

# Dedicated Server Manual

## Introduction

Shatterline Dedicated Server is Windows game server distributed as Steam tool. It supports the following functionality:

- Host your dedicated server on Windows machine
- Configure PvP playlists, you can choose which PvP maps to play
- Host private PvP playlists so only you and your friends will have access to it
- Basic management of connected players: kick, ban, unban

## How to Host Dedicated Server

Dedicated Server **must be configured** before hosting it on your **Windows** machine.

### Configuration Step

Install Shatterline Dedicated Server from Steam and open **game\_server\_config.json** from **Bin.Release.Dedicated** folder. It is default config used by dedicated server. It contains several important parameters that you have to configure accordingly to your network environment.

```
"server_name": "FL Casual Server",  
"server_port": 30090,  
"server_host": "",  
"server_region": "EU",  
"server_password": "",  
"rotate_missions": true,  
"randomize_missions": true,  
"auto_start": true,
```

- **server\_name** - Put your game server name here, it should be something unique that allows you to find your dedicated server in client's server browser. NOTE: It is limited to 50 characters
- **server\_port** - 30090 is default dedicated server port, however if you're behind the NAT then put here your external port which is mapped to 30090 in your port forwarding configuration, for sake of simplicity it is suggested to map 30090 to 30090 on your port forwarding configuration
- **server\_host** - if empty then your external IP address will be detected and used for dedicated server promotion, **in most home ISP configuration you have to define your static external IP manually here**
- **server\_region** - it can be EU, NA, SA or ASIA only. It is recommended to define your region to help other people to filter out too distant from them dedicated servers

- **server\_password** - if empty then anyone can play on the server, if you want to keep it private then add some password here, for example 4156, and share it with your friends in secure manner
- **rotate\_missions** - it is recommended to keep it true, so playlist will be rotated, and the server will stay alive
- **randomize\_missions** - if true then playlist is shuffled each time it is loaded
- **auto\_start** - atm only true option is supported, *please don't change it*

The most important are these two parameters: **server\_host** and **server\_port** (if port forwarding is used). If not properly configured, then the server will be visible in client's server browser but no one will be able to join.

*At this point you can try to run from Steam library and test it via client's server browser. If you want to change playlist and run more servers then please read below sections.*

## Playlist Configuration Step

By default, **game\_server\_config.json** contains casual modes, like Team deathmatch, Conquest and Domination. Playlist section contains one or more mission entries:

```
"mission": "conq_highpick",
"min_players_to_start": 2,
"max_players_count": 10,
"max_bots_count": 8
```

- **mission** - contains mission name, below will be a table with all supported missions
- **min\_players\_to\_start** - number of players to wait in pre-game before game started
- **max\_players\_count** - limit for players in game session
- **max\_bots\_count** - number of bots to fill free slots, if real player is joined then random bot is kicked from a session

## How to Host

*The easiest way is just to run dedicated server from Steam library, after configuration step.*

However, it is recommended to use the launcher tool to cope with server crashes and port collisions. **NOTE:** launcher tool requires **python installed**.

It is recommended but not required to set "**rotate\_missions**" into **false** when running under *the launcher tool*. Thus, dedicated server will be restarted after playlist is over, since it is never be designed to host many missions at once we suggest avoiding infinite rotation. The launcher tool will take care about it and restart on the same port.

Here is the example of running dedicated server via the launcher tool:

```
py Bin.Release.Dedicated\dedicated_server_launcher.py --port 30090 --exe
Bin.Release.Dedicated\Shatterline_Server.exe --exe-args "+sv_port 30090 --
server_config game_server_config.json"
```

**NOTE: Port value** in launcher tool and port in server command lines **must be the same**.

## How to Host Multiple Servers

It is possible to host multiple dedicated servers on the same host. For example, we want to host FFA and PTB playlists defined in **game\_server\_config\_ffa.json** and **game\_server\_config\_ptb.json** files. Here are the steps to run two servers:

- Configure different **server\_port** in FFA and PTB config files, for example FFA will use **30090** while PTB **30091**
- Use the launcher tool to spawn two dedicated servers with different ports and different configs as follows:

```
py Bin.Release.Dedicated\dedicated_server_launcher.py --port 30090 --exe
Bin.Release.Dedicated\Shatterline_Server.exe --exe-args "+sv_port 30090 --
server_config game_server_config_ffa.json"
py Bin.Release.Dedicated\dedicated_server_launcher.py --port 30091 --exe
Bin.Release.Dedicated\Shatterline_Server.exe --exe-args "+sv_port 30091 --
server_config game_server_config_ptb.json"
```

## How to Manage Dedicated Server

Dedicated server can be managed as follows:

- Command line arguments
- Console commands

### Command Line

There are following important command line arguments:

- **+sv\_port** - default value is **30090** UDP port, configuration file either uses the same value or **forwarded port value**, in case of NAT network configuration
- **--server\_config** - default value is **game\_server\_config.json**, use it when need to run more than one dedicated server on the same host or use another value than default config file
- **--community** - command line switch to run dedicated server as community dedicated server advertised as public online server

## Console Commands

Dedicated server supports following console commands:

- **gs\_reload\_server\_config** - reload server configuration file on the fly without dedicated server restart, by default it reloads currently loaded one, if no server config filename is provided as optional argument
- **list** - print list of connected players, with their IDs, nicknames
- **kick** - kick player from active game session by ID or nickname
- **ban** - ban player from active game session by ID or nickname
- **banned** - list of all banned players with their IDs and nicknames
- **unban** - unban player by ID or nickname
- **quit** - it is strongly recommended to use this command for dedicated server shutdown

*It is recommended to use ID because of it is more stable than nickname, it is enough to input unique part of ID for sake of usability.*

**NOTE:** at current implementation, ban list isn't persistent and lost after dedicated server restart.

## List of Missions

Dedicated server is shipped with set of predefined game server configuration files:

- **game\_server\_config.json** - casual missions for Team deatchmatch, Domination and Conquest game modes
- **game\_server\_config\_escort.json** - Escort missions
- **game\_server\_config\_round\_based.json** - missions with round based game modes, Round based tdm, Plant the bomb, 3v3 round based and playground with blocks mode
- **game\_server\_config\_ffa.json** - Free for all missions
- **game\_server\_config\_ptb.json** - classic Plant the bomb missions
- **game\_server\_config\_coop.json** - PvE and PvEnP missions
- **game\_server\_config\_experimental.json** - not production ready missions to explore and have fun

*Casual, Escort, Round-Based and FFA configs contain production ready missions and configured to play with bots. Classic PTB doesn't support bots and require 5v5 players, Coop requires 3 players.*

Here is the list of all missions for creating your own configuration files:

Mission	Game Mode	Recommended Players	Production Ready	Bot Support
conq_cqb	Conquest	12	Yes	Yes

conq_deathlab	Conquest	12	Yes	Yes
conq_harbor	Conquest	12	Yes	Yes
conq_highpick	Conquest	12	Yes	Yes
conq_island	Conquest	12	Yes	Yes
conq_italy	Conquest	12	No	Yes
conq_nisida	Conquest	12	Yes	Yes
conq_project01	Conquest	12	No	Yes
conq_promenade	Conquest	12	Yes	Yes
dmn_cqb	Domination	12	Yes	Yes
dmn_deathlab	Domination	12	Yes	Yes
dmn_harbor	Domination	12	Yes	Yes
dmn_highpick	Domination	12	Yes	Yes
dmn_island	Domination	12	Yes	Yes
dmn_italy	Domination	12	No	Yes
dmn_lost_fortress	Domination	12	No	Yes
dmn_nisida	Domination	12	Yes	Yes
dmn_project01	Domination	12	No	Yes
dmn_promenade	Domination	12	Yes	Yes
esc_barracuda	Escort	10	Yes	Yes
esc_escape	Escort	10	Yes	Yes
esc_march	Escort	10	Yes	Yes
ffa_cqb	Free for all	10	Yes	Yes
ffa_deathlab	Free for all	10	Yes	Yes
ffa_harbor	Free for all	10	Yes	Yes
ffa_highpick	Free for all	10	Yes	Yes
ffa_island	Free for all	10	Yes	Yes
ffa_italy	Free for all	10	No	Yes
ffa_nisida	Free for all	10	Yes	Yes
ffa_project01	Free for all	10	No	Yes

ffa_promenade	Free for all	10	Yes	Yes
ptb_classic_cqb	Classic plant the bomb	10	Yes	No
ptb_classic_highpick	Classic plant the bomb	10	Yes	No
ptb_classic_island	Classis plant the bomb	10	Yes	No
ptb_classic_italy_mv	Classic plant the bomb	10	No	No
ptb_classic_nisida	Classic plant the bomb	10	Yes	No
ptb_classic_promenade	Classic plant the bomb	10	Yes	No
ptb_classic_sector_x	Classic plant the bomb	10	No	No
ptb_island	Plant the bomb	10	Yes	Yes
ptb_highpick	Plant the bomb	10	Yes	Yes
ptb_nisida	Plant the bomb	10	Yes	Yes
ptb_cqb	Plant the bomb	10	Yes	Yes
ptb_promenade	Plant the bomb	10	Yes	Yes
ptb_harbor	Plant the bomb	10	Yes	Yes
ptb_promenade	Plant the bomb	10	Yes	Yes
rtdm_3v3_cityhall	Round based tdm 3v3	6	Yes	Yes
rtdm_3v3_metro	Round based tdm 3v3	6	Yes	Yes
rtdm_3v3_ruin	Round based tdm 3v3	6	Yes	Yes

rtdm_classic_deathlab	Round based tdm	10	Yes	Yes
rtdm_classic_highpick	Round based tdm	10	Yes	Yes
rtdm_classic_lost_fortress	Round based tdm	10	No	Yes
rtdm_italy	Round based tdm	10	No	Yes
tdm_cqb	Team deathmatch	12	Yes	Yes
tdm_deathlab	Team deathmatch	12	Yes	Yes
tdm_harbor	Team deathmatch	12	Yes	Yes
tdm_highpick	Team deathmatch	12	Yes	Yes
tdm_island	Team deathmatch	12	Yes	Yes
tdm_italy	Team deathmatch	12	No	Yes
tdm_lost_fortress	Team deathmatch	12	No	Yes
tdm_nisida	Team deathmatch	12	Yes	Yes
tdm_project01	Team deathmatch	12	No	Yes
tdm_promenade	Team deathmatch	12	Yes	Yes
citadel_homeland	Experimental	10	No	No
playground	Blocks	10	Yes	No
du_bordercontrol	PvE	3	Yes	No
du_bordercontrol_contaminated	PvE	3	Yes	No
du_cybertrail	PvE	3	Yes	No
du_portal	PvE	3	Yes	No

du_stormbringer	PvE	3	Yes	No
du_stormbringer_backstab	PvE	3	Yes	No
du_stormbringer_contaminated	PvE	3	Yes	No
du_stormbringer_quicksand	PvE	3	Yes	No
isl_cargo_cult	PvE	3	Yes	No
isl_escape	PvE	3	Yes	No
isl_inside_out	PvE	3	Yes	No
isl_invasion	PvEnP	4	Yes	No
isl_redlake	PvE	3	Yes	No
isl_redlake_bastion	PvE	3	Yes	No
isl_redlake_contaminated	PvE	3	Yes	No
isl_redlake_twins_v2	PvE	3	Yes	No
nl_hecatomb	PvE	3	Yes	No
nl_hecatomb_contaminated	PvE	3	Yes	No
nl_hecatomb_short	PvE	3	Yes	No
nl_hephaestus	PvE	3	Yes	No
nyc_liberty_base	PvE	3	Yes	No