How to create a tf2 server

For a step-by-step guide on setting up a basic Team Fortress 2 Windows Dedicated Server, see the Windows dedicated server page. This short tutorial will guide you on how to create a Dedicated Server for Team Fortress 2 on a Windows-based computer. The current tool used for doing this is the Steam Console Client Tool (or Steamcmd). Steamcmd is an application that will completely install the latest version of the server content to your computer. If it is already installed when running Steamcmd, the tool will update the existing Dedicated Server installation to the latest released version. You can install TF2-server by downloading the Steamcmd from: Once you have downloaded this, run the tool from a command shell and a text windowed installer will automatically update/install your server. To save time and bandwidth when downloading files, it is wise to install the Steamcmd into the root folder of an existing Half-Life Dedicated Server installation. An example command line option: steamcmd +login anonymous +force_install_dir C:\tf2_server +app_update 232250 validate +quit You may save this command line to a text file, rename it with the .bat extension which will convert it to a batch file. This batch file can be run any time your server needs an update. For more detailed installation instructions visit: SteamCMD on the Valve Developer Community MOTD The MOTD ("Message Of The Day") is the message which appears upon successfully connecting to your server. A MOTD can be a simple message, or a complex website page. To modify the message, navigate to your orangebox/tf folder and edit the text in the files named motd_default.txt and motd_text_default.txt. The difference between the two files, is that if the motd_default.txt file contains any web programming language of client side (HTML, CSS, JavaScript), whether writing directly to the file or displaying the content by providing a URL to the file, but the user has decided to disable HTML MOTDs - the content of motd_text_default.txt file will be used instead. If the motd_default.txt contains any web programming language in it, whether directly or via a URL, the game will render the code using Internet Explorer. Both files are limited to a size of 2 KB (2,048 characters). A possible workaround for the files limitations (i.e., the size limit) is to place a link to a hosted .html file on the web. For example placing this as your motd.txt: will display the motd.html file. For a tutorial on how to create a MOTD that seamlessly fits into the TF2 chalkboard, go here or here. Maplist The Maplist is a file used to list all maps that are playable to the server. If you decide to use a custom map voting plugin, make sure you put the map name in both the maplist.txt and the voting list for it to work correctly. SRCDS (Source Dedicated Server) allows for easily editing of this list of playable maps. which is found in orangebox/tf/maplist.txt To add custom maps, drop the .bsp file into the orangebox/tf/maps directory and then find the maplist.txt at orangebox/tf/maplist.txt in your server directories and then add its name on a new line to the list (when listing map names, use the exact name of the .bsp file, without including the .bsp extension). Cheating Prevention VAC Valve Anti-Cheat will automatically detect and ban many users that are using programs used for playing unfairly on server (examples being speed hacking and aimbot use). VAC is enabled by default on all servers and requires the administrator to expressly disable it by adding the -insecure line to the launch options Server Settings Outside of VAC securing a server, the first line of defense against cheating is the server variable (console command) sv_pure. This variable controls where a client gets its information and acts as a means to restrict what kind of content and files can be modified/substituted on the player's side. This can be easily exploited by players if not configured properly. It's optional (but not vital) to set this variable to 1 or 2 if you don't want to allow any form of cheating on your servers. By default sv_pure is set to 0 which restricts nothing. Possible values are 0, 1, and 2 which are explained below. sv_pure 0 allows the client to specify the location of ANY game file. A client can potentially use modified files to gain an unfair advantage by doing things such as replacing enemy player models with ones that use bright colored skins, make walls invisible, add beacons onto the intelligence, or just about anything else you can think of. VAC doesn't protect against these kinds of exploits because they don't modify the game process itself. It's up to the server to decide what its clients can do. sv_pure 1 restricts where the client can get information from based on a white list (list of allowed content). The default white list is still set to allow custom player models as well as any potential exploits such as bright skins. The default whitelist also allows for custom weapon models such as re-animations of viewmodels. sv_pure 2 forces the client to ignore ALL user content, and instead forces them to use the information supplied by Steam. While this is the most secure, sv_pure 2 will prevent the use all custom skins/models and even custom sprays. For more information on sv_pure servers, including information on the white list format, see Pure_Servers on the Valve Developer Community. Many servers typically run sv_pure with a value of 1 together with a modified white list either to allow directories of content that are difficult or impossible to cheat with, or remove the ability for players to supply their own models. Third Party Plugins Several Third Party Plugins/Addons give extra protection against malicious players. See SRCDS Hardening @ alliedmods.net for more information and additional plugins. Command Line Options Command Line Options on the Valve Developer Community Example Server.cfg for TF2 dedicated server // General Settings // // Hostname for server. hostname yourserver.com TF2 Server // Overrides the max players reported to prospective clients sv_visiblemaxplayers 24 // Maximum number of rounds to play before server changes maps mp_maxrounds 5 // Set to lock per-frame time elapse host_framerate 0 // Set the pause state of the server setpause 0 // Control where the client gets content from // 0 = anywhere, 1 = anywhere listed in white list, 2 = steam official content only sv_pure 0 // Is the server pausable sv_pausable 0 // Type of server 0=internet 1=lan sv_lan 0 // Collect CPU usage stats sv_stats 1 // Execute Banned Users // exec banned_user.cfg exec banned_ip.cfg writeid writeip // Contact & Region // // Contact email for server sysop sv_contact emailaddy@google.com // The region of the world to report this server in. // -1 is the world, 0 is USA east coast, 1 is USA west coast // 2 south america, 3 europe, 4 asia, 5 australia, 6 middle east, 7 africa sv_region -1 // Rcon Settings // // Password for rcon authentication (Remote CONtrol) rcon_password yourpw // Number of minutes to ban users who fail rcon authentication sv_rcon_banpenalty 1440 // Max number of times a user can fail rcon authentication before being banned sv_rcon_maxfailures 5 // Log Settings // // Enables logging to file, console, and udp < on | off >. log on // Log server information to only one file. sv_log_onefile 0 // Log information in the log file. sv_logfile 1 // Log server bans in the server logs. sv_logbans 1 // Echo log information to the console. sv_logecho 1 // Rate Settings // // Frame rate limiter fps_max 600 // Min bandwidth rate allowed on server, 0 == unlimited sv_minrate 0 // Max bandwidth rate allowed on server, 0 == unlimited sv_maxrate 20000 // Maximum updates per second that the server will allow sv_minupdaterate 10 // Maximum updates per second that the server will allow sv_maxupdaterate 66 // Download Settings // // Allow clients to upload customizations files sv_allowupload 1 // Allow clients to download files sv_allowdownload 1 // Maximum allowed file size for uploading in MB net_maxfilesize 15 // Team Balancing // // Enable team balancing mp_autoteambalance 1 // Time after the teams become unbalanced to attempt to switch players. mp_autoteambalance_delay 60 // Time after the teams become unbalanced to print a balance warning mp_autoteambalance_warning 30 // Teams are unbalanced when one team has this many more players than the other team. (0 disables check) mp_teams_unbalance_limit 1 // Round and Game Times // // Enable timers to wait between rounds. WARNING: Setting this to 0 has been known to cause a bug with setup times lasting 5:20 (5 minutes 20 seconds) on some servers! mp_enableroundwaittime 1 // Time after round win until round restarts mp_bonusroundtime 8 // If non-zero, the current round will restart in the specified number of seconds mp_restartround 0 // Enable sudden death mp_stalemate_enable 1 // Timelimit (in seconds) of the stalemate round. mp_stalemate_timelimit 300 // Game time per map in minutes mp_timelimit 35 // Client CVars // // Restricts spectator modes for dead players mp_forcecamera 0 // Toggles whether the server allows spectator mode or not mp_allowspectators 1 // Toggles footstep sounds mp_footsteps 1 // Toggles game cheats sv_cheats 0 // After this many seconds without a message from a client, the client is dropped sv_timeout 900 // Maximum time a player is allowed to be idle (in minutes), made this and sv_timeout equal same time? mp_idlemaxtime 15 // Deals with idle players 1=send to spectator 2=kick mp_idledealmethod 2 // Time (seconds) between decal sprays decalfrequency 30 // Communications // // enable voice communications sv_voiceenable 1 // Players can hear all other players, no team restrictions 0=off 1=on sv_alltalk 0 // Amount of time players can chat after the game is over mp_chattime 10 // Enable party mode tf_birthday 0 Popular mods/addons Additional Protection General Admin Management See also Linux dedicated server Windows dedicated server Team Fortress 2 – How to host a tf2 server in 2021 1 - steamlists.comBasic guide for a basic tf2 serverIntroSo, you decided to create your own server.To get started, you need a hosting.HostingAny linux computer can be a hosting for a tf2 server.It could be a virtual private server (VPS), dedicated server, cloud service, virtual machine, docker container, your old PC, or your college's hacked server.The server must meet the following requirements:x86 or x86_64 (amd64) CPU architecture1 Ghz CPU frequency1 GB of RAM15 GB of disk spacePublic static IP addressThick internet connectionAny Linux distribution on the board. This tutorial assumes the use of Debian Buster (Debian 10, Debian Stable)Many hosting services provide such servers. Comparing them is beyond the scope of this guide. Also I do not want to advertise them. On internet, you can find tons of guides for choosing a hosting service/hosting provider.In terms of cost, my server costs around $26 per month.Let's skip the step of choosing a hosting service and assume that you already have access to your server terminal.ServerAdd support for i386 (x86) architecture:sudo dpkg --add-architecture i386Update software packages database:Update software packages:sudo apt-get dist-upgradeInstall required software packages:sudo apt-get install screen wget mc htop lib32z1 libncurses5:i386 libbz2-1.0:i386 lib32gcc1 lib32stdc++6 libtinfo5:i386 libcurl3-gnutls:i386Run new screen session.This utility make it easier to start the server as a background process and reconnect to it at any time.Create a folder for your server staff:Go inside of it:Download steam console client archive:wget it in the current folder:tar zxf steamcmd_linux.tar.gzDownload tf2 server:./steamcmd.sh +login anonymous +force_install_dir ./hlserver +app_update 232250 +quitIf it failed with out of memory error, don't worry just retry this command again and again until it downloads tf2 server successfullyGo to the downloaded server's folder:Now you should get your Valve Dedicated Game Server Account (token). It looks like a string of random letters and numbers. Something likeTo get one go to and create new account for TF2 (Game id is 440).Run your server../srcds_run -console -game tf +sv_pure 1 +randommap +maxplayers 24 +sv_setsteamaccount Replacewith your token from previous step.You can now disconnect from your screen session while tf2 server will be running inside of it untouched.To do it press Ctrl+A and then press D.If you want to connect to it again enter:To stop the server simply press Ctrl+CNetworkDifferent hosting providers have different user interfaces for opening ports.You need to search on internet how to open port for your hosting provider, your home router or your virtual machine software depending of what you are using as hosting.Google compute engine have the following UI for example: Some of our users, including one of the highest traffic Mann vs. Machine TF2 networks, have contacted us for help on setting up their game mode specific TF2 server. We've seen how popular they can become and are happy to help in any way we can. If you're interested in purchasing a server with us, go ahead and check out our industry-low priced Team Fortress 2 Servers! If you've enjoyed this article, or it has helped you in any way, please check out more of our articles. We have a comprehensive list of all of our Team Fortress Articles, SourceMod Guides, and Server Hosting Tips on our TF2 Knowledge Base! Say you've just set up your server and you want to make it specific to one game mode. Management Panel First, you'll need to login to your GameServerKings Game Server Control Panel. Use your TCAdmin login information sent to you in the verification email you received after your purchase. Select "Game Services" on the left-hand side of the screen on the navbar listed under "Game & Voice Management." From there, STOP your server and then click "File Manager". Creating Your Maplist Once inside, click on the /tf file. Once inside click "New File" on the top of the file manager. It will ask for a name, name it "maplist.txt" and click OK. From there click on the pencil next to "maplist.txt" to open that file in the text editor. Once inside, this is where you'll add the name of all your map files. For this example, I'm only going to be using control point (standard) maps. My file will look like this: Change Your Default Map Once completed, press save and go back to your "Game Services" tab. Now that you're back, follow our guide on how to set your default map. This is important because the game will always boot into the default map every time the server starts up. So, if your default map is set to a Mann vs Machine map, for example, you will always boot into an MvM map. Select a map which is in your map list, save the command line, select your new command line, and then Start your server back up. You now own a mono game mode server!