

Converting Single Player Maps To MultiPlayer



by Cobra {sfx}

To convert SinglePlayer to Multiplayer you need 3 IMPORTANT things:

1. A MultiPlayer Start-up Script.

2. The AI Players Removed.

3. MultiPlayer SpawnPoints added.

The prefab script below supplies you with all 3, anything after that is a bonus :) Read on ...

You will need:



Pakscape - For opening/creating/saving A pk3 File ... Available here ... [Pakscape](#)

NotePad (or similar) - For Opening Map Script Files.

Once you have got Pakscape, run it and go to your *MOHAA/Main* folder and you will see the games PK3 files, if you open pak5 you will find the Single Player and MultiPlayer maps.

Example of what to do now...

Copy the script file of the map you want to do to your desktop
(eg copy *M5L1B.scr* to your desktop)

Now run Notepad and go to load (change file type to all Types) and load the M5L1B.scr

Now as it is, it will not run in MultiPlayer.

Included is a "prefab" called *M5L1B* - you can use this and compare it to the original.

Grab it here...

[M5L1B-Prefab](#)

Note - this is already set up for *M5L1B*, to test it - just save it in your *Mohaa/Main/Maps* folder (eg *MOHAA/Main/Maps/M5L1B.scr*)

Make sure you save as **.scr**

Converting Single Player Maps To MultiPlayer.

NOTE - we NEVER save anything back into any of our original PK3 files, you can copy from them but NEVER save into them.

Also we need to test things before considering making a PK3 file for server use so we know there isnt going to be any problems/crashes serverside.

To edit the maps script file we need it in our Mohaa/Main/Maps folder so we can make changes and load the game up and make sure everythings working how we want it to.

Anyway -

Put that *M5LIB.scr* in main/maps folder and load up Mohaa and open console with the tilde key **`** and type map m5l1b and hit enter

You should then be able to run around that map same as you do on the stock MultiPlayer maps.

Now i called this a prefab, you can simply rename the *M5LIB.scr* in your main/maps folder that you just tested to **any** Single Player Map to Test That Map


eg... rename *M5LIB.scr* to *M4L3.scr* and Load Mohaa again and in console load that map (eg map *m4l3*).

Now Youll Notice The Spawns arent right as theyre from *M5LIBs* map, you can sometimes spawn in the map and manage to go looking around, if not you can still use spectate to look around the map.

what you are going to have to do is add new spawnpoints for where you want the players to start when they join a team, this applies to every Single Player map you intend to mod.

So... Ingame you need to decide where you want players to spawn, seeing as this script is setup for gametype 2 (TDM), i would select one side of a map for the firstteam and the other side of the map for the second team.

Converting Single Player Maps To MultiPlayer.

Heres what you do - stand facing the direction you want the player to face when he spawns and from the location you want him to spawn from, and open console with the tilde key () and type coord - console will return the coordinates of the map your standing in and the angles your facing....

eg - type coord and console returns with the info you requested ...

location: 5877.67 -4503.13 208.13

angles: 10.43 82.34 0.00

(use 'tele' or 'face' to set) ← This can be ignored.

So you write down the location and the angle for your first spawnpoint.

These are the bits that interest us:

5877 -4503 208 *** notice you dont need the decimal point and extra numbers ***

82 *** The angle we require is the middle set – the decimal and extra numbers we discard ***

Once youve ran around that teams area repeating that 10 times and obtaining the needed coords, do the same for the opposite team. You should end up with 20 sets of coords and angles.

Then editing the ones in your "prefab" add the spawnpoints to each teams, save in the same maps folder and overwrite the one thats in there then go and test ingame.

That covers basic Converting, you will find some maps will need work to make more usable, there are a lot of bottlenecks, items you may want to remove, items you can move around for better use, spawn new items in, there are lots of options at your disposal.

You are going to find players can get under the map, there are some things you need to remove, you will need to block them from going places you dont want them to get to, in other words there is still some work to do after adding spawnpoints, you may want to enable some of the old objectives, heres where you get creative and build something really nice for your server. :)

Every Single Player Conversion is going to need fixes for something or other but thats what forums are for and i KNOW you will learn from making your Conversion and you should enjoy it! If you arent enjoying it then id change to doing something else lol.

Once all the fixes have been done (with help from forums, friends etc ...) and you are satisfied its ready for server use...

Converting Single Player Maps To MultiPlayer.

Open Pakscape, click new and in the right window right click and go to *OBJECT* and select *NEW DIRECTORY*, name it maps and hit enter, now go to your *mohaa/main/maps* folder and copy your script file to the maps folder in Pakscape

(eg copy your *M5LIB.scr* to the maps folder in Pakscape)

Then in Pakscape click:

File

Save As

make sure its going to save in your *Mohaa/Main* folder at the top

click save as type and change it to read Quake 3 Pak (*.PK3)

In the filename type your choice of name for the mod

(eg *zzzz_my_m5l1b*) and hit save

You will now have your Converted map in pk3 format ready to upload to your servers main folder.

Compare your *M5LIB* prefab to the *M5LIB* i made thats in our Mod Files section at www.Mods-R-us.net

youll see how i removed certain things and also added some.

For SpearHead and breakThrough

For SpearHead and BreakThrough roughly the same applies except you have to test your "prefab" from within a PK3 - eg make your pk3 file with the maps folder and place your selected "prefab" inside.

SpearHead...

Make a *T1L3.scr* prefab from the one supplied and in pakscape make your maps folder as explained above and paste your *T1L3.scr* prefab in and save in your Spearhead - Mainta folder and load up SpearHead and do the same in console - map *T1L3* and hit enter

BreakThrough...

Make a *E1L1.scr* prefab from the one supplied and in pakscape make your maps folder as explained above and paste your *E1L1.scr* prefab in and save in your BreakThrough - Maintt folder and load up SH/BT and do the same in console - map *E1L1* and hit enter.

Converting Single Player Maps To MultiPlayer.

You will have a few things to add before you start becoming happy with it but thats part of the fun, you will learn a lot from the SP scripts :)

Advice: ALWAYS look through the original script file as it will have a lot of information you will need, also the other scripts that it executes/threads to from within the main script.

once you get the hang of it and thirst for more i recommend some extra tools be used to help you ...

Tools:

MohRadiant - used for looking at .map files and making your own maps if you ever decide to take up Mapping. Available here ... [MohRadiant](#)

MohBSPtoMohMAP - a handy tool for converting the BSP files to a .map format, you would then use MohRadiant to load the .map and you can look around inside the map and retrieve quite a lot of information that can help you when converting SP maps, eg the targetnames of certain items you may want to enable like a tank or a flightpath for example.
Available here ... [MohBSP2MohMAP](#)

MohaaTools made by scorpio Midget is another handy prog, This can load the BSP and give you a lot of information including a 3d browser to look around the map.
Available here ... [ScorpioMidgets MohTools](#)

M2S map to script converter provides you with a targetnames list and some nice options for scripting things in for you.
available here... <http://www.alienxsoftware.co.uk/>

SorridStokers SpawnCreate - makes adding spawnpoints easy ...
Available here [SpawnPoint Creator](#)

Notepad++ is a great program for Scripting ... Available here ... [Notepad++](#)

Edit+ is another great program for Scripting ... Available here ... [Edit+](#)

You will come across some maps where the removeclass actor doesnt remove all the AI players, you will need to remove them by their targetname - some homework there for you when you come across them :P

Every map is different to do, so begins your quest!
This is a handy thing to have in your Mohaa shortcut ...

+set developer 1 +set thereisnomonkey 1 +set cheats 1

copy that and right click your Mohaa shortcut on your desktop and add it to the target

eg should look something like this

C:\Program Files\EaGames\MOHAA\MOHAA.exe +set developer 1 +set thereisnomonkey 1 +set cheats 1
click apply and click ok....

Converting Single Player Maps To MultiPlayer.

This will give you better access to things in console and ingame.(no you cant cheat in a multiplayer game unless the server allows you to but when testing your conversion you can use noclip to look around etc)

eg in console type noclip and hit enter - you can now "float" around your map, quicker than running also, to land simply repeat what you typed - in console type noclip and hit enter.

LOCALIZATION ERROR: '{SFX} Shock + Awe-MIL2A' does not have a localization entry

Localization errors can be ignored, theyre just saying the text isnt standard but will run ok. If youve added text / ingame messages youll see that error in console - ignore them.

Alias errors.. Sounds ingame will need an alias, youll find quite a few sounds dont work, some we can fix, other we are still looking for a fix for. Namely some of the weapons.

ERROR PlaySound: bar_snd_reload needs an alias in ubersound.scr or uberdialog.scr - Please fix. Another missing weapon sound

Your maps precache will be found in the pak that you took the original script file from eg... *M5L1B precache.scr* (yes copy that to your pk3 alongside your prefab of *M5L1B*) Same applies to any map you do - make sure it has its precache in your pk3s maps folder.

If youve added a model that wasnt in the SP map then you should add it to the maps precache or any that you find in your qconsole that you know youve added via script.

Example - i added a p47 flying and now i see this message in console...

^^^ Add the following line to the *_precache.scr map script:
cache models/vehicles/p47fly.tik

Just copy and paste "**cache models/vehicles/p47fly.tik**" to your maps precache.

Keep a copy of the precache.scr on your desktop and add to it, when finished add the new precache to your pk3s maps folder alongside your map script.

Converting Single Player Maps To MultiPlayer.

REMOVECLASS.

you are going to be using the removeclass command a bit, these need to be used BEFORE level waittill prespawn

```
removeclass actor // removes most/all of the AI players  
removeclass trigger // removes original triggers
```

I recommend using the above 2 in every script as we need to remove the AI and remove the triggers the single player game used for saving etc

New triggers can be added in the usual way and threaded to after the removeclass has been used from the usual place (inbetween level waittill prespawn and level waittill spawn)

(Look at my *M5LIB.scr* to see how i removed triggers and added new ones)

If you ever need to know somethings class, look in PAK 0 in the models list and find its TIK file, double click to look at its info.

Setsize:

How to determine the required Setsize ...

Imagine a box, and here are its sides... (-10 -10 -10) = Left/ Back/ Bottom) / (10 10 10) = Right/ Front/ Top

The numbers are units in the game, 16 units = 1 foot ingame (12 inches)

Heres an example of some setsize ...

The Opel Truck
setsize (-65 -40 0) (65 40 120)

The U-Boat...
(-2150 -212 0) (2150 212 750)

An AI or Human Player...
(-16 -16 0) (16 16 96)

Tip: ... 16 units = 1 foot (12 inches) So a player is about 2 foot square by 6 foot tall.

Converting Single Player Maps To MultiPlayer.

Setsize:

To find the correct setsize of an object you have spawned look at the bottom of its TIK file (Located in the PK3 that contains the models - Pak0 for Allied Assault, Pak1 for SpearHead and BreakThrough).

This is handy for setting **trigger** sizes or making **clips** or scaling an objects bounding box to a changed models scale.

eg...

If you changed a Panzer Tanks scale to .5 (half scale) then you should adjust its bounding box to match that scale.

So a PanzerTank at scale .5 (halfsize) would need a bounding box of (-82.5 -42.5 0) (82.5 42.5 80) instead of the fullsize Tanks bounding box of (-165 -85 0) (165 85 160)

When testing your setsize ingame, in console type **sv_showbboxes 4** and you should see the bounding box of your trigger or clip etc (experiment with the numbers).

Spawning a usable clip ...

```
local.clippy = spawn script_object
local.clippy.origin = ( -4195.71 -355.26 550.65 )
local.clippy.angles = ( 0 0 0 )
local.clippy setsize ( -30 -10 -80 ) ( 30 10 80 )
local.clippy.targetname = "solid_clip1"
local.clippy solid
local.clippy nodamage
```

This can be used to block areas off to players as an example of usage.

Using **sv_showbboxes 4** is handy when working with this as it will show you its bounding box which you will need to scale using the setsize for where your putting it.

Useful Cheats:

If you cant get the sv_showbboxes etc to work via console you can add them in your map script with these, just place anywhere before main:

eg ..

```
setcvar "cheats" "1"
setcvar "thereisnomonkey" "1"
setcvar "developer" "1"
setcvar "sv_showentnums" "1"
setcvar "sv_showbboxes" "4"
```

main:

Moh Modding Snippets.

Adding a trigger that Kills.

This is a full size under the map kill trigger.

```
Map_Guard:

    spawn trigger_multipleall "targetname" "Killah"

    $Killah.origin = ( -2610.24 -1978.16 60 )

    $Killah setsize ( -9999 -9999 -30 ) ( 9999 9999 6 )

    $Killah setthread die

end

die:

    iprintln "*** - Map_Guard Triggered - ***"

    local.punk = parm.other

    if!(isalive local.punk)

    {

    end

    }

    local.punk thread spawn_fx models/animate/explosion_bridge.tik

end

spawn_fx local.fx:

    local.temp = spawn script_model model local.fx

    local.temp.origin = self.origin

    local.temp.scale = .5

    local.temp playsound gas_explode1

    local.temp anim start

    radiusdamage local.temp 150 150

    wait 3

    local.temp remove

end
```

Moh Modding Snippets.

General Info.

In your MohAA/MohSH/MohBT settings go to advanced and make sure you have a X where it says console.

To access console press the tilde key ``` you'll find it below ESC.

To get detailed information for testing your scripts you should type in console before you load your map `set developer 1`

or add to your mohaa shortcut like this ...
C:\Program Files\EA GAMES\MOHAA\MOHAA.exe" `+set developer 1`

You can then open console ingame to check for errors using page up.

You can also create a logfile which will help you by typing `logfile 2 in console` before map load, then load your map, do whatever your doing ingame/looking at etc then when you quit look in your main/mainta/maintt folder for a file called `qconsole` and double click it.

It will list a lot of information that can help you determine why something has gone wrong with your script and also helps other people to help you. You needn't worry about some errors you find, the only ones that concern you are the ones relating to your script/s or any mod you may have added.

Console will point out an error with this `^`

When scripting mohaa, script in window mode ...

Press `Alt-Enter` to toggle window mode. Then script and to check your script simply press `alt-tab` to go back and type `'restart'` in console. You can then test your new script.

You can also use the in-game editor. Type `"editscript"` in console and your script will be opened in-game.

With console enabled type `fps 1` in console. You can see the frames per second on screen. This will give you some indication of how your mods are lagging the game (fps will drop).

Other Random Tips:

The Loop.

Heres how to script a loop, in this case the loop is making a spawned cratelid (acting as an elevator) go up and down continually ...

```
spawn script_model model "static/cratelid2.tik" "targetname" "cratelid"
$cratelid.origin = ( -743 -3009 430 )
$cratelid.angles = ( 0 180 0 )
$cratelid nodamage
while (1)
{
wait 5
$cratelid moveUp 580
$cratelid waitmove
wait 4
$cratelid movedown 580
$cratelid waitmove
}
end
```

As you can see, you can manipulate objects using it.

Making a Corona blink ...

```
spawn script_model model "fx/corona_red.tik" "targetname" "blinky"
$blinky.origin = ( 5390.76 -7459.20 3042.76 )
$blinky scale .7
$blinky notsolid
while (1)
{
$blinky hide
wait 2
$blinky show
wait 2
}
end
```

Snippets obtained from various members posts for ease of finding in one file.
(You know who you are and thank you for sharing)

This list may be updated.

www.Mods-R-us.net
See you on the Forums
Cobra {SFX}

