Blow up that multiplayer objective :: Bjarne Grönnevik  
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There are a bunch of tutorials on blowing objectives... they mostly tell you half the story. I will try to be more complete.  
This tutorial requires a bit of scripting and setting parameters and configuring entities, so if you have no idea what those words mean, try to learn that first.

Oh yeah, you'll probably want to put the objective somewhere, so I recommend building a map, made up only of one small room ( To minimize compile times while you are learning ). All red words below are keywords that should not be changed, the rest you can change as much as you like.

A multiplayer objective destruction is made out of a number of parts:

1: [Making a bomb.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#1)  
2: [A trigger for that bomb.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#2)  
3: [Something to blow up.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#3)  
4: [Explosion radius.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#4)  
5: [A chain reaction explosion FX.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#5)  
6: [Debris from the explosion.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#6)  
7: [Leftovers after the explosion.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#7)  
8: [Some scripting in your .scr file.](http://www.mohaaaa.co.uk/mohaa/tutorials/obj_blow.php#8)

So lets start from the top.

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(1) Making a bomb  
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Create a script\_model ( with nothing selected, right click on the map grid and select script -> model ).

Give it these key-value pairs:

#exploder\_set 1 // The ID that connects all the parts of the objective. To add entities to this exploder give them the key/value #set/1.

$explosion\_fx models/fx/fx\_explosion.tik // What explosion effect to activate when the bomb blows ( optional ).

$killarea groundzero // Target name of a trigger\_multiple brush that defines the area where you will be killed by the bomb blast ( optional, if left out a default radius from the bomb will be used ). See 4

$trigger\_name panel\_trigger // Target name of a trigger\_use brush that defines the area where you can plant the bomb.

model models/items/pulse\_explosive.tik // What model to use for the bomb ( optional, you can make your own bomb and skip this key).

targetname panel\_bomb // A name used by other entities to target this entity.

By now you should have a nice black/yellow bomb before you.

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(2) Making a trigger for the bomb  
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Create a trigger\_use ( with nothing selected, right click on the map grid and select trigger->use ).Give it these key-value pairs:

targetname panel\_trigger // A name used by other entities to target this entity ( the bomb above uses it ).

Reposition the trigger so that it sits around your bomb. Done.

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(3) Something to blow up  
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I made a control panel out of a single brush, textured with the norway/nor\_panelXXX textures, but you can use any number of brushes or a model, in the same way as we set a model for the bomb ( the models/statweapons/flak88turret.tik is apparently popular ).

Select all the brushes you wish to blow up and make them a script\_object ( right click on the map grid and select script->object ).Give it these key-value pairs:

#set 1 // The ID that connects all the parts of the objective to the bomb.

targetname exploder // Tells the exploder system that this is an item that shall be destroyed.

By now you should have a doomed panel.

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(4) Blast radius calibration  
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Shouldn't soldiers nearby be affected by the explosion too? Well yes, the default behavior, like damage and blast radius is set in the .scr file below, but we can be more specific.

Create a trigger\_multiple ( with nothing selected, right click on the map grid and select trigger->multiple ).Give it these key-value pairs:

targetname groundzero // A name used by other entities to target this entity ( the bomb above uses it ).

Reposition the trigger so that it sits around the area where the bomb should hurt /kill people. Done.

-------------------------------------------------------------------------------  
(5) Fire and brimstone shall rain!  
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We want some wicked fire and sound FX, right? You know you want it... So lets create a chain-reaction explosion effect:

Create two script\_model's ( with nothing selected, right click on the map grid and select script -> model ).Place them close to the bomb and give both of them these key-value pairs:

#set 1 // The ID that connects all the parts of the objective. To add entities to this exploder give them the key / value #set / 1.

model models/animate/fx\_explosion\_tank.tik // What model to use for the explosion effect.

targetname exploderfire // Tells the exploder system that this is an item containing special FX.

Give one of the script\_model's this value:

#pause 0.5 // Delays the explosion FX to 0.5 seconds after the bomb goes off.

By now you should have a funky, two stage explosion.

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(6) Throwing debris out of the explosion.  
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We are not talking debris from the explosion FX here, but the thing you are blowing up breaking apart and getting hurled in all directions. It will not break apart by itself; you will have to make the debris by yourself ( or select a model ).

I copied the panel and split the copy in four pieces.

Select all the brushes **one by one** and make them script\_object's ( right click on the map grid and select script->object ).   
Give them these key-value pairs :

#set 1 //The ID that connects all the parts of the objective to the bomb.

targetname exploderchunk // Tells the exploder system that this is an item that shall be hurled when the bomb is blown. Place the pieces a bit outside the panel ( don't worry, the exploder system will hide them until the bomb blows ).

**Where to throw the debris?**  
Create a script\_origin ( with nothing selected, right click on the map grid and select script -> origin ) for each piece where you want it to be hurled ( Remember: It will start in that direction, and then be drawn towards the ground as gravity takes over ).

Unselect everything, select **first** the piece **then** the script\_origin, then press CTRL+k ( this **k**onnects the entities. Order is important ). You can also set the targetname of the script\_origin and then set the target key of the piece to the same value ( using CTRL+k gives targetnames like t3, and that can be hard to debug ).

You should now have some debris that point a blue arrow towards one red box each.

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(7) Something left after the explosion?  
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Sometimes there is a need for something to remain after the explosion. A twisted Flak88, a nice wall turns into a smoking hole...

Construct what remains after the explosion. Select the blown up remains and make them a script\_object ( right click on the map grid and select script->object ).Give the selection these key-value pairs:

#set 1 // ID that connects all the parts of the objective to the bomb.

targetname explodersmashed // Tells the exploder system that this is an item that shall replace the exploder object after it has been destroyed.

That's what will replace the panel after the explosion.

-------------------------------------------------------------------------------  
(8) Last but not least: some scripting  
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Here is the script for the objective map. The ojective related stuff in red. Explanations / comments in green:

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| --- |
| // Custom objective test map // ARCHITECTURE: Bjarne Grönnevik // SCRIPTING: Bjarne Grönnevik  **main:**  setcvar "g\_obj\_alliedtext1" "Destroy the control"  setcvar "g\_obj\_alliedtext2" "panel" setcvar "g\_obj\_alliedtext3" "" setcvar "g\_obj\_axistext1" "Defend the control" setcvar "g\_obj\_axistext2" "panel" setcvar "g\_obj\_axistext3" "" setcvar "g\_scoreboardpic" "none"  **level waittill prespawn**  exec global/DMprecache.scr level.script = maps/obj/cust\_obj\_test.scr exec global/ambient.scr cust\_obj\_test thread global/exploder.scr::main // Initialize the exploder subsystem  **level waittill spawn**  level.defusing\_team = "axis" // Axis like the bombs unplanted level.planting\_team = "allies" // Allies will try to plant the bombs level.targets\_to\_destroy = 1 // Number of targets in this map level.bomb\_damage = 200 // Default damage of the bomb level.bomb\_explosion\_radius = 2048 // Default radius of bomb blast  // Set the parameters for round based match level.dmrespawning = 0 // 1 or 0 (0=no respawn) level.dmroundlimit = 5 // round time limit in minutes level.clockside = axis // set to axis, allies, kills, or draw  // **level waittill roundstart** // Comment out this line using '//' before it to be able to set the bomb when alone on the map ( just for testing )  $panel\_bomb thread global/obj\_dm.scr::bomb\_thinker // "panel\_bomb" is the targetname set on the bomb in MOHRadiant thread allies\_win\_bomb // Start the win check thread for allies $panel\_bomb thread axis\_win\_timer // Start the win check thread for axis end // end of main  // Allied victory test  allies\_win\_bomb: while(level.targets\_destroyed < level.targets\_to\_destroy) // While undestroyed objectives left waitframe // chill out teamwin allies // No objectives left allies win end // end allied victory test  // Axis victory test  axis\_win\_timer: level waittill axiswin // At the end Axis win end // end axis victory test |

That's all you need to know to blow most of the world into tiny bits, in thy mercy...

[ [Download the Example map](http://www.mohaaaa.co.uk/AAAAMOHAA/content/custom-objective-test) ]

Need any help : Ask in the [Forum](http://www.mohaaaa.co.uk/mohaa/forum/index.php)