for vertex shader and fragment shader)
- GL: -noshadinglanguage100 disables GL ARB shading language 100 (required for vertex shader and fragment shader)
- GL: -nostenciltwoside disables GL EXT stencil two side (which accelerate shadow rendering)
- GL: -notexture3d disables GL_EXT_texture3D (required for spherical lights, otherwise they render as a column)
- GL: -novertexshader disables GL_ARB_vertex_shader (allows vertex shader effects)
- Game: -battlemech runs the multiplayer topdown deathmatch game BattleMech
- Game: -contagiontheory runs the game Contagion Theory
- Game: -darsana runs the game Darsana

- Game: -did2 runs the game Defeat In Detail 2
- Game: -goodvsbad2 runs the psychadelic RTS FPS game Good Vs Bad 2
- Game: -hipnotic runs Quake mission pack 1: The Scourge of Armagon
- · Game: -nehahra runs The Seal of Nehahra movie and game
- Game: -neoteric runs the game Neoteric
- Game: -netherworld runs the game Netherworld: Dark Master
- Game: -nexuiz runs the multiplayer game Nexuiz
- · Game: -openquartz runs the game OpenQuartz, a standalone GPL replacement of the quake content
- Game: -prydon runs the topdown point and click action-RPG Prydon Gate
- Game: -quake runs the game Quake (default)
- Game: -rogue runs Quake mission pack 2: The Dissolution of Eternity
- Game: -setheral runs the multiplayer game Setheral
- Game: -som runs the multiplayer game Son Of Man
- Game: -tenebrae runs the graphics test mod known as Tenebrae (some features not implemented)
- Game: -teu runs The Evil Unleashed (this option is obsolete as they are not using darkplaces)
- Game: -thehunted runs the game The Hunted
- Game: -transfusion runs Transfusion (the recreation of Blood in Quake)
- Game: -zymotic runs the singleplayer game Zymotic
- Input: -nomouse disables mouse support (see also vid_mouse cvar)
- Input: -nomouse disables mouse support (see also vid_mouse evar)
- Linux ALSA Sound: -sndpcm devicename selects which pcm device to us, default is "default"
- Linux GLX: -gl_driver drivername selects a GL driver library, default is libGL.so.1, useful only for using fxmesa or similar, if you don't know what this is for, you don't need it
- Linux GLX: -nogetprocaddress disables GLX_ARB_get_proc_address (not required, more formal method of getting extension functions)
- Linux GLX: -novideosync disables GLX SGI swap control
- Linux Sound: -cddev devicepath chooses which CD drive to use
- MacOSX GLX: -nogetprocaddress disables GLX_ARB_get_proc_address (not required, more formal method of getting extension functions)
- MacOSX GLX: -novideosync disables GLX SGI swap control
- SDL GL: -gl_driver drivername selects a GL driver library, default is whatever SDL recommends, useful only for 3dfxogl.dll/3dfxvgl.dll or fxmesa or similar, if you don't know what this is for, you don't need it
- Server: -dedicated [playerlimit] starts a dedicated server (with a command console), default playerlimit is 8
- Server: -ip ipaddress sets the ip address of this machine for purposes of networking (default 0.0.0.0 also known as INADDR_ANY),
 use only if you have multiple network adapters and need to choose one specifically.
- Server: -listen [playerlimit] starts a multiplayer server with graphical client, like singleplayer but other players can connect, default playerlimit is 8
- Server: -port portnumber sets the port to use for a server (default 26000, the same port as QUAKE itself), useful if you host multiple servers on your machine
- Sound: -nocdaudio disables CD audio support
- Sound: -nosound disables sound (including CD audio)
- Sound: -novorbis disables ogg vorbis sound support
- Sound: -simsound runs sound mixing but with no output
- Sound: -sndbits bits chooses 8 bit or 16 bit sound output
- Sound: -sndmono sets sound output to mono
- Sound: -sndquad sets sound output to 4 channel surround
- Sound: -sndspeed hz chooses sound output rate (supported values are 48000, 44100, 32000, 24000, 22050, 16000, 11025 (quake), 8000)
- Sound: -sndstereo sets sound output to stereo
- Video: -bpp bits performs +vid_bitsperpixel bits (example -bpp 32 or -bpp 16)
- Video: -fullscreen performs +vid_fullscreen 1
- Video: -height pixels performs +vid_height pixels and also +vid_width pixels*4/3 if only -height is specified (example: -height 768 sets 1024x768 mode)
- Video: -width pixels performs +vid_width pixels and also +vid_height pixels*3/4 if only -width is specified (example: -width 1024 sets 1024x768 mode)
- Video: -window performs +vid_fullscreen 0
- Windows DirectSound: -primarysound locks the sound hardware for exclusive use
- Windows DirectSound: -snoforceformat uses the format that DirectSound returns, rather than forcing it
- · Windows GDI Input: -noforcemaccel disables setting of mouse acceleration (not used with -dinput, windows only)
- Windows GDI Input: -noforcemparms disables setting of mouse parameters (not used with -dinput, windows only)
- Windows GDI Input: -noforcemspd disables setting of mouse speed (not used with -dinput, windows only)
- Windows Input: -dinput enables DirectInput for mouse/joystick input
- Windows Input: -nojoy disables joystick support, may be a small speed increase
- Windows Sound: -wavonly uses wave sound instead of DirectSound
- Windows WGL: -gl_driver drivername selects a GL driver library, default is opengl32.dll, useful only for 3dfxogl.dll or 3dfxvgl.dll, if you don't know what this is for, you don't need it
- Windows WGL: -novideosync disables WGL_EXT_swap_control

_cl_color	0	internal storage cvar for current player colors (changed by color command)
_cl_name	player	internal storage cvar for current player name (changed by name command)
_cl_playermodel		internal storage cvar for current player model in Nexuiz (changed by playermodel command)
_cl_playerskin		internal storage cvar for current player skin in Nexuiz (changed by playerskin command)
_cl_pmodel	0	internal storage cvar for current player model number in nehahra (changed by pmodel command)
_cl_rate	10000	internal storage evar for current rate (changed by rate command)
_snd_mixahead	0.1	how much sound to mix ahead of time
ambient_fade	100	rate of volume fading when moving from one environment to another
ambient_level	0.3	volume of environment noises (water and wind)
bgmvolume	1	volume of background music (such as CD music or replacement files such as id1/sound/cdtracks/track002.ogg)
cdaudioinitialized	0	indicates if CD Audio system is active
chase_active	0	enables chase cam
chase_back	48	chase cam distance from the player
chase_stevie	0	chase cam view from above (used only by GoodVsBad2)
chase_up	24	chase cam distance from the player
cl_anglespeedkey	1.5	how much +speed multiplies keyboard turning speed
cl_autodemo	0	records every game played, using the date/time and map name to name the demo file
cl_autodemo_nameformat	%Y-%m- %d_%H-%M	The format of the cl_autodemo filename, followed by the map name
cl_backspeed	400	backward movement speed
cl_beams_instantaimhack	1	makes your lightning gun aiming update instantly
cl_beams_lightatend	0	make a light at the end of the beam
cl_beams_polygons	1	use beam polygons instead of models
cl_beams_quakepositionhack	1	makes your lightning gun appear to fire from your waist (as in Quake and QuakeWorld)
cl_bob	0.02	view bobbing amount
cl_bobcycle	0.6	view bobbing speed
cl_bobmodel	1	enables gun bobbing
cl_bobmodel_side	0.05	gun bobbing sideways sway amount
cl_bobmodel_speed	7	gun bobbing speed
cl_bobmodel_up	0.02	gun bobbing upward movement amount
cl_bobup	0.5	view bobbing adjustment that makes the up or down swing of the bob last longer
cl_capturevideo	0	enables saving of video to a .avi file using uncompressed I420 colorspace and PCM audio, note that scr_screenshot_gammaboost affects the brightness of the output)
cl_capturevideo_fps	30	how many frames per second to save (29.97 for NTSC, 30 for typical PC video, 15 can be useful)
cl_capturevideo_number	1	number to append to video filename, incremented each time a capture begins
cl_capturevideo_realtime	0	causes video saving to operate in realtime (mostly useful while playing, not while capturing demos), this can produce a much lower quality video due to poor sound/video sync and will abort saving if your machine stalls for over 1 second
cl_curl_enabled	0	whether client's download support is enabled
cl_curl_maxdownloads	1	maximum number of concurrent HTTP/FTP downloads
cl_curl_maxspeed	100	maximum download speed (KiB/s)
cl_deathnoviewmodel	1	hides gun model when dead
cl_deathscoreboard	1	shows scoreboard (+showscores) while dead
cl_decals	0	enables decals (bullet holes, blood, etc)
cl_decals_fadetime	20	how long decals take to fade away
cl_decals_time	0	how long before decals start to fade away
cl_dlights_decaybrightness	1	reduces brightness of light flashes over time
cl_dlights_decayradius	1	reduces size of light flashes over time

cl_explosions_alpha_end	0	end alpha of an explosion shell (just before it disappears)
cl_explosions_alpha_start	1.5	starting alpha of an explosion shell
cl_explosions_lifetime	0.5	how long an explosion shell lasts
cl_explosions_size_end	128	ending alpha of an explosion shell (just before it disappears)
cl_explosions_size_start	16	starting size of an explosion shell
cl_forwardspeed	400	forward movement speed
cl_gravity	800	how much gravity to apply in client physics (should match sv_gravity)
cl_itembobheight	0	how much items bob up and down (try 8)
cl_itembobspeed	0.5	how frequently items bob up and down
cl_joinbeforedownloadsfinish	1	if non-zero the game will begin after the map is loaded before other downloads finish
cl_maxfps	1000	maximum fps cap, if game is running faster than this it will wait before running another frame (useful to make cpu time available to other programs)
cl_movement	0	enables clientside prediction of your player movement
cl_movement_accelerate	10	how fast you accelerate (should match sv_accelerate)
cl_movement_airaccel_qw	1	ratio of QW-style air control as opposed to simple acceleration (should match sv_airaccel_qw)
cl_movement_airaccel_sideways_friction	0	anti-sideways movement stabilization (should match sv_airaccel_sideways_friction)
cl_movement_airaccelerate	-1	how fast you accelerate while in the air (should match sv_airaccelerate), if less than 0 the cl_movement_accelerate variable is used instead
cl_movement_edgefriction	2	how much to slow down when you may be about to fall off a ledge (should match edgefriction)
cl_movement_friction	4	how fast you slow down (should match sv_friction)
cl_movement_jumpvelocity	270	how fast you move upward when you begin a jump (should match the quakec code)
cl_movement_latency	0	compensates for this much latency (ping time) on quake servers which do not really support prediction, no effect on darkplaces7 protocol servers or quakeworld servers
cl_movement_maxairspeed	30	how fast you can move while in the air (should match sv_maxairspeed)
cl_movement_maxspeed	320	how fast you can move (should match sv_maxspeed)
cl_movement_stepheight	18	how tall a step you can step in one instant (should match sv_stepheight)
cl_movement_stopspeed	100	speed below which you will be slowed rapidly to a stop rather than sliding endlessly (should match sv_stopspeed)
cl_movement_wateraccelerate	-1	how fast you accelerate while in the air (should match sv_airaccelerate), if less than 0 the cl_movement_accelerate variable is used instead
cl_movement_waterfriction	-1	how fast you slow down (should match sv_friction), if less than 0 the cl_movement_friction variable is used instead
cl_movespeedkey	2.0	how much +speed multiplies keyboard movement speed
cl_netinputpacketlosstolerance	4	how many packets in a row can be lost without movement issues when using cl_movement (technically how many input messages to repeat in each packet that have not yet been acknowledged by
cl_netinputpacketspersecond	50	the server) how many input packets to send to server each second
		lags local loopback connection by this much ping time (useful to
cl_netlocalping	0	play more fairly on your own server with people with higher pings)
cl_netpacketloss	0	drops this percentage of packets (incoming and outgoing), useful for testing network protocol robustness (effects failing to start, sounds failing to play, etc)
cl_nettimesyncmode	2	selects method of time synchronization in client with regard to server packets, values are: $0 = \text{no sync}$, $1 = \text{exact sync}$ (reset timing each packet), $2 = \text{loose sync}$ (reset timing only if it is out of bounds), $3 = \text{tight sync}$ and bounding
cl_nodelta	0	disables delta compression of non-player entities in QW network protocol
cl_nolerp	0	network update smoothing
cl_noplayershadow	0	hide player shadow

cl particles	1	enables particle effects
cl particles blood	1	enables blood effects
cl particles blood alpha	0.5	opacity of blood
cl particles blood bloodhack	1	make certain quake particle() calls create blood effects instead
cl particles bubbles	1	enables bubbles (used by multiple effects)
cl particles bulletimpacts	1	enables bulletimpact effects
cl particles explosions shell	0	enables polygonal shell from explosions
cl particles explosions smokes	0	enables smoke from explosions
cl particles explosions sparks	1	enables sparks from explosions
cl particles quake	0	makes particle effects look mostly like the ones in Quake
cl particles quality	1	multiplies number of particles and reduces their alpha
cl particles size	1	multiplies particle size
cl particles smoke	1	enables smoke (used by multiple effects)
cl_particles_smoke_alpha	0.5	smoke brightness
cl_particles_smoke_alphafade	0.55	brightness fade per second
cl particles sparks	1	enables sparks (used by multiple effects)
cl pitchspeed	150	keyboard pitch turning speed
cl port	0	forces client to use chosen port number if not 0
<u></u> po	v	enables a mouse pointer which is able to click on entities in the
cl prydoncursor	0	world, useful for point and click mods, see
		PRYDON_CLIENTCURSOR extension in dpextensions.qc
cl_rollangle	2.0	how much to tilt the view when strafing
cl_rollspeed	200	how much strafing is necessary to tilt the view
cl_serverextension_download	0	indicates whether the server supports the download command
cl_shownet	0	1 = print packet size, 2 = print packet message list
cl sidespeed	350	strafe movement speed
cl slowmo	1	speed of game time (should match slowmo)
cl_sound_hknighthit	hknight/hit.wav	sound to play during TE_KNIGHTSPIKE (empty cvar disables sound)
cl_sound_r_exp3	weapons/r_exp3.wa	sound to play during TE_EXPLOSION and related effects (empty
cl_sound_ric1	weapons/ric1.wav	sound to play with 5% chance during TE_SPIKE/TE_SUPERSPIKE (empty cvar disables sound)
cl_sound_ric2	weapons/ric2.wav	sound to play with 5% chance during TE_SPIKE/TE_SUPERSPIKE (empty cvar disables sound)
cl sound ric3	weapons/ric3.wav	sound to play with 10% chance during
cl_sound_tink1	weapons/tink1.wav	TE_SPIKE/TE_SUPERSPIKE (empty cvar disables sound) sound to play with 80% chance during
CI_SOUNG_UNKT	-	TE_SPIKE/TE_SUPERSPIKE (empty cvar disables sound)
cl_sound_wizardhit	wizard/hit.wav	sound to play during TE_WIZSPIKE (empty cvar disables sound)
cl_stainmaps	1	stains lightmaps, much faster than decals but blurred
cl_stainmaps_clearonload	1	clear stainmaps on map restart
cl_stairsmoothspeed	160	how fast your view moves upward/downward when running up/down stairs
cl_upspeed	400	vertical movement speed (while swimming or flying)
cl_viewmodel_scale	0.3	changes size of gun model, lower values prevent poking into walls but cause strange artifacts on lighting and especially r_stereo/vid_stereobuffer options where the size of the gun becomes visible
cl_yawspeed	140	keyboard yaw turning speed
cmdline	0	contains commandline the engine was launched with
collision_endnudge	0	how much to bias collision trace end
collision enternudge	0	how much to bias collision entry fraction
collision_impactnudge	0.03125	how much to back off from the impact
collision leavenudge	0	how much to bias collision exit fraction
collision_prefernudgedfraction	1	whether to sort collision events by nudged fraction (1) or real fraction (0)
collision_startnudge	0	how much to bias collision trace start
con closeontoggleconsole	1	allows toggleconsole binds to close the console as well
con notify	4	how many notify lines to show (0-32)
con_notifytime	3	how long notify lines last, in seconds
-		

con_textsize	8	console text size in virtual 2D pixels
coop	0	coop mode, $0 = \text{no coop}$, $1 = \text{coop mode}$, multiple players playing through the singleplayer game (coop mode also shuts off
Соор	v	deathmatch)
crosshair	0	selects crosshair to use (0 is none)
crosshair_color_alpha	1	how opaque the crosshair should be
crosshair_color_blue	0	customizable crosshair color
crosshair_color_green	0	customizable crosshair color
crosshair_color_red	1	customizable crosshair color
crosshair_size	1	adjusts size of the crosshair on the screen
csqc_progere	-1	CRC of csprogs.dat file to load (-1 is none), only used during level changes and then reset to -1
csqc progname	csprogs.dat	name of csprogs.dat file to load
csqc_progsize	-1	file size of csprogs.dat file to load (-1 is none), only used during level changes and then reset to -1
cutscene	1	enables cutscenes in nehahra, can be used by other mods
cuscenc	1	deathmatch mode, values depend on mod but typically 0 = no
deathmatch	0	deathmatch, 1 = normal deathmatch with respawning weapons, 2 = weapons stay (players can only pick up new weapons)
demo_nehahra	0	reads all quake demos as nehahra movie protocol
		prints additional debugging messages and information
developer	0	(recommended for modders and level designers)
		prints detailed network entities information each time a packet is
developer_entityparsing	0	received
developer_memory	0	prints debugging information about memory allocations
developer_memorydebug	0	enables memory corruption checks (very slow)
developer networkentities	0	prints received entities, value is 0-4 (higher for more info)
	0	prints all received and sent packets (recommended only for
developer_networking	0	debugging)
developer_texturelogging	0	produces a textures.log file containing names of skins and map textures the engine tried to load
edgefriction	2	how much you slow down when nearing a ledge you might fall off
forceqmenu	0	enables the quake menu instead of the quakec menu.dat (if present)
fov	90	field of vision, 1-170 degrees, default 90, some players use 110-130
fraglimit	0	ends level if this many frags is reached by any player
freelook	1	mouse controls pitch instead of forward/back
gamecfg	0	unused cvar in quake, can be used by mods
gameversion	0	version of game data (mod-specific), when client and server gameversion mismatch in the server browser the server is shown
		as incompatible
gl_combine	1	faster rendering by using GL_ARB_texture_env_combine extension (part of OpenGL 1.3 and above)
gl_dither	1	enables OpenGL dithering (16bit looks bad with this off)
gl_ext_separatetencil	1	make use of OpenGL 2.0 glStencilOpSeparate or
	1	GL_ATI_separate_stencil extension
gl_ext_stenciltwoside	1	make use of GL_EXT_stenciltwoside extension (NVIDIA only)
gl_finish	0	make the cpu wait for the graphics processor at the end of each rendered frame (can help with strange input or video lag problems on some machines)
gl_flashblend	0	render bright coronas for dynamic lights instead of actual lighting, fast but ugly
gl_fogblue	0.3	nehahra fog color blue value (for Nehahra compatibility only)
gl_fogdensity	0.25	nehahra fog density (recommend values below 0.1) (for Nehahra compatibility only)
gl_fogenable	0	nehahra fog enable (for Nehahra compatibility only)
gl_fogend	0	nehahra fog end distance (for Nehahra compatibility only)
gl_foggreen	0.3	nehahra fog color green value (for Nehahra compatibility only)
gl_fogred	0.3	nehahra fog color red value (for Nehahra compatibility only)
gl_logred gl_fogstart	0.3	nehahra fog start distance (for Nehahra compatibility only)
	0	
gl_lightmaps	J	draws only lightmaps, no texture (for level designers)

gl_lockarrays	0	enables use of glLockArraysEXT, may cause glitches with some broken drivers, and may be slower than normal
gl_lockarrays_minimumvertices	1	minimum number of vertices required for use of glLockArraysEXT, setting this too low may reduce performance
gl_max_size	2048	maximum allowed texture size, can be used to reduce video memory usage, note: this is automatically reduced to match video card capabilities (such as 256 on 3Dfx cards before Voodoo4/5)
gl_mesh_drawrangeelements	1	use glDrawRangeElements function if available instead of glDrawElements (for performance comparisons or bug testing)
gl_mesh_testarrayelement	0	use glBegin(GL_TRIANGLES);glArrayElement();glEnd(); primitives instead of glDrawElements (useful to test for driver bugs with glDrawElements)
gl_mesh_testmanualfeeding	0	use glBegin(GL_TRIANGLES);glTexCoord2f();glVertex3f();glEnd(); primitives instead of glDrawElements (useful to test for driver bugs with glDrawElements)
gl paranoid	0	enables OpenGL error checking and other tests
gl_picmip	0	reduces resolution of textures by powers of 2, for example 1 will halve width/height, reducing texture memory usage by 75%
gl_polyblend	1	tints view while underwater, hurt, etc
gl_printcheckerror	0	prints all OpenGL error checks, useful to identify location of driver crashes
gl_texture_anisotropy	1	anisotropic filtering quality (if supported by hardware), 1 sample (no anisotropy) and 8 sample (8 tap anisotropy) are recommended values
halflifebsp	0	indicates the current map is hlbsp format (useful to know because of different bounding box sizes)
host_framerate	0	locks frame timing to this value in seconds, 0.05 is 20fps for example, note that this can easily run too fast, use cl_maxfps if you want to limit your framerate instead, or sys_ticrate to limit server speed
host_speeds	0	reports how much time is used in server/graphics/sound
hostname	UNNAMED	server message to show in server browser
in_pitch_max	90	how far upward you can aim (quake used 80
in_pitch_min	-90	how far downward you can aim (quake used -70
joy_axisforward	1	which joystick axis to query for forward/backward movement
joy_axispitch	3	which joystick axis to query for looking up/down
joy_axisroll	-1	which joystick axis to query for tilting head right/left
joy_axisside	0	which joystick axis to query for right/left movement
joy_axisup 	-1	which joystick axis to query for up/down movement
joy_axisyaw	2	which joystick axis to query for looking right/left
joy_deadzoneforward	0	deadzone tolerance, suggested values are in the range 0 to 0.01
joy_deadzonepitch	0	deadzone tolerance, suggested values are in the range 0 to 0.01
joy_deadzoneroll joy_deadzoneside	0	deadzone tolerance, suggested values are in the range 0 to 0.01 deadzone tolerance, suggested values are in the range 0 to 0.01
joy_deadzoneup	0	deadzone tolerance, suggested values are in the range 0 to 0.01 deadzone tolerance, suggested values are in the range 0 to 0.01
joy_deadzoneyaw	0	deadzone tolerance, suggested values are in the range 0 to 0.01
joy detected	0	number of joysticks detected by engine
joy_enable	1	enables joystick support
joy_index	0	selects which joystick to use if you have multiple
joy_sensitivityforward	-1	movement multiplier
joy_sensitivitypitch	1	movement multiplier
joy sensitivityroll	1	movement multiplier
joy_sensitivityside	1	movement multiplier
joy_sensitivityup	1	movement multiplier
joy_sensitivityyaw	-1	movement multiplier
joyadvanced	0	use more than 2 axis joysticks (configuring this is very technical)
joyadvaxisr	0	axis mapping for joyadvanced 1 mode
joyadvaxisu	0	axis mapping for joyadvanced 1 mode
joyadvaxisv	0	axis mapping for joyadvanced 1 mode
joyadvaxisx	0	axis mapping for joyadvanced 1 mode
joyadvaxisy	0	axis mapping for joyadvanced 1 mode

joyadvaxisz	0	axis mapping for joyadvanced 1 mode
joyforwardsensitivity	-1.0	how fast the joystick moves forward
joyforwardthreshold	0.15	minimum joystick movement necessary to move forward
joyname	joystick	name of joystick to use (informational only, used only by joyadvanced 1 mode)
joypitchsensitivity	1.0	how fast the joystick looks up/down
joypitchthreshold	0.15	minimum joystick movement necessary to look up/down
joysidesensitivity	-1.0	how fast the joystick moves sideways (strafing)
joysidethreshold	0.15	minimum joystick movement necessary to move sideways (strafing)
joystick	0	enables joysticks
joywwhack1	0.0	special hack for wingman warrior
joywwhack2	0.0	special hack for wingman warrior
joyyawsensitivity	-1.0	how fast the joystick turns left/right
joyyawthreshold	0.15	minimum joystick movement necessary to turn left/right
locs_enable	1	enables replacement of certain % codes in chat messages: %l (location), %d (last death location), %h (health), %a (armor), %x (rockets), %c (cells), %r (rocket launcher status), %p (powerup status), %w (weapon status), %t (current time in level)
locs_show	0	shows defined locations for editing purposes
log_file		filename to log messages to
lookspring	0	returns pitch to level with the floor when no longer holding a pitch key
lookstrafe	0	move instead of turning
m_filter	0	smoothes mouse movement, less responsive but smoother aiming
m_forward	1	mouse forward speed multiplier
m_pitch	0.022	mouse pitch speed multiplier
m_side	0.8	mouse side speed multiplier
m_yaw	0.022	mouse yaw speed multiplier
mcbsp	0	indicates the current map is mcbsp format (useful to know because of different bounding box sizes)
menu_options_colorcontrol_correctionvalue	0.5	intensity value that matches up to white/black dither pattern, should be 0.5 for linear color
mod_q3bsp_curves_collisions	1	enables collisions with curves (SLOW)
mod_q3bsp_debugtracebrush	0	selects different tracebrush bsp recursion algorithms (for debugging purposes only)
mod_q3bsp_lightmapmergepower	4	merges the quake3 128x128 lightmap textures into larger lightmap group textures to speed up rendering, $1 = 256x256$, $2 = 512x512$, $3 = 1024x1024$, $4 = 2048x2048$, $5 = 4096x4096$,
mod_q3bsp_optimizedtraceline	1	whether to use optimized traceline code for line traces (as opposed to tracebox code)
nehx00	0	nehahra data storage cvar (used in singleplayer)
nehx01	0	nehahra data storage cvar (used in singleplayer)
nehx02	0	nehahra data storage cvar (used in singleplayer)
nehx03	0	nehahra data storage cvar (used in singleplayer)
nehx04	0	nehahra data storage cvar (used in singleplayer)
nehx05	0	nehahra data storage cvar (used in singleplayer)
nehx06	0	nehahra data storage cvar (used in singleplayer)
nehx07	0	nehahra data storage cvar (used in singleplayer)
nehx08	0	nehahra data storage cvar (used in singleplayer)
nehx09	0	nehahra data storage cvar (used in singleplayer)
nehx10	0	nehahra data storage cvar (used in singleplayer)
nehx11	0	nehahra data storage cvar (used in singleplayer)
nehx12	0	nehahra data storage cvar (used in singleplayer)
nehx13	0	nehahra data storage cvar (used in singleplayer)
nehx14	0	nehahra data storage evar (used in singleplayer)
nehx15	0	nehahra data storage evar (used in singleplayer)
nehx16 nehx17	0	nehahra data storage cvar (used in singleplayer) nehahra data storage cvar (used in singleplayer)
nehx17	0	nenanra data storage cvar (used in singleplayer) nehahra data storage cvar (used in singleplayer)
nehx19	0	nehahra data storage cvar (used in singleplayer) nehahra data storage cvar (used in singleplayer)
HeliA1/	U	nonama data storage evar (used in singleplayer)

net_address	0.0.0.0	network address to open ports on
net_address_ipv6	[0:0:0:0:0:0:0:0]	network address to open ipv6 ports on when a connection packet is received, it will block all future
net_connectfloodblockingtimeout	5	connect packets from that IP address for this many seconds (cuts down on connect floods)
net_connecttimeout	10	after requesting a connection, the client must reply within this many seconds or be dropped (cuts down on connect floods)
net_messagetimeout	300	drops players who have not sent any packets for this many seconds
net_slist_maxtries	3	how many times to ask the same server for information (more times gives better ping reports but takes longer)
net_slist_queriesperframe	4	maximum number of server information requests to send each rendered frame (guards against low framerates causing problems)
net_slist_queriespersecond	20	how many server information requests to send per second
net_slist_timeout	4	how long to listen for a server information response before giving up
noaim	1	QW option to disable vertical autoaim
noexit	0	kills anyone attempting to use an exit
nomonsters	0	unused cvar in quake, can be used by mods
nosound	0	disables sound
pausable	1	allow players to pause or not
port	26000	server port for players to connect to
pr_checkextension	1	indicates to QuakeC that the standard quakec extensions system is available (if 0, quakec should not attempt to use extensions)
prvm_boundscheck	1	enables detection of out of bounds memory access in the QuakeC code being run (in other words, prevents really exceedingly bad QuakeC code from doing nasty things to your computer)
prvm_statementprofiling	0	counts how many times each QuakeC statement has been executed, these counts are displayed in prvm_printfunction output (if enabled)
prvm_traceqc	0	prints every QuakeC statement as it is executed (only for really thorough debugging!)
qport	0	identification key for playing on qw servers (allows you to maintain a connection to a quakeworld server even if your port changes)
r_ambient	0	brighter world cheat (not allowed in multiplayer), value is 0-128
r_batchmode	1	selects method of rendering multiple surfaces with one driver call (values are 0, 1, 2, etc)
r_bloom	0	enables bloom effect (makes bright pixels affect neighboring pixels)
r_bloom_blur	4	how large the glow is
r_bloom_brighten	2	how bright the glow is, after subtract/power
r_bloom_colorexponent	1	how exagerated the glow is
r_bloom_colorscale	1	how bright the glow is
r_bloom_colorsubtract	0.125	reduces bloom colors by a certain amount
r_bloom_resolution	320	what resolution to perform the bloom effect at (independent of screen resolution)
r_coronas	1	brightness of corona flare effects around certain lights, 0 disables corona effects
r_cullentities_trace	1	probabistically cull invisible entities
r_cullentities_trace_delay	1	number of seconds until the entity gets actually culled
r_cullentities_trace_enlarge	0	box enlargement for entity culling
r_cullentities_trace_samples	2	number of samples to test for entity culling
r_draweffects	1	renders temporary sprite effects
r_drawentities	1	draw entities (doors, players, projectiles, etc)
r_drawexplosions	1	enables rendering of explosion shells (see also cl_particles_explosions_shell)
r_drawparticles	1	enables drawing of particles
r_drawportals	0	shows portals (separating polygons) in world interior in quakel maps
r_drawviewmodel	1	draw your weapon model
r_dynamic	1	enables dynamic lights (rocket glow and such)
r_editlights	0	enables .rtlights file editing mode

J:41: -1.4	1024	
r_editlights_cursordistance r_editlights_cursorgrid	1024 4	maximum distance of cursor from eye snaps cursor to this grid size
r_editlights_cursorpushback	0	how far to pull the cursor back toward the eye
r_editlights_cursorpushoff	4	how far to push the cursor off the impacted surface
r editlights quakelightsizescale	1	changes size of light entities loaded from a map
r_explosionclip	1	enables collision detection for explosion shell (so that it flattens against walls and floors)
r fullbright	0	make everything bright cheat (not allowed in multiplayer)
r_fullbrights	1	enables glowing pixels in quake textures (changes need r_restart to take effect)
r_glsl	1	enables use of OpenGL 2.0 pixel shaders for lighting
r_glsl_deluxemapping	1	use per pixel lighting on deluxemap-compiled q3bsp maps (or a value of 2 forces deluxemap shading even without deluxemaps)
r_glsl_offsetmapping	0	offset mapping effect (also known as parallax mapping or virtual displacement mapping)
r_glsl_offsetmapping_reliefmapping	0	relief mapping effect (higher quality)
r_glsl_offsetmapping_scale	0.04	how deep the offset mapping effect is
r_hdr	0	enables High Dynamic Range bloom effect (higher quality version of r_bloom)
r_hdr_glowintensity	1	how bright light emitting textures should appear
r_hdr_range	4	how much dynamic range to render bloom with (equivilant to multiplying r_bloom_brighten by this value and dividing r_bloom_colorscale by this value)
r_hdr_scenebrightness	1	global rendering brightness
r_lerpimages	1	bilinear filters images when scaling them up to power of 2 size (mode 1), looks better than glquake (mode 0)
r_lerpmodels	1	enables animation smoothing on models
r_lerpsprites	1	enables animation smoothing on sprites (requires r_lerpmodels 1)
r_letterbox	0	reduces vertical height of view to simulate a letterboxed movie effect (can be used by mods for cutscenes)
r_lightmaprgba	1	whether to use RGBA (32bit) or RGB (24bit) lightmaps
r_lightningbeam_color_blue	1	color of the lightning beam effect
r_lightningbeam_color_green	1	color of the lightning beam effect
r_lightningbeam_color_red	1	color of the lightning beam effect
r_lightningbeam_qmbtexture	0	load the qmb textures/particles/lightning.pcx texture instead of generating one, can look better
r_lightningbeam_repeatdistance	128	how far to stretch the texture along the lightning beam effect
r_lightningbeam_scroll	5	speed of texture scrolling on the lightning beam effect
r_lightningbeam_thickness	4	thickness of the lightning beam effect
r_lockpvs	0	disables pvs switching, allows you to walk around and inspect what is visible from a given location in the map (anything not visible from your current location will not be drawn)
r_lockvisibility	0	disables visibility updates, allows you to walk around and inspect what is visible from a given viewpoint in the map (anything offscreen at the moment this is enabled will not be drawn)
r_mipskins	0	mipmaps skins (so they become blurrier in the distance), disabled by default because it tends to blur with strange border colors from the skin
r_mipsprites	1	mipmaps skins (so they become blurrier in the distance), unlike skins the sprites do not have strange border colors
r_nearclip	1	distance from camera of nearclip plane
r_nosurftextures	0	pretends there was no texture lump found in the q1bsp/hlbsp loading (useful for debugging this rare case)
r_novis	0	draws whole level, see also sv cullentities pvs 0
r_precachetextures	1	0 = never upload textures until used, 1 = upload most textures before use (exceptions: rarely used skin colormap layers), 2 = upload all textures before use (can increase texture memory usage significantly)
r_q3bsp_renderskydepth	0	draws sky depth masking in q3 maps (as in q1 maps), this means for example that sky polygons can hide other things
r_qb1sp_skymasking	1	allows sky polygons in quake1 maps to obscure other geometry
r_render	1	enables rendering calls (you want this on!)

r_shadow_bumpscale_basetexture	0	generate fake bumpmaps from diffuse textures at this bumpyness, try 4 to match tenebrae, higher values increase depth, requires
		r_restart to take effect
r_shadow_bumpscale_bumpmap	4	what magnitude to interpret _bump.tga textures as, higher values increase depth, requires r_restart to take effect
r_shadow_culltriangles	1	performs more expensive tests to remove unnecessary triangles of lit surfaces
r_shadow_debuglight	-1	renders only one light, for level design purposes or debugging
r_shadow_frontsidecasting	1	whether to cast shadows from illuminated triangles (front side of model) or unlit triangles (back side of model)
r_shadow_gloss2intensity	0.125	how bright the forced flat gloss should look if r_shadow_gloss is 2
r_shadow_gloss	1	0 disables gloss (specularity) rendering, 1 uses gloss if textures are found, 2 forces a flat metallic specular effect on everything without textures (similar to tenebrae)
r_shadow_glossexponent	32	how 'sharp' the gloss should appear (specular power)
r_shadow_glossintensity	1	how bright textured glossmaps should look if r_shadow_gloss is 1 or 2
r_shadow_lightattenuationpower	0.5	changes attenuation texture generation (does not affect r_glsl lighting)
r_shadow_lightattenuationscale	1	changes attenuation texture generation (does not affect r_glsl lighting)
r_shadow_lightintensityscale	1	renders all world lights brighter or darker
r_shadow_lightradiusscale	1	renders all world lights larger or smaller
r_shadow_portallight	1	use portal culling to exactly determine lit triangles when compiling world lights
r_shadow_projectdistance	1000000	how far to cast shadows
r_shadow_realtime_dlight	1	enables rendering of dynamic lights such as explosions and rocket light
r_shadow_realtime_dlight_portalculling	0	enables portal optimization on dynamic lights (slow!)
r_shadow_realtime_dlight_shadows	1	enables rendering of shadows from dynamic lights
r_shadow_realtime_dlight_svbspculling	0	enables svbsp optimization on dynamic lights (very slow!)
r_shadow_realtime_world	0	enables rendering of full world lighting (whether loaded from the map, or a .rtlights file, or a .ent file, or a .lights file produced by hlight)
r_shadow_realtime_world_compile	1	enables compilation of world lights for higher performance rendering
$r_shadow_real time_world_compile portal culling$	1	enables portal-based culling optimization during compilation
$r_shadow_real time_world_compiles hadow$	1	enables compilation of shadows from world lights for higher performance rendering
$r_shadow_realtime_world_compilesvbsp$	1	enables svbsp optimization during compilation
$r_shadow_real time_world_dlight shadows$	1	enables shadows from dynamic lights when using full world lighting
r_shadow_realtime_world_lightmaps	0	brightness to render lightmaps when using full world lighting, try 0.5 for a tenebrae-like appearance
r_shadow_realtime_world_shadows	1	enables rendering of shadows from world lights
r_shadow_scissor	1	use scissor optimization of light rendering (restricts rendering to the portion of the screen affected by the light)
r_shadow_shadow_polygonfactor	0	how much to enlarge shadow volume polygons when rendering (should be 0!)
r_shadow_shadow_polygonoffset	1	how much to push shadow volumes into the distance when rendering, to reduce chances of zfighting artifacts (should not be less than 0)
r_shadow_texture3d	1	use 3D voxel textures for spherical attenuation rather than cylindrical (does not affect r_glsl lighting)
r_shadows	0	casts fake stencil shadows from models onto the world (rtlights are unaffected by this)
r_shadows_throwdistance	500	how far to cast shadows from models
r_showcollisionbrushes	0	draws collision brushes in quake3 maps (mode 1), mode 2 disables rendering of world (trippy!)
r_showcollisionbrushes_polygonfactor	-1	expands outward the brush polygons a little bit, used to make collision brushes appear infront of walls
r_showcollisionbrushes_polygonoffset	0	nudges brush polygon depth in hardware depth units, used to make collision brushes appear infront of walls

$r_showdisabledepthtest$	0	disables depth testing on r_show* cvars, allowing you to see what hidden geometry the graphics card is processing
r_showlighting	0	shows areas lit by lights, useful for finding out why some areas of a map render slowly (bright orange = lots of passes = slow), a value of 2 disables depth testing which can be interesting but not very useful
r_shownormals	0	shows per-vertex surface normals and tangent vectors for bumpmapped lighting
$r_showshadowvolumes$	0	shows areas shadowed by lights, useful for finding out why some areas of a map render slowly (bright blue = lots of passes = slow), a value of 2 disables depth testing which can be interesting but not very useful
r_showsurfaces	0	1 shows surfaces as different colors, or a value of 2 shows triangle draw order (for analyzing whether meshes are optimized for vertex cache)
r_showtris	0	shows triangle outlines, value controls brightness (can be above 1)
r_skeletal_debugbone	-1	development cvar for testing skeletal model code
r_skeletal_debugbonecomponent	3	development cvar for testing skeletal model code
r_skeletal_debugbonevalue	100	development cvar for testing skeletal model code
r_skeletal_debugtranslatex	1	development cvar for testing skeletal model code
r_skeletal_debugtranslatey	1	development cvar for testing skeletal model code
r_skeletal_debugtranslatez	1	development cvar for testing skeletal model code
r_sky	1	enables sky rendering (black otherwise)
r_skyscroll1	1	speed at which upper clouds layer scrolls in quake sky
r_skyscroll2	2	speed at which lower clouds layer scrolls in quake sky
r_smoothnormals_areaweighting	1	uses significantly faster (and supposedly higher quality) area- weighted vertex normals and tangent vectors rather than summing normalized triangle normals and tangents
r_speeds	0	displays rendering statistics and per-subsystem timings
r_stereo_redblue	0	red/blue anaglyph stereo glasses (note: most of these glasses are actually red/cyan, try that one too)
r_stereo_redcyan	0	red/cyan anaglyph stereo glasses, the kind given away at drive-in movies like Creature From The Black Lagoon In 3D
r_stereo_redgreen	0	red/green anaglyph stereo glasses (for those who don't mind yellow)
r_stereo_separation	4	separation of eyes in the world (try negative values too)
r_stereo_sidebyside	0	side by side views (for those who can't afford glasses but can afford eye strain)
r_subdivide_size	128	how large water polygons should be (smaller values produce more polygons which give better warping effects)
r_subdivisions_collision_maxtess	1024	maximum number of subdivisions (prevents curves beyond a certain detail level, limits smoothing)
r_subdivisions_collision_maxvertices	4225	maximum vertices allowed per subdivided curve
r_subdivisions_collision_mintess	1	minimum number of subdivisions (values above 1 will smooth curves that don't need it)
r_subdivisions_collision_tolerance	15	maximum error tolerance on curve subdivision for collision purposes (usually a larger error tolerance than for rendering)
r_subdivisions_maxtess	1024	maximum number of subdivisions (prevents curves beyond a certain detail level, limits smoothing)
r_subdivisions_maxvertices	65536	maximum vertices allowed per subdivided curve
r_subdivisions_mintess	1	minimum number of subdivisions (values above 1 will smooth curves that don't need it)
r_subdivisions_tolerance	4	maximum error tolerance on curve subdivision for rendering purposes (in other words, the curves will be given as many polygons as necessary to represent curves at this quality)
r_test	0	internal development use only, leave it alone (usually does nothing anyway)
r_textshadow	0	draws a shadow on all text to improve readability
r_textureunits	32	number of hardware texture units reported by driver (note: setting this to 1 turns off gl_combine)
r_useportalculling	1	use advanced portal culling visibility method to improve performance over just Potentially Visible Set, provides an even more significant speed improvement in unvised maps

r_wateralpha	1	opacity of water polygons
r_waterscroll	1	makes water scroll around, value controls how much
r_waterwarp	1	warp view while underwater
rcon_address		server address to send rcon commands to (when not connected to a server)
rcon_password		password to authenticate rcon commands
registered	0	indicates if this is running registered quake (whether gfx/pop.lmp was found)
samelevel	0	repeats same level if level ends (due to timelimit or someone hitting an exit)
saved1	0	unused cvar in quake that is saved to config.cfg on exit, can be used by mods
saved2	0	unused cvar in quake that is saved to config.cfg on exit, can be used by mods
saved3	0	unused cvar in quake that is saved to config.cfg on exit, can be used by mods
saved4	0	unused cvar in quake that is saved to config.cfg on exit, can be used by mods
savedgamecfg	0	unused cvar in quake that is saved to config.cfg on exit, can be used by mods
sbar_alpha_bg	0.4	opacity value of the statusbar background image
sbar_alpha_fg	1	opacity value of the statusbar weapon/item icons and numbers
scr centertime	2	how long centerprint messages show
scr conalpha	1	opacity of console background
scr conbrightness	1	brightness of console background (0 = black, 1 = image)
scr conforcewhiledisconnected	1	forces fullscreen console while disconnected
scr_menuforcewhiledisconnected	0	forces menu while disconnected
scr printspeed	8	speed of intermission printing (episode end texts)
scr_refresh	1	allows you to completely shut off rendering for benchmarking purposes
scr_screenshot_gammaboost	1	gamma correction on saved screenshots and videos, 1.0 saves unmodified images
scr_screenshot_jpeg	1	save jpeg instead of targa
scr_screenshot_jpeg_quality	0.9	image quality of saved jpeg
scr_screenshot_name	dp	prefix name for saved screenshots (changes based on -game commandline, as well as which game mode is running)
scr_stipple	0	interlacing-like stippling of the display
scr_zoomwindow	0	displays a zoomed in overlay window
scr_zoomwindow_fov	20	fov of zoom window
scr_zoomwindow_viewsizex	20	horizontal viewsize of zoom window
scr_zoomwindow_viewsizey	20	vertical viewsize of zoom window
scratch1	0	unused cvar in quake, can be used by mods
scratch2	0	unused cvar in quake, can be used by mods
scratch3	0	unused cvar in quake, can be used by mods
scratch4	0	unused cvar in quake, can be used by mods
sensitivity	3	mouse speed multiplier
showbrand	0	shows gfx/brand.tga in a corner of the screen (different values select different positions, including centered)
showdate	0	shows current date (useful on screenshots)
showdate_format	%Y-%m-%d	format string for date
showfps	0	shows your rendered fps (frames per second)
showpause	1	show pause icon when game is paused
showram	1	show ram icon if low on surface cache memory (not used)
showtime	0	shows current time of day (useful on screenshots)
showtime_format	%H:%M:%S	format string for time of day
showturtle	0	show turtle icon when framerate is too low (not used)
skill	1	difficulty level of game, affects monster layouts in levels, $0 = $ easy, $1 = $ normal, $2 = $ hard, $3 = $ nightmare (same layout as hard but monsters fire twice)
skin		QW player skin name (example: base)
slowmo	1.0	controls game speed, 0.5 is half speed, 2 is double speed

snd_channellayout	0	channel layout. Can be 0 (auto - snd_restart needed), 1 (standard layout), or 2 (ALSA layout)
snd_channels	2	number of channels for the sound ouput (2 for stereo; up to 8 supported for 3D sound)
snd_initialized	0	indicates the sound subsystem is active
snd_noextraupdate	0	disables extra sound mixer calls that are meant to reduce the chance of sound breakup at very low framerates
snd_precache	1	loads sounds before they are used
snd_show	0	shows some statistics about sound mixing
snd_soundradius	1000	radius of weapon sounds and other standard sound effects (monster idle noises are half this radius and flickering light noises are one third of this radius)
snd_speed	48000	sound output frequency, in hertz
snd_staticvolume	1	volume of ambient sound effects (such as swampy sounds at the start of e1m2)
snd_streaming	1	enables keeping compressed ogg sound files compressed, decompressing them only as needed, otherwise they will be decompressed completely at load (may use a lot of memory)
snd_swapstereo	0	swaps left/right speakers for old ISA soundblaster cards
snd_width	2	sound output precision, in bytes (1 and 2 supported)
sv_accelerate	10	rate at which a player accelerates to sv_maxspeed
sv_adminnick		nick name to use for admin messages instead of host name
sv_aim	2	maximum cosine angle for quake's vertical autoaim, a value above 1 completely disables the autoaim, quake used 0.93
sv_airaccelerate	-1	rate at which a player accelerates to sv_maxairspeed while in the air, if less than 0 the sv_accelerate variable is used instead
sv_allowdownloads	1	whether to allow clients to download files from the server (does not affect http downloads)
sv_allowdownloads_archive	0	whether to allow downloads of archives (pak/pk3)
sv_allowdownloads_config	0	whether to allow downloads of config files (cfg)
sv_allowdownloads_dlcache	0	whether to allow downloads of dlcache files (dlcache/)
sv_allowdownloads_inarchive	0	whether to allow downloads from archives (pak/pk3)
sv_areagrid_mingridsize	64	minimum areagrid cell size, smaller values work better for lots of small objects, higher values for large objects
sv_cheats	0	enables cheat commands in any game, and cheat impulses in dpmod
sv_clmovement_enable	1	whether to allow clients to use cl_movement prediction, which can cause choppy movement on the server which may annoy other players
sv_clmovement_minping	0	if client ping is below this time in milliseconds, then their ability to use cl_movement prediction is disabled for a while (as they don't need it)
sv_clmovement_minping_disabletime	1000	when client falls below minping, disable their prediction for this many milliseconds (should be at least 1000 or else their prediction may turn on/off frequently)
sv_clmovement_waitforinput	16	when a client does not send input for this many frames, force them to move anyway (unlike QuakeWorld)
sv_cullentities_nevercullbmodels	0	if enabled the clients are always notified of moving doors and lifts and other submodels of world (warning: eats a lot of network bandwidth on some levels!)
sv cullentities pvs	1	fast but loose culling of hidden entities
sv_cullentities_stats	0	displays stats on network entities culled by various methods for each client
sv_cullentities_trace	0	somewhat slow but very tight culling of hidden entities, minimizes network traffic and makes wallhack cheats useless
sv_cullentities_trace_delay	1	number of seconds until the entity gets actually culled
sv_cullentities_trace_enlarge	0	box enlargement for entity culling
sv_cullentities_trace_prediction	1	also trace from the predicted player position
sv_cullentities_trace_samples	1	number of samples to test for entity culling
sv_cullentities_trace_samples_extra	2	number of samples to test for entity culling when the entity affects its surroundings by e.g. dlight
sv_curl_defaulturl		default autodownload source URL
sv_curl_serverpackages		list of required files for the clients, separated by spaces
sv_debugmove	0	disables collision detection optimizations for debugging purposes

sv_echobprint	1	prints gamecode bprint() calls to server console
sv_cenooprine	1	enables loading of .ent files to override entities in the bsp (for
sv_entpatch	1	example Threewave CTF server pack contains .ent patch files enabling play of CTF on id1 maps)
sv_fixedframeratesingleplayer	0	allows you to use server-style timing system in singleplayer (don't run faster than sys_ticrate)
sv_freezenonclients	0	freezes time, except for players, allowing you to walk around and take screenshots of explosions
sv_friction	4	how fast you slow down
$sv_gameplay fix_blowup fallen zombies$	1	causes findradius to detect SOLID_NOT entities such as zombies and corpses on the floor, allowing splash damage to apply to them
sv_gameplayfix_droptofloorstartsolid	1	prevents items and monsters that start in a solid area from falling out of the level (makes droptofloor treat trace_startsolid as an acceptable outcome)
sv_gameplayfix_findradiusdistancetobox	1	causes findradius to check the distance to the corner of a box rather than the center of the box, makes findradius detect bmodels such as very large doors that would otherwise be unaffected by splash damage
$sv_game play fix_grena de bounce downs lopes$	1	prevents MOVETYPE_BOUNCE (grenades) from getting stuck when fired down a downward sloping surface
sv_gameplayfix_noairborncorpse	1	causes entities (corpses) sitting ontop of moving entities (players) to fall when the moving entity (player) is no longer supporting them
sv_gameplayfix_qwplayerphysics	1	changes water jumping to make it easier to get out of water, and prevents friction on landing when bunnyhopping
sv_gameplayfix_setmodelrealbox	1	fixes a bug in Quake that made setmodel always set the entity box to ('-16 -16 -16', '16 16 16') rather than properly checking the model box, breaks some poorly coded mods
sv_gameplayfix_stepdown	0	attempts to step down stairs, not just up them (prevents the familiar thudthudthud when running down stairs and slopes)
sv_gameplayfix_stepwhilejumping	1	applies step-up onto a ledge even while airborn, useful if you would otherwise just-miss the floor when running across small areas with gaps (for instance running across the moving platforms in dm2, or jumping to the megahealth and red armor in dm2 rather than using the bridge)
sv_gameplayfix_swiminbmodels	1	causes pointcontents (used to determine if you are in a liquid) to check bmodel entities as well as the world model, so you can swim around in (possibly moving) water bmodel entities
sv_gameplayfix_upwardvelocityclearsongroundfla	g 1	prevents monsters, items, and most other objects from being stuck to the floor when pushed around by damage, and other situations in mods
sv_gravity	800	how fast you fall (512 = roughly earth gravity)
sv_heartbeatperiod	120	how often to send heartbeat in seconds (only used if sv_public is 1)
sv_idealpitchscale	0.8	how much to look up/down slopes and stairs when not using freelook
sv_jumpstep	0	whether you can step up while jumping (sv_gameplayfix_stepwhilejumping must also be 1)
sv_master1		user-chosen master server 1
sv_master2		user-chosen master server 2
sv_master3		user-chosen master server 3
sv_master4		user-chosen master server 4
sv_maxairspeed	30	maximum speed a player can accelerate to when airborn (note that it is possible to completely stop by moving the opposite direction)
sv_maxrate	10000	upper limit on client rate evar, should reflect your network connection quality
sv_maxspeed	320	maximum speed a player can accelerate to when on ground (can be exceeded by tricks)
sv_maxvelocity	2000	universal speed limit on all entities
sv_newflymove	0	enables simpler/buggier player physics (not recommended)
sv_nostep	0	prevents MOVETYPE_STEP entities (monsters) from moving
sv_playerphysicsqc	1	enables QuakeC function to override player physics
sv_progs	progs.dat	selects which quakec progs.dat file to run

sv_protocolname	DP7	selects network protocol to host for (values include QUAKE, QUAKEDP, NEHAHRAMOVIE, DP1 and up)
sv_public	0	1: advertises this server on the master server (so that players can find it in the server browser); 0: allow direct queries only; -1: do not respond to direct queries; -2: do not allow anyone to connect
sv_qwmaster1		user-chosen qwmaster server 1
sv_qwmaster2		user-chosen qwmaster server 2
sv qwmaster3		user-chosen qwmaster server 3
sv_qwmaster4		user-chosen qwmaster server 4
sv_random_seed		random seed; when set, on every map start this random seed is used to initialize the random number generator. Don't touch it unless for benchmarking or debugging
sv_ratelimitlocalplayer	0	whether to apply rate limiting to the local player in a listen server (only useful for testing)
sv_sound_land	demon/dland2.wav	sound to play when MOVETYPE_STEP entity hits the ground at high speed (empty cvar disables the sound)
sv_sound_watersplash	misc/h2ohit1.wav	sound to play when MOVETYPE_FLY/TOSS/BOUNCE/STEP entity enters or leaves water (empty cvar disables the sound)
sv_stepheight	18	how high you can step up (TW_SV_STEPCONTROL extension)
sv_stopspeed	100	how fast you come to a complete stop
sv wallfriction	1	how much you slow down when sliding along a wall
sv_wateraccelerate	-1	rate at which a player accelerates to sv_maxspeed while in the air, if less than 0 the sv_accelerate variable is used instead
sv_waterfriction	-1	how fast you slow down, if less than 0 the sv_friction variable is used instead
sys_colortranslation	0	terminal console color translation (supported values: 0 = strip color codes, 1 = translate to ANSI codes, 2 = no translation)
sys_colortranslation	1	terminal console color translation (supported values: 0 = strip color codes, 1 = translate to ANSI codes, 2 = no translation)
sys_specialcharactertranslation	1	terminal console conchars to ASCII translation (set to 0 if your conchars.tga is for an 8bit character set or if you want raw output)
sys_ticrate	0.05	how long a server frame is in seconds, 0.05 is 20fps server rate, 0.1 is 10fps (can not be set higher than 0.1), 0 runs as many server frames as possible (makes games against bots a little smoother, overwhelms network players)
sys_usetimegettime	1	use windows timeGetTime function (which has issues on some motherboards) for timing rather than QueryPerformanceCounter timer (which has issues on multicore/multiprocessor machines and processors which are designed to conserve power)
team	none	QW team (4 character limit, example: blue)
teamplay	0	teamplay mode, values depend on mod but typically $0 = no$ teams, $1 = no$ team damage no self damage, $2 = team$ damage and self damage, some mods support $3 = no$ team damage but can damage self
temp1	0	general cvar for mods to use, in stock id1 this selects which death animation to use on players (0 = random death, other values select specific death scenes)
timeformat	[%Y-%m-%d %H:%M:%S]	time format to use on timestamped console messages
timelimit	0	ends level at this time (in minutes)
timestamps	0	prints timestamps on console messages
v brightness	0	brightness of black, useful for monitors that are too dark
v_centermove	0.15	how long before the view begins to center itself (if freelook/+mlook/+jlook/+klook are off)
v_centerspeed	500	how fast the view centers itself
v_color_black_b	0	desired color of black
v_color_black_g	0	desired color of black
v_color_black_g v_color_black_r	0	desired color of black
v_color_enable	0	enables black-grey-white color correction curve controls
v_color_grey_b	0.5	desired color of grey
v_color_grey_g	0.5	desired color of grey
v_color_grey_r	0.5	desired color of grey
v_color_white_b	1	desired color of white
v_color_white_g	1	desired color of white

v_color_white_r	1	desired color of white
v_contrast	1	brightness of white (values above 1 give a brighter image with increased color saturation, unlike v_gamma)
v_deathtilt	1	whether to use sideways view when dead
v_deathtiltangle	80	what roll angle to use when tilting the view while dead
v_gamma	1	inverse gamma correction value, a brightness effect that does not affect white or black, and tends to make the image grey and dull
v_hwgamma	1	enables use of hardware gamma correction ramps if available (note: does not work very well on Windows2000 and above), values are $0 = off$, $1 = attempt$ to use hardware gamma, $2 = use$ hardware gamma whether it works or not
v_idlescale	0	how much of the quake 'drunken view' effect to use
v_ipitch_cycle	1	v_idlescale pitch speed
v_ipitch_level	0.3	v_idlescale pitch amount
v_iroll_cycle	0.5	v_idlescale roll speed
v_iroll_level	0.1	v_idlescale roll amount
v_iyaw_cycle	2	v_idlescale yaw speed
v_iyaw_level	0.3	v_idlescale yaw amount
v_kickpitch	0.6	how much a view kick from damage pitches your view
v_kickroll	0.6	how much a view kick from damage rolls your view
v_kicktime	0.5	how long a view kick from damage lasts
v psycho	0	easter egg (does not work on Windows2000 or above)
vid_bitsperpixel	32	how many bits per pixel to render at (32 or 16, 32 is recommended)
vid_conheight	480	virtual height of 2D graphics system
vid_conwidth	640	virtual width of 2D graphics system
vid_dga	1	make use of DGA mouse input
vid_dga_mouseaccel	1	speed of mouse when using DGA mouse input
vid_fullscreen	1	use fullscreen (1) or windowed (0)
vid_grabkeyboard	0	whether to grab the keyboard when mouse is active (prevents use of volume control keys, music player keys, etc on some keyboards)
vid_hardwaregammasupported	1	indicates whether hardware gamma is supported (updated by attempts to set hardware gamma ramps)
vid_height	480	resolution
vid_minheight	0	minimum vid_height that is acceptable (to be set in default.cfg in mods)
vid_minwidth	0	minimum vid_width that is acceptable (to be set in default.cfg in mods)
vid_mouse	1	whether to use the mouse in windowed mode (fullscreen always does)
vid_pixelheight	1	adjusts vertical field of vision to account for non-square pixels (1280x1024 on a CRT monitor for example)
vid_refreshrate	60	refresh rate to use, in hz (higher values flicker less, if supported by your monitor)
vid_stereobuffer	0	enables 'quad-buffered' stereo rendering for stereo shutterglasses, HMD (head mounted display) devices, or polarized stereo LCDs, if supported by your drivers
vid_vsync	0	sync to vertical blank, prevents 'tearing' (seeing part of one frame and part of another on the screen at the same time), automatically disabled when doing timedemo benchmarks
vid_width	640	resolution
viewsize	100	how large the view should be, 110 disables inventory bar, 120 disables status bar
volume	0.7	volume of sound effects

Full console command list as of 2007-03-11

+attack begin firing +back move backward

+button3 activate button3 (behavior depends on mod)
+button4 activate button4 (behavior depends on mod)

+button5 activate button5 (behavior depends on mod) +button6 activate button6 (behavior depends on mod) +button7 activate button7 (behavior depends on mod) +button8 activate button8 (behavior depends on mod) activate button9 (behavior depends on mod) +button9 +button10 activate button10 (behavior depends on mod) +button11 activate button11 (behavior depends on mod) +button12 activate button12 (behavior depends on mod) +button13 activate button13 (behavior depends on mod) +button14 activate button14 (behavior depends on mod) +button15 activate button15 (behavior depends on mod) +button16 activate button16 (behavior depends on mod)

+forward move forward

+jump jump

+klook activate keyboard looking mode, do not recenter view

+left turn left +lookdown look downward +lookup look upward

+mlook activate mouse looking mode, do not recenter view

+movedownswim downward+moveleftstrafe left+moverightstrafe right+moveupswim upward+rightturn right+showscoresshow scoreboard

+speed activate run mode (faster movement and turning)
+strafe activate strafing mode (move instead of turn)
+use use something (may be used by some mods)

-attack stop firing

-back stop moving backward -button3 deactivate button3 -button4 deactivate button4 -button5 deactivate button5 -button6 deactivate button6 -button7 deactivate button7 -button8 deactivate button8 -button9 deactivate button9 -button10 deactivate button10 -button11 deactivate button11 deactivate button12 -button12 -button13 deactivate button13 -button14 deactivate button14 -button15 deactivate button15 -button16 deactivate button16 -forward stop moving forward

-jump end jump (so you can jump again)
-klook deactivate keyboard looking mode

-leftstop turning left-lookdownstop looking downward-lookupstop looking upward

-mlook deactivate mouse looking mode-movedown stop swimming downward

-moveleft stop strafing left
-moveright stop strafing right
-moveup stop swimming upward
-right stop turning right
-showscores hide scoreboard
-speed deactivate run mode
-strafe deactivate strafing mode

-use stop using something

alias create a script function (parameters are passed in as \$1 through \$9, and \$* for all parameters)

begin signon 3 (client asks server to start sending entities, and will go to signon 4 (playing) when the first

entity update is received)

send an impulse number to server to select the first usable weapon out of several (example:

87654321)

bf briefly flashes a bright color tint on view (used when items are picked up)

binds a command to the specified key in bindmap 0

bottomcolor QW command to set bottom color without changing top color

cd execute a CD drive command (cd on/off/reset/remap/close/play/loop/stop/pause/resume/eject/info)

- use cd by itself for usage

cddrive select an SDL-detected CD drive by number centerview gradually recenter view (stop looking up/down)

changelevel change to another level, bringing along all connected clients changing sent by qw servers to tell client to wait for level change cl areastats prints statistics on entity culling during collision traces

cl_begindownloads used internally by darkplaces client while connecting (causes loading of models and sounds or

triggers downloads for missing ones)

cl downloadbegin (networking) informs client of download file information, client replies with sv_startsoundload to

begin the transfer

cl downloadfinished signals that a download has finished and provides the client with file size and crc to check its

integrity

cl_particles_reloadeffects reloads effectinfo.txt clear console history

cmd send a console commandline to the server (used by some mods)
cmdlist lists all console commands beginning with the specified prefix

color change your player shirt and pants colors
condump output console history to a file (see also log_file)
connect connect to a server by IP address or hostname
curl download data from an URL and add to search path

cvar lockdefaults stores the current values of all cvars into their default values, only used once during startup after

parsing default.cfg

cvar_resettodefaults_all sets all cvars to their locked default values

cvar resettodefaults nosaveonly sets all non-saved cvars to their locked default values (variables that will not be saved to

config.cfg)

cvar_resettodefaults_saveonly sets all saved cvars to their locked default values (variables that will be saved to config.cfg)

cvarlist lists all console variables beginning with the specified prefix demos restart looping demos defined by the last startdemos command dir list files in searchpath matching an * filename pattern, one per line disconnect disconnect all clients if running a server)

downloaddownloads a specified file from the serverechoprint a message to the console (useful in scripts)entitiesprint information on network entities known to clientenvmaprender a cubemap (skybox) of the current scene

exec execute a script file fly mode (flight)

fog set global fog parameters (density red green blue)

force_centerview recenters view (stops looking up/down)

fs rescan rescans filesystem for new pack archives and any other changes

fullinfo allows client to modify their userinfo

fullserverinfo internal use only, sent by server to client to update client's local copy of serverinfo string

changes active gamedir list (can take multiple arguments), not including base directory (example

usage: gamedir ctf)

give alter inventory

gamedir

gl_texturemode set texture filtering mode (GL_NEAREST, GL_LINEAR, GL_LINEAR_MIPMAP_LINEAR, etc)

god god mode (invulnerability)

heartbeat send a heartbeat to the master server (updates your server information)

help open the help menu

impulse send an impulse number to server (select weapon, use item, etc) in_bind binds a command to the specified key in the selected bindmap

in bindmap selects active foreground and background (used only if a key is not bound in the foreground)

bindmaps for typing

in_unbind removes command on the specified key in the selected bindmap joyadvancedupdate applies current joyadv* cvar settings to the joystick driver

kick a player off the server by number or name

kill die instantly

load a saved game file

loadconfig reset everything and reload configs

load a skybox by basename (for example loadsky mtnsun loads mtnsun ft.tga and so on)

locs add a point or box location (usage: x y z[x y z] \

locs_clear remove all loc points/boxes locs reload reload .loc file for this map

locs removenearest remove the nearest point or box (note: you need to be very near a box to remove it)

locs_save save .loc file for this map containing currently defined points and boxes list files in searchpath matching an * filename pattern, multiple per line

map kick everyone off the server and start a new level

maps list information about available maps

maxplayers sets limit on how many players (or bots) may be connected to the server at once

memlist prints memory pool information (or if used as memlist 5 lists individual allocations of 5K or larger,

0 lists all allocations)

memstats prints memory system statistics

menu credits open the credits menu

menu_fallback switch to engine menu (unload menu.dat)

menu keys open the key binding menu menu load open the loadgame menu open the main menu menu main menu multiplayer open the multiplayer menu menu options open the options menu menu options colorcontrol open the color control menu menu options effects open the effects options menu menu options graphics open the graphics options menu

menu quit open the quit menu

menu_reset open the reset to defaults menu
menu restart restart menu system (reloads menu.dat

menu_save open the savegame menu

menu_setup open the saregame menu menu_singleplayer open the singleplayer menu

menu_transfusion_episode open the transfusion episode select menu menu_transfusion_skill open the transfusion skill select menu

menu video open the video options menu

messagemode input a chat message to say to everyone messagemode2 input a chat message to say to only your team

modellist prints a list of loaded models

modelprecache load a model

pausedemo

name change your player name

net_slist query dp master servers and print all server information net_slistqw query qw master servers and print all server information

net stats print network statistics

nextul sends next fragment of current upload buffer (screenshot for example)

noclip mode (flight without collisions, move through walls)

notarget mode (monsters do not see you)

packet send a packet to the specified address:port containing a text string

path print searchpath (game directories and archives)
pause pause the game (if the server allows pausing)

pause demo playback (can also safely pause demo recording if using QUAKE, QUAKEDP or

NEHAHRAMOVIE protocol, useful for making movies)

print ping times of all players on the server

pingplreport command sent by server containing client ping and packet loss values for scoreboard, triggered by

pings command from client (not used by QW servers)

command sent by clients to request updated ping and packetloss of players on scoreboard pings

(originally from QW, but also used on NQ servers)

play play a sound at your current location (not heard by anyone else) play a sound globally throughout the level (not heard by anyone else) play2

playdemo watch a demo file playermodel change your player model playerskin change your player skin number

playvideo play a .dpv video file

play a sound at the specified volume level at your current location (not heard by anyone else) playvol

pmodel change your player model choice (Nehahra specific)

display point file produced by qbsp when a leak was detected in the map (a line leading through the pointfile

leak hole, to an entity inside the level)

prespawn signon 1 (client acknowledges that server information has been received) prvm edict print all data about an entity number in the selected VM (server, client, menu) prints number of active entities in the selected VM (server, client, menu) prvm edictcount prvm edicts set a property on an entity number in the selected VM (server, client, menu)

prvm edictset changes value of a specified property of a specified entity in the selected VM (server, client, menu) prints usage statistics on properties (how many entities have non-zero values) in the selected VM prvm fields

(server, client, menu)

prvm global prints value of a specified global variable in the selected VM (server, client, menu)

prints all global variables in the selected VM (server, client, menu) prvm globals

prvm_globalset sets value of a specified global variable in the selected VM (server, client, menu)

prints a disassembly (QuakeC instructions) of the specified function in the selected VM (server, prvm printfunction

client, menu)

prints execution statistics about the most used QuakeC functions in the selected VM (server, client, prvm_profile

menu)

quit quit the game

removes all world lights (let there be darkness!) r editlights clear

r editlights copyinfo store a copy of all properties (except origin) of the selected light

r editlights edit changes a property on the selected light

changes a property on ALL lights at once (tip: use radiusscale and colorscale to alter these r editlights editall

properties)

r_editlights_help prints documentation on console commands and variables in rtlight editing system

r editlights importlightentitiesfrommap load lights from .ent file or map entities (ignoring .rtlights or .lights file) r editlights importlightsfile load lights from .lights file (ignoring .rtlights or .ent files and map entities)

r editlights pasteinfo apply the stored properties onto the selected light (making it exactly identical except for origin)

r editlights reload reloads rtlights file (or imports from .lights file or .ent file or the map itself)

r_editlights_remove remove selected light

save .rtlights file for current level r editlights save

r editlights spawn creates a light with default properties (let there be light!) r editlights togglecorona toggle on/off the corona option on the selected light r editlights toggleshadow toggle on/off the shadow option on the selected light r_glsl_restart unloads GLSL shaders, they will then be reloaded as needed

list all textures used by the current map r listmaptextures r_replacemaptexture override a map texture for testing purposes

restarts renderer r restart

rcon

reconnect

prints documentation on console commands and variables used by realtime lighting and shadowing r shadow help

r texturestats print information about all loaded textures and some statistics

rate change your network connection speed

> sends a command to the server console (if your rcon_password matches the server's rcon password), or to the address specified by rcon address when not connected (again

rcon password must match the server's)

reconnect to the last server you were on, or resets a quakeworld connection (do not use if currently

playing on a netquake server)

record record a demo restart current level restart save save the game to a file

saveconfig save settings to config.cfg immediately (also automatic when quitting)

send a chat message to everyone on the server say say team send a chat message to your team on the server screenshot takes a screenshot of the next rendered frame

sends the value of a cvar to the server as a sentevar command, for use by QuakeC

set create or change the value of a console variable

seta create or change the value of a console variable that will be saved to config.cfg

setinfo modifies your userinfo

sizedown decrease view size (decreases viewsize cvar)
sizeup increase view size (increases viewsize cvar)
skins downloads missing qw skins from server

snd_reload reload all sound files snd_restart restart sound system

soundinfo print sound system information (such as channels and speed)

soundlist list loaded sounds

spawn signon 2 (client has sent player information, and is asking server to send scoreboard rankings)

startdemos start playing back the selected demos sequentially (used at end of startup script)

status print server status information stop stop recording or playing a demo

stopdemo stop playing or recording demo (like stop command) and return to looping demos

stopdownload terminates a download

stopsound silence

stopul aborts current upload (screenshot for example)

stopvideo stop playing a .dpv video file

stuffemds execute commandline parameters (must be present in quake.rc script)

sv_areastatsprints statistics on entity culling during collision tracessv_saveentfilesave map entities to .ent file (to allow external editing)sv startdownloadbegins sending a file to the client (network protocol use only)

tell send a chat message to only one person on the server

timedemo play back a demo as fast as possible and save statistics to benchmark.log

timerefresh turn quickly and print rendering statistcs

toggles a console variable's values (use for more info)

toggleconsole opens or closes the console togglemenu opens or closes menu

topcolor QW command to set top color without changing bottom color unbind removes a command on the specified key in bindmap 0

unbindall removes all commands from all keys in all bindmaps (leaving only shift-escape and escape)

user prints additional information about a player number or name on the scoreboard

users prints additional information about all players on the scoreboard

v_cshift sets tint color of view version print engine version

vid restart restarts video system (closes and reopens the window, restarts renderer)

viewframe change animation frame of viewthing entity in current level

viewmodel change model of viewthing entity in current level

viewnext change to next animation frame of viewthing entity in current level viewprev change to previous animation frame of viewthing entity in current level

wait make script execution wait for next rendered frame

Console features

This documentation provided by divverent.

The console does the following preprocessing:

- \$\$ is transformed to a single dollar sign.
- \$var or \${var} are expanded to the contents of the named cvar, with quotation marks and backslashes quoted so it can safely be used inside quotation marks (and it should always be used that way)
- \${var asis} inserts the cvar value as is, without doing this quoting
- prefix the ovar name with a dollar sign to do indirection; for example, if \$x has the value timelimit, \${\$x} will return the value of \$timelimit
- when expanding an alias, the special variable name * refers to all alias parameters, and a number refers to that numbered alias parameter, where the name of the alias is \$0, the first parameter is \$1 and so on

Note: when expanding an alias, cvar expansion is done in the SAME step as alias expansion so that alias parameters or cvar values containing dollar signs have no unwanted bad side effects. However, this needs to be accounted for when writing complex aliases. For

```
example,
alias foo "set x NEW; echo $x"
actually expands to
"set x NEW; echo OLD"
and will print OLD! To work around this, use a second alias:
alias foo "set x NEW; foo2"
alias foo2 "echo $x"
```

Also note: lines starting with alias are exempt from cvar expansion.

If you want cvar expansion, write "alias" instead:
set x 1
alias foo "echo \$x"
"alias" bar "echo \$x"
set x 2

foo will print 2, because the variable \$x will be expanded when the alias gets expanded. bar will print 1, because the variable \$x was expanded at definition time. foo can be equivalently defined as:

"alias" foo "echo \$\$x"

because at definition time, \$\$ will get replaced to a single \$.

How to install Quake on Windows

All that DarkPlaces needs from the Quake CD is pak files (be sure not to copy opengl32.dll from the Quake CD, it will not work with DarkPlaces!), with this in mind, all you need to do is make a Quake directory, extract the darkplaces engine zip to that directory, then make a quake/id1 directory, and put the pak0.pak and pak1.pak from your Quake CD into the quake/id1 directory, then all should be well.

How to deal with a DOS Quake CD on Windows

Try to use the DOS Quake installer if you can, use DOSBox if necessary to run the installer, then copy the pak0.pak and pak1.pak to your id1 directory in the darkplaces installation. (http://dosbox.sourceforge.net)

How to deal with a WinQuake CD on Windows

Copy the D:\Data\id1\pak0.pak and pak1.pak to your id1 directory.

How to deal with a Linux Quake CD on Windows

Find an archiver (perhaps 7zip or winrar) that can extract files from rpm archives, locate the pak files and copy them to your idl directory.

How to install Quake on Linux

All that DarkPlaces needs from the Quake CD is pak files, with this in mind, all you need to do is make a ~/quake directory, extract the darkplaces engine zip to that directory, then make a quake/id1 directory, and put the pak0.pak and pak1.pak from your Quake CD into the quake/id1 directory, then all should be well, you will probably also want to make a ~/bin/darkplaces script containing the following text:

```
#!/bin/sh
cd ~/quake
./darkplaces-sdl $*
```

Then do chmod +x ~/bin/darkplaces

For more information on Quake installation on Linux see the Linux Quake How To

How to deal with a DOS Quake CD on Linux

```
cat /media/cdrom/resource.001 /media/cdrom/resource.002 >quake.lha unlha x quake.lha
```

If you can't get unlha or lha for your distribution, try using DOSBox to run the Quake installer.

How to deal with a WinQuake CD on Linux

Copy the /media/cdrom/data/id1/pak*.pak to your id1 directory.

How to deal with a Linux Quake CD on Linux

```
mkdir temp
cd temp
# in the following line replace quake.rpm with a correct rpm filename
```

Now you should have a mess of subdirectories, locate the pak files and copy to your idl directory.

Alternatively if you have an rpm-based distribution you could install the rpm, but it is easier to maintain your ~/quake directory than /usr/share/games/quake so you may want to copy the id1/pak*.pak from there and uninstall the rpm.

How to install Quake on Mac OS X

All that DarkPlaces needs from the Quake CD is pak files, with this in mind, make a folder named Quake, drag the Darkplaces.app into this Quake folder, make a folder inside the Quake folder (alongside Darkplaces) named id1, and put the pak0.pak and pak1.pak from your Quake CD into the quake/id1 directory, then all should be well, simply run the Darkplaces app

How to deal with a DOS Quake CD on Mac OS X

Unknown. Linux solution may work if you can get hold of lha, otherwise use DOSBox to run the Quake installer.

How to deal with a WinQuake CD on Mac OS X

Find the data folder on the cdrom and copy the data/id1/pak*.pak files to your id1 folder.

How to deal with a Linux Quake CD on Mac OS X

Unknown. If you can get hold of rpm2cpio and cpio you should be able to follow the Linux method.

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