

T.E.C. 2.0

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BETA DOCS**

Team T.E.C.
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T.E.C. 2.0 Documentation
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Preface

This document describes how to use and configure the TEC mod for Quake 3 Arena.

How This Document is Organized

Chapter 1 provides an overview of the entire mod.

Chapter 2 describes details of the client side features and commands.

Chapter 3 describes details of the server side settings.

Chapter 4 describes how to run a server.

Chapter 5 details the T.E.C. special mapping objects.

Appendix A provides a full TEC related CVAR reference.

Using Console Commands

Within this document you will find reference to “console commands” on occasion. The console is the command line interface to the Q3A engine. The default key to show the console in Q3A is the ``` which is also the same key with the `~` located on it. When this document references a console command, you should first press the ``` key, and then type in the command listed with a `\` preceding it. You can also type out the command in partial and then press the TAB key and Q3A will complete the line as well as add the preceding `\` to the command. This feature is known as TAB-Completion. You can also use the TAB-Completion to see a list of all the commands that start with a certain sequence of characters. For instance to see all of the commands that deal with the client side display, you would type `cg_` and then TAB. See the Q3A documentation for more information about the console.

Typographic Conventions

Typeface	Meaning	Examples
AaBbCc123	What you type either in the console or in the configuration file.	cg_ExtraGibby 1
<i>AaBbCc123</i>	Book titles, new words, or terms; words to be emphasized; command-line variable: replace with a real name or value.	See <i>Client Side Setup</i> in Chapter 2. You <i>must</i> be admin do to this. Use bind key weapon 10

CHAPTER 1

Overview

TEC is a server and client side mod for Quake 3 Arena. It offers significantly enhanced configuration options over the standard id Software provided Quake 3 Arena base game. TEC includes game play elements that were found in Quake 2, but without being a Quake 2 for Q3A conversion as some other mods are out to be. We wanted to bring what we thought were the best parts of the Quake 2 game to the Quake 3 Arena game, but with out sacrificing most aspects of the Q3A game. TEC can be used as a CTF, FFA, TDM or Tourney mod. The main focus of the mod has been on team play/CTF game play, as those were the areas we felt the id base game left the most to be desired.

Features Overview

Grapple

Probably the most requested game play element for Q3A, especially for the CTF crowd. With the base Q3A, id provided the grapple code, but never implemented grapple in their game. We extended this base code and have made it into a core part of the game. The grappling hook is highly customizable, from fire and pull speeds, to the use of team color (CTF) and the choice of on, or off-hand usage.

Techs

The techs that were made famous by the Three Wave CTF for Quake 2 are back. In addition to the standard 4 (AutoDoc, PowerAmp, TimeAccel, Disruptor Shield) TEC also adds 9 new techs. See the full feature list for the new ones and for all techs functions in *Techs Explained* found in Chapter 2.

Menu Based Match Administration

TECs built in menu system allows for simplified match setup. A menu-based system provides easy administration of a match for organized game play. Team locking, player team forcing, player kicking, match time limit, capture limit, frag limit, match rounds and more are all configured with Q3A built in style menus. An expanded admin election system

has also been added, or a traditional password only admin can be setup. See the *Match Administration* section in Chapter 2 for more detail.

Per Map Config Files

TEC allows server admins to make special configuration changes on a per map basis. This is done by having a per map configuration file that is read when ever the server loads the map. With this the server admin can change settings to allow for CTF/FFA/TDM mode changes between maps. For more information see *Per Map Config Files* in Chapter 3.

High Scores Tracking

Also in the feature list for TEC is per map high score tracking. At the end of each map, a high score board will show the date, player name and score for the top 10 point scorers for the map which has just ended. TEC will maintain this list for all maps the server has available.

Overtime Modes

The base Q3A game only features a Sudden Death over time, we wanted more. TEC brings a Rocket Arena style overtime mode to Q3A. Of course we couldn't stop at just one new OT mode, so we ended up with 3 new: Rocket Arena, Rail War and Grudge Match. See the full details for each overtime type in *Overtime Modes* in Chapter 4.

New CTF Game Play Mode

Beyond adding enhancements to the game, we have also added a new CTF mode. The major change is that to return the flag you must actually run it back to your base and re-store it to the flag home. This allows for interesting game play, where one player could be holding both the enemy flag and their own flag. If the player is able to capture the enemy flag and return their own flag at the same time, they get major points.

Bot Features

The bots have been made aware of the Techs included with TEC. This allows you to play local games with the techs enabled and get some practice in with the new game play elements. Just as the bots each have their individual favorite weapon, TEC makes each bot crave their favorite tech. As of this release, the bots do not support the use of the grapple. The way the bots move around the maps makes implementing a grapple function very hard, we may not end up being able to do this at all with the code that id has released to the mod makers.

CHAPTER 2

Client Side Features

TEC features many updates to the client side of the game. The updates range from the visual updates to the HUD, to in game visual updates.

HUD Features

During a CTF game, TEC adds several new enhancements to the HUD. In a normal CTF game, when a flag is picked up the flag status display places a X over the flag to notate that it has been taken. TEC now also displays the name of the player who holds each of the flags. See *Figure 2-1* for an example.

INSERT FIGURE 2-1

TEC also adds several HUD updates dealing with techs. So players know which tech they currently have an icon representing the tech will appear in the HUD status bar at the bottom, to the right of the players model head. The Team Overlay has also been modified so that it will show which techs your teammates are holding. The techs will show as icons at the end of the team overlays item list for each player. See *Figure 2-2*.

INSERT FIGURE 2-2

In Game Features

TEC introduces two new in game client side visual options. The first, `cg_ExtraGibby`, will produce twice the normal gib chunks when a body explodes. The second, `cg_HealthBar`, provides a HUD overlay near the aim sight which shows a health level meter. The health bar is for people who either play with the normal 2D graphics off, or people who have trouble looking down to see their health is running out. See *Figure 2-3* for an example of the health bar.

INSERT FIGURE 2-3

`cg_ExtraGibby` 0=off 1=on

cg_HealthBar 0=off 1=on

Client Side Commands

To use many of the new features of tech, you will need to know some new binds. Some of the new binds which are available include on/off-hand grapple, dropping techs, tech specific binds and weapon/ammo dropping. What follows is a description and details for each of these features.

Grappling Hook

With the Q3A base game, id provided the grapple code itself, but they never used it in their game. TEC brings the grapple back to its full function as found in the Q2 game. TEC has two ways to bind the grapple, either from the standard Q3A controls menu under the TEC section, or from the console. In the standard Q3A controls menu you will see a TEC menu option at the end of the list, in that panel you will find options to bind both a “grappling hook” and “offhand hook” feature. The server admin has the option of setting grapple in either off-hand or on-hand modes. *Only one* type of grapple can be enabled on the server at a time. The server admin can also control the grapple travel and pull speeds. For more info on the server side configuration see the **ADD CHAPTER NAME**. The console binds for the grapple are detailed below:

bind KEY use weapon 10	On-hand grapple
bind KEY +button 5	Off-hand grapple

For the grapple to be enabled at all, the server admin must have the `g_allowGrapple` cvar set to 1.

g_allowGrapple 0=off 1=on

To configure the server for off-hand grapple, set the following cvar to 1:

g_OffhandGrapple 0=off 1=on

Weapon/Ammo Dropping

So you’re playing O but you just made a raid on the ammo dump? Want to drop some of those goods off at the base for the D? Can’t do it with the base Q3A game. TEC brings the ability to drop ammo and weapons to Q3A. Every weapon with the *exception* of the

machine gun, and gauntlet can be dropped. All types of ammo are droppable. Note that you must have at least the amount of ammo contained in a normal ammo item to drop ammo. As an example, for rockets you must have at least 10 to use the drop command.

Drop command examples for all ammo types:

drop bullets	drops 50 bullets for the machine gun
drop shells	drops 10 shells for the shotgun
drop grenades	drops 10 grenades for the grenade launcher
drop rockets	drops 10 rockets for the rocket launcher
drop cells	drops 50 cells for the plasma gun
drop bolts	drops 100 bolts for the lightning gun
drop slugs	drops 10 slugs for the railgun
drop bfgammo	drops 50 units of BFG10K

For weapons:

drop sg	drops the shotgun
drop gl	drops the grenade launcher
drop rl	drops the rocket launcher
drop pg	drops the plasma gun
drop lg	drops the lightning gun
drop rg	drops the Railgun
drop bfg	drops the BFG10K

Tech Usage

TEC includes the classic 4 techs as well as 9 new ones. The server admin can choose which of the 13 techs spawn. If left in it's default state, all 13 will spawn. Each tech can be individually banned and thereby prevented from spawning. For more info about banning techs see **ADD CHAPTER TITLE**. What follows is a full description for each of the techs. The 4 classics are listed first, and they have shorter descriptions than the new ones.

AutoDoc – You gain 5 points of health each second upto 100, then 2 per second upto 150. **Armor**, you gain 5 per second below 100, then 2 per second to 150 as well.

PowerAmp – 1.5x the damage for all weapons used.

TimeAccel – Increase the speed of fire, as well as the weapon change time for all weapons.

DisruptorShield – Lowers damage taken by .5.

Vampire – When you hold this, you will regain .5 the damage you deal to your enemy. Does not recover armor.

Stealth – Holding this tech, you are near invisible, as long as you remain still. As soon as you move, you will increase your level of visibility to other players. When you are still, your name will not show up with the “identify target” feature, but as you move, your name will appear (much like how the id provided invisibility power up works). The effect is like that of the Predator cloaking effect —but with out the funky soap bubble color swirling.

WeaponAmp – Each weapon takes on a new level of destructive power when you hold this one. The down side to this tech is that in some cases it uses more ammo per shot than normal fire. Here’s a full list of its powers by weapon:

Gauntlet: Instagib.

Machinegun: Very tight spread. Makes it so that it's easier to keep a steady stream of hits to a player you are giving chase to. No extra ammo used.

Shotgun: Double the pellets, can double the damage at close range, or increase the chance of a hit at long range. Double the ammo used per shot.

Grenade Launcher: Triple shot, all grenades are full power, 2 per shot ammo cost.

Rocket Launcher: Bouncy rockets, do I need to say more? Once a rocket bounces, it loses some of its power. No extra ammo used.

Plasma Gun: Triple shot; center ball is full power, side two are half power. Extra ammo is need, 2 cells per shot to fire.

Railgun: 25% wider rail path. Allows for a greater degree of sloppy aim and still getting a hit from the shot. Very nice for modem or other >150ping players.

Lightning Gun: 2x the length of the normal lightning gun.

BFG10K: Find out!

AntiGrav – This tech, as it’s name implies, reduces the effect of gravity on the player who

holds it. This allows them to jump (about 3x) higher, glide over larger openings, and bounce off jump pads like a super ball. The trick to making use of this tech is in control of the effect. The effect of the AntiGrav can be toggled on and off via a special bind. Use the Q3A controls menu to find the TEC panel and set the bind from there, or use the console bind at the end of this paragraph. Imagine running into a room full of enemies and getting them all off guard by kicking the AntiGrav on and leaping over all their heads fragging them as you go, then toggle the effect off and land perfect on the flag, and off you go. There is a HUD visual to let you know if the effect is enabled or not, see *Figure 2-4* for an example.

bind KEY antigrav sets *key* to be your AntiGrav toggle bind

ADD FIGURE 2-4

KineticAmp – This is another strategic tech. It doubles the power of kick from any weapons attack. Imagine rocket splash that tosses the enemy over your head, it's very disorienting compared to normal splash effects when you get hit. With the Railgun it provides quite a kick to the enemy who gets hit.

Resurrect – If you die while in possession of this tech, you will not lose your inventory and respawn, instead you will instantly regain 100 health and 50 armor with all your items intact. You will lose the tech once you die holding it. This tech will not save you from falling over the edge, some lava, hell-fog or in most cases of getting squished.

Suicide – Game stuck in a stalemate? Maybe you're just bored? Grab this tech and then make your way to a concentration of enemies, and let it rip. This personal nuke device is sure to blow any enemy near by to bits. Don't wait too long to blow it, or you'll die holding it. You will lose one point of health per second you hold it, and you can't pickup any health while in possession of suicide either. By default this tech will only spawn once every 3 minutes of game play, though it is configurable by the server op. The Resurrect is the only thing that will save you from Suicides attack if you are in range with it goes off. This tech has its own *bind* used to set it off. You can use the standard Q3A controls menu to find the TEC section and bind it there, or you can set the following console bind:

bind KEY suicide sets *key* to be your suicide bind

Radiation – This tech will take health away from any enemy in range. Also since they are getting 100x their daily dose of radiation per second, they enemy will also cough, gag and see bursts of green flashes from the radiation poisoning they are experiencing. The range is somewhat limited, but if the enemy is within range, they will lose 10 points of health per second.

Electrocute – Shoot beams of electricity from your body with this tech. As you hold this tech, you will charge up, when you are ready to release, you will take on a white quad-like glow. This is the enemy’s queue to get outta your way. If you are able to get into range of an enemy and release your energy, the enemy will take damage. The damage can be up to 150 points of health if dealt to only one enemy. If more than one enemy is within range, then the damage will split between all of them. Not equally split, but about .25 less than full per enemy in range. Sounds too good? Be careful with this tech, if you let your charge get too high, you’ll fry yourself. To make sure you don’t fry, keep a close watch on the charge meter next to this techs HUD icon. See *Figure 2-5* for an example of the meter. This tech also has its own bind which can be set from the Q3A controls menu, under the TEC panel, or from the console with the following bind:

bind KEY electro binds *KEY* as your Electrocute bind

In addition to simply holding the techs, you can also drop them to pickup new ones. The bind to drop a tech can be set two ways. From the Q3A controls menu, under the TEC tab you will see the “drop tech” bind. You can also use the console command below:

bind KEY droptech binds *KEY* as your drop tech bind

Match Administration

TEC provides an easy to use menu based match administration system. Admins status can be had either by being elected via vote, or by entering a password configured for the server. Once a player has been granted admin status, they will have a new menu on their standard Q3A menus (accessed by hitting ESC while in game) called “Match Setup”. Once into the Match Setup menu, the admin will have control over many features including: game type (CTF/FFA/TDM/Tourney), time limit, cap limit, frag limit, overtime, team locking, player team forcing, banned items, banned weapons, match rounds and map. The maps which are available on the server are transmitted to the client to be displayed in a list. Once all of the desired settings and the maps have been chose, the admin clicks on “Start Match” button. Once into the game, the admin will retain his permission to change the server setup as they wish. For an example of the Match Setup screen see *Figure 3-2*.

INSERT FIGURE 3-2

TEC supports two ways to grant admin status. To setup a admin password for the match administration on the server, create a text file called “admin.pwd” in the /quake3/tec directory. The server will read this file upon startup. Anyone who authenticates themselves to the server with the t_login command will be granted admin status.

t_logIn *PASSWORD* Used to authenticate as a match admin.

The second method of granting admin status is to allow admins to be voted on by the players on the server. By setting the `g_allowVoteAdmin` cvar to 1, you enable match admin voting. To call a vote for an admin, players on the server would use the `callvote` command, calling the vote on `make_admin`. To disallow match admin voting, and only use the password, set the `g_allowVoteAdmin` cvar to 0. The default setting for `g_allowVoteAdmin` is 0.

g_allowVoteAdmin *value* 0=off 1=on

callvote match_admin *playername*

Note that in the current release of TEC, the `callvote match_admin` command can only be issued for a player who has no spaces in their name. This will be fixed in a future release.

CHAPTER 3

Server Side Settings

Due to the large number of features with TEC, the server side configuration has many options. TEC can be setup as a CTF, FFA or Tourney server. It also includes options to have InstaGib play. Along with game mode features, TEC has many in game features that are controllable by the server admin. Grappling hook, techs, weapon and item banning, weapon substitution and a full features menu drive match administration mode.

Grapple Options

By default the grapple is *not* enabled. To enable the grapple, the server admin must have the `g_allowGrapple` cvar set to 1. Setting `g_allowGrapple` to 1 will enable an on-hand grapple.

`g_allowGrapple` 0=off 1=on

To enable the off-hand grapple, both `g_allowGrapple` and `g_OffhandGrapple` must be set to 1.

`g_OffhandGrapple` 0=off 1=on

The grapple fire and pull speeds are also configurable. See the listing below list for details:

	Default On-hand
<code>g_grappleFireSpeed</code> <i>value</i>	1100
<code>g_grapplePullSpeed</code> <i>value</i>	800

	Default Off-hand
<code>g_ohGrappleFireSpeed</code> <i>value</i>	950
<code>g_ohGrapplePullSpeed</code> <i>value</i>	550

Team Colored Grapple

A new feature that TEC introduces is the option to use a team colored grapple. This means that in CTF style games, the blue team will shoot out a blue grapple, and the red team will shoot a red grapple. This feature can be turned on or off. If off, both teams will fire a white grapple. The default is to turn team colored grapple on.

g_teamColorGrapple 0=off 1=on

Weapon/Ammo Settings

TEC allows an server op to configure many options in regard to the weapons. Most of the popular features from past Q2 mods are found in the TEC weapons feature list.

Drop Weapons

The default behavior of Q3A is to drop a weapon when a player is killed holding a weapon. TEC allows the server op to override this setting and not drop a weapon. The default for g_dropWeapons is 1.

g_dropWeapons 0=off 1=on

TEC also allows for the manual dropping of weapons. The cvar g_allowDropWeapons controls this feature. The default is 1, or allow manual weapon dropping. Along with weapons, TEC allows the dropping of ammo. By default ammo dropping is enabled.

g_allowDropWeapons 0=off 1=on
g_allowDropAmmo 0=off 1=on

Weapon Stay

With the base Q3A game, when a player picks up a weapon, it will disappear for at least 1 second. TEC allows this to be change so that weapons stay all the time. The cvar g_weaponStay will default to 0 meaning that the normal Q3A rules apply.

g_weaponStay 0=off 1=on

Weapon Banning

With TEC server admins have the ability to ban weapons. When you ban a weapon the ammo for that weapon will automatically be banned also. The banning is done via a bit mask, to ban more than one weapon add the values of each together. For instance to ban both the Gauntlet and Machinegun you would set the value of the cvar to 3. For full de-

tails see the below chart:

g_BannedWeapons *value*

1	Gauntlet
2	Machinegun
4	Shotgun
8	Grenade Launcher
16	Rocket Launcher
32	Lightning Gun
64	Railgun
128	Plasmagun
256	BFG

Item Banning

TEC also allows server ops to ban items. Again to ban more than one at a time, add the values for each item. Bellow are the item masks:

g_BannedItems *value*

1	Small Health
2	Medium Health
4	Large Health
8	Mega Health
16	Armor Shards
32	Yellow Armor
64	Red Armor
128	Medkit
256	Personal Teleporter

Starting Weapons

TEC allows for the configuration of starting weapons. Like the other bit masks, add values of each to select more than one weapon at a time.

g_StartWeapons *value*

1	Gauntlet
2	Machinegun
4	Shotgun
8	Grenade Launcher

16	Rocket Launcher
32	Lightning Gun
64	Railgun
128	Plasmagun
256	BFG

Starting Ammo

With these cvars a server admin can control the starting ammo for all players.

Variable	Default Value
startammo_bullets <i>value</i>	100
startammo_shells <i>value</i>	10
startammo_grenades <i>value</i>	10
startammo_rockets <i>value</i>	10
startammo_lightning <i>value</i>	100
startammo_slugs <i>value</i>	10
startammo_cells <i>value</i>	50
startammo_bfg <i>value</i>	20

Tech Setup

TEC provides 9 new techs in addition to the classic 4 found in Q2's Three Wave CTF game. Some server admins may wish to disable all but the classics. Rather than having to ban 9 of them, TEC provides a quick cvar to set that will prevent all of the new techs from spawning. To allow only AutoDoc, TimeAccel, Disruptor Shield and PowerAmp to spawn, set `g_newTechs` to 1. The default is 0.

g_newTechs 0=off 1=on

Tech Specific Controls

Server admins can control the power and function of many of the techs provided by TEC. Below is a description of each of the configurable options. Note that in the `g_DisruptorDamage` cvar that 2 would equal $\frac{1}{2}$ damage, 4 would equal $\frac{1}{4}$ and so on. A value of 0 will translate to 1 (we can't have any division by 0 now can we?).

g_suicideSpawnTime *value* 3 Default Minutes between suicide spawns

g_SuicideDamage <i>value</i>	5000	Damage suicide does
g_SuicideRadius <i>value</i>	700	Radius of the suicide tech.
g_DisruptorDamage <i>value</i>	2	Division factor for Disruptor Shield.

Broadcast Tech Sounds

When a player picks up a tech, the default is to play the pickup sound as a broadcast event. This means that other players, from either team within a certain range of the player who picks up a tech will hear the tech name announced just as the player picking up the tech hears.

g_BroadcastTechs 0=off 1=on

Banning Techs

The server op can control which techs to spawn with these commands:

0=off 1=on

g_spawnAutodoc
g_spawnDisruptor
g_spawnPoweramp
g_spawnTimeaccel
g_spawnVampire
g_spawnResurrect
g_spawnSuicide
g_spawnWeaponamp
g_spawnAntigrav
g_spawnRadiation
g_spawnStealth
g_spawnKineticAmp
g_spawnElectrocute

Tech Spawn Options

TEC provides several ways to spawn the techs into maps. Mapmakers have the option of placing special map objects on their maps to specify where specific techs spawn, or to place special tech spawn objects that allow any tech to spawn from that object. The default behavior is to have the techs spawn at the same points that players spawn from. This is due to the fact that unless a map has been made with techs in mind, the techs have no default place to spawn and the player spawn points are the only option. The server admin has the option to choose whether the map will be checked for the special tech objects in a

map file, or not. The default is to look for the special objects and to use them. If the server is set to 2 (the default), it will first check for the specific spawn objects, if they are found it will use them, if not it will check for the random objects. If the random objects exist it will use them, if not it will fall over to using the player spawn points. If the server is set to 1, it will check for the random objects, if they do not exist it will again, fall over to using the player spawn points. If the server admin wishes to override the map objects, the server can be forced to use the player spawn points even if the special tech objects exist in the map, set the server to 0 to accomplish this. The following cvar deals with controlling the tech spawn location options:

g_techSpawnType 2=specific 1=random 0=player

Powerups

When playing a game with the techs enabled, having the standard powerups (Haste, Regen, Battlesuit) enabled is often not wanted. *Note* that the Quad Damage is *not* included in this list. The default is 0. To turn off the standard powerups use this cvar setting:

g_Powerups 1=spawn powerups 0=no powerups

Overtime Modes

The default setting for Q3A is to *not* have overtime. If you wish to enable overtime modes, set the g_Overtime cvar to 1.

g_Overtime 0=off 1=on

To enable a random overtime selection,

Rocket Arena Overtime

The standard Q3A tiebreaker, Sudden Death, is rather boring. If the game has been in a dead lock for 15 minutes, and to break it one team has to score a cap, it can take another 15 minutes to decide a game. With Rocket Arena, a game can come to a decisive ending within a few minutes, and everyone gets in on the action. Taking the idea from the Rocket Arena mod, all players on both teams are equipped with a full arsenal of weapons and ammo for them. The player is also granted 150 points of health. The RA OT is

played as a best of 3 set. During each round, all players from both teams battle it out. As time goes on in each round, the players health counts down. Each second, each player loses one point of health. If the player is able to kill an enemy, they will gain back .5 the damage done to enemies up to 150, but they will still count down. When all of the players from one team have been eliminated, then the round is over, and the next one will begin after a short view of the scoreboard.

The server admin has the option to set the overtime type to RA style, or to a random selection of the 4 types included in TEC. To set the server to RA OT only, use the following config file setting:

g_Overtime 1 OT type 1 is Rocket Arena

Rail War Overtime

Another popular option found in Q2 mods was the option for a Rail War overtime setting. In this style overtime, each player is given a Railgun and unlimited ammo. Players are also granted 175 health points, which like in RA OT, count down one per second. The player also gains .5 of the damage done to enemies, up to 175 again, but they will still count down to 0. Setting the server to Rail War mode can be done with the following setting:

g_Overtime 4 OT type 4 is Rail War

Grudge Match Overtime

The Grudge Match overtime features a one on one dual game where winner takes all. When a game ends and the server is either set to, or has randomly chose the Grudge Match overtime mode, the server will call a vote to elect one player from each team to do battle with one player from the opposing team. If no votes are cast, the server will choose the player from each team with the highest score. If two players receive the same number of votes, the server will select the one with the highest score from the game. Once the Grudge Match has started, each player will receive all weapons as well as ammo for each. The scoring is done on a best of 3 rounds; the player to kill the other twice wins the round. All non-elected players from the team will default to spectator view of their teams Grudge Match player, though they can switch to the opposing teams players spectator view. To set the server to Grudge Match overtime use the following server cvar:

g_Overtime 3 OT type 3 is Grudge Match

Sudden Death Overtime

If you would still like to use the id provided Sudden Death overtime, you can do it by setting `g_Overtime` to 2.

```
g_Overtime 2      OT type 2 is Sudden Death
```

Per Map Config Files

Every wanted to run a CTF match, then have a TDM mactch? Now you can. TEC allows for per map config files. This means that if you setup the server to rotate maps, you will be able to add special config options for each map. All cvars can be changed per map.

To use per map config files, first create a directory under your `quake3/tec/` dir called “mapconfig”. To setup a config for the `q3dm17` map, edit a file in the `mapconfig` dir called `q3dm17.cfg`. The format for the `q3dm17.cfg` is not exactly like the format of normal Q3A config files. What follows is an example per map config file:

```
{
g_gametype 0 // FFA
timelimit 5
fraglimit 10
capturelimit 0
g_allowGrapple 0 // No grapple on the map
g_Overtime 0 // No need for overtime
}
```

Note that the curley braces *are* necessary! With out them, the server will go into a loop not knowing when the end of the `.cfg` file is.

Any cvars can be put into the map, *except* “map” or “nextmap”.

High Scores Tracking

Time for some bragging rights. TEC has a high scores tracking system which will let you prove what type of player you are. At the end of each map played, TEC will show the top 10 high scores for that map. For an example of the high scores board, see *Figure 3-1*.

INSERT FIGURE 3-1

To enable the high scores tracking on the server, you will need to set `g_hiScores` to 1, which is also the default setting.

g_hiScores 0=off 1=on

Misc. Options

InstaGib Options

TEC has two separate InstaGib play modes. Normal InstaGib makes all weapons one hit kills, and also removes some of the techs from spawning. The techs that are removed are the AutoDoc, PowerAmp, Disruptor Shield and Vampire. Those techs all relate to health regeneration/retention or damage protection, which are both irrelevant in InstaGib modes. The second play mode is a Railgun only InstaGib. In this mode, all weapons other than the Railgun are normal while the Railgun is InstaGib. With Railgun only InstaGib, no techs are disabled. To setup a game with Railgun as the *only* weapon and InstaGib, ban all weapons other than the Railgun and set `g_InstaGib` to 1. The default for both InstaGib modes is 0. The server cvars for the InstaGib modes are as follows:

g_InstaGib 0=off 1=on
g_InstaGibRailOnly 0=off 1=on

Inside the pak0.pk3 there is a config called *tec_instagib_rail.cfg* which has an example of a Railgun only InstaGib (all other weapons banned).

Flag Sounds

Default Q3A has the same sound for each teams flag pickup in a CTF game. In TEC we have included two new sounds, one for each teams flag pickup sound, to enable this feature set `g_teamFlagSounds` to 1. The default is 1.

g_teamFlagSounds 0=off 1=on

CHAPTER 4

Running a Server

Within the pak0.pk3 for TEC, you will find several sample configs. What follows is a description of each of the included .cfg files.

<i>tec_tdm.cfg</i>	Team Death Match sample config
<i>tec_rfctf.cfg</i>	Return Flag Rules CTF sample config
<i>tec_instagib_rail.cfg</i>	Railgun only on the map InstaGib config
<i>tec_insta_rocket.cfg</i>	Rocket Launcher only on the map InstaGib config
<i>tec_ffa.cfg</i>	Free For All sample config
<i>tec_ctf.cfg</i>	CTF sample config

See the comments inside each .cfg for more detail about the server set.

CHAPTER 5

Mapmaker Objects

To map for T.E.C. you can place new map objects (found in the "entities.def" file provided in the PK3) for the techs. There are two kinds of entities:

- 1) Non-specific tech spawn points (any tech will spawn there)
- 2) Specific tech spawn points (only the specified tech will spawn there)

The types are:

info_tech_spawn (non-specific)

tec_autodoc
tec_timeaccel
tec_poweramp
tec_disruptor
tec_vampire
tec_resurrect
tec_suicide
tec_weaponamp
tec_antigrav
tec_radiation
tec_stealth
tec_kineticamp
tec_electrocute

If the server is configured for `g_techSpawnType 2`, a mapper will have the ability to specify which techs will be available on a map. This gives the mapper the ability to make a particular strategy for map development.

g_newTechs
g_Powerups
g_BroadcastTechs
g_spawnAutodoc
g_spawnDisruptor
g_spawnPoweramp
g_spawnTimeaccel
g_spawnVampire
g_spawnResurrect
g_spawnSuicide
g_spawnWeaponamp
g_spawnAntigrav
g_spawnRadiation
g_spawnStealth
g_spawnKineticAmp
g_spawnElectrocute
g_techSpawnType
g_suicideSpawnTime
g_PowerampDamage
g_SuicideDamage
g_SuicideRadius
g_DisruptorDamage
g_allowGrapple
g_grappleFireSpeed
g_grapplePullSpeed
g_teamColorGrapple
g_OffhandGrapple
g_ohGrappleFireSpeed
g_ohGrapplePullSpeed
g_Overtime
g_RandomOvertime
g_HiScores
g_railSpread
g_railRadialDamage
g_teamFlagSounds
g_AllowVoteAdmin
g_BannedItems
g_BannedWeapons
g_StartWeapons
g_DropWeapon
g_WeaponStay
startammo_bullets
startammo_shells
startammo_grenades
startammo_rockets
startammo_lightning
startammo_slugs
startammo_cells
startammo_bfg
g_InstaGib
g_InstaGibRailOnly
g_ReturnFlags

Cg_extragibby
Cg_healthbar