TF2 Party Gamemode (TFP)

Minigame Template Builder (v1.1)

By BigfootBeto

The .vmf contains several boxed sections. Each are useful sets of entities to help get you started when making a minigame. This guide is primarily an overview of how the entities work. More specific info is provided in the comments section on an entity itself, so be sure to read those and the info_nulls.

The provided room with skybox brushes already contain the teleport destinations for the minigame, so all you need to do is build a template, place the desired entities inside the room, and that's it!

Naming Convention

Most entity names in a minigame will start with the prefix **mgx_**. This prefix is short for "minigame x" where "x" is replaced by the minigame index assigned to the minigame. For example, *mg4_* is minigame 4.
After an index has been assigned, one can "find and replace" all uses of "mgx" and replace with "mg#"

Custom Templates: If your minigame requires custom templates that spawn separately from the main template, they will use the prefix **t_mgx_**. An example of the setup is provided in the template.

Global Core Logic Entities

These are entities that are allowed inputs by a minigame. They are part of the core logic and marked by a long skip brush over them.

tfp_mg_finished_relay	The logic_relay that handles ending a minigame. Send a "Trigger" input to end a minigame early.
tfp_mg_win_counter	Stores the value of the current minigame winner. It is checked 3 seconds after the finished relay is triggered, so there are 3 seconds where a winner can change after a minigame ends.
points_count_buffer_(blu/red)	The math_counters that handle adding and subtracting minigame points and updating the hud. A minigame can send "Add" and "Subtract" inputs to these counters.
points_count_total_(blu/red)	The math_counters that store the current total of minigame points. A minigame can send "FireUser4" to add an output that lets a minigame automatically end when the points reach zero for one team.
points_compare	The logic_compare that handles setting a winner from most minigame points. A minigame can send "Compare" when the points are ready to be compared.

Build-a-Template™ *as easy as 1, 2, 3!*
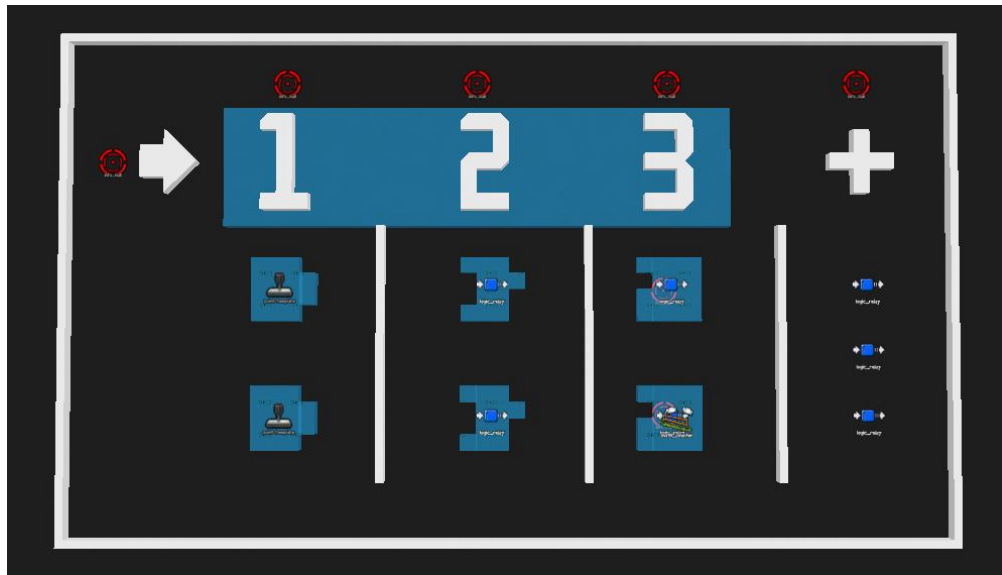
This section is the core of a minigame template. Each column is one piece of the main logic for controlling a minigame. **Pick one puzzle piece from each column 1, 2, & 3** (+ is optional)

1. *Base Template*

The base template is the core of a minigame template. The outputs will initialize the minigame entities and start the game loop for a minigame. Users can modify the highlighted parameters with no issues.

Since the template outputs fire before players are teleported into the minigame, if you need I/O to happen before the minigame starts, feel free to add outputs here.
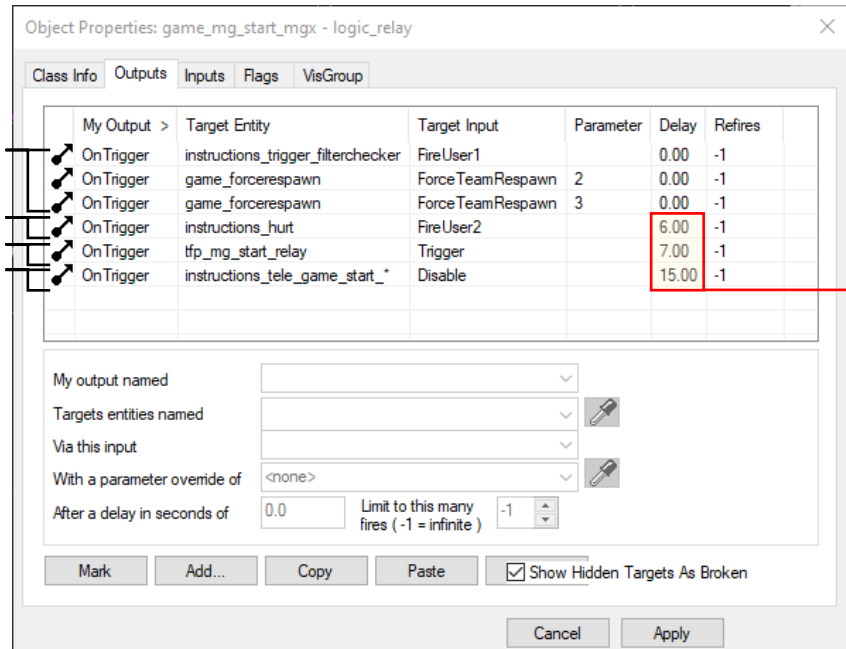
2. *Minigame Start Relay*

Object Properties: game_mg_start_mgx - logic_relay   ✕

Class Info | Outputs | Inputs | Flags | VisGroup

My Output >	Target Entity	Target Input	Parameter	Delay	Refires
OnTrigger	instructions_trigger_filterchecker	FireUser1		0.00	-1
OnTrigger	game_forcerespawn	ForceTeamRespawn	2	0.00	-1
OnTrigger	game_forcerespawn	ForceTeamRespawn	3	0.00	-1
OnTrigger	instructions_hurt	FireUser2		6.00	-1
OnTrigger	tfp_mg_start_relay	Trigger		7.00	-1
OnTrigger	instructions_tele_game_start_*	Disable		15.00	-1

Start teleporting players into the minigame

Kill players stuck in respawn room*
Start minigame timer and show START HUD
Stop teleporting players into the minigame*

My output named _____ ⌄

Targets entities named _____ ⌄ 🖋

Via this input _____ ⌄

With a parameter override of <none> ⌄ 🖋

After a delay in seconds of 0.0   Limit to this many -1 ▲▼
                             fires (-1 = infinite)

Mark | Add... | Copy | Paste | ☑ Show Hidden Targets As Broken

Cancel | Apply

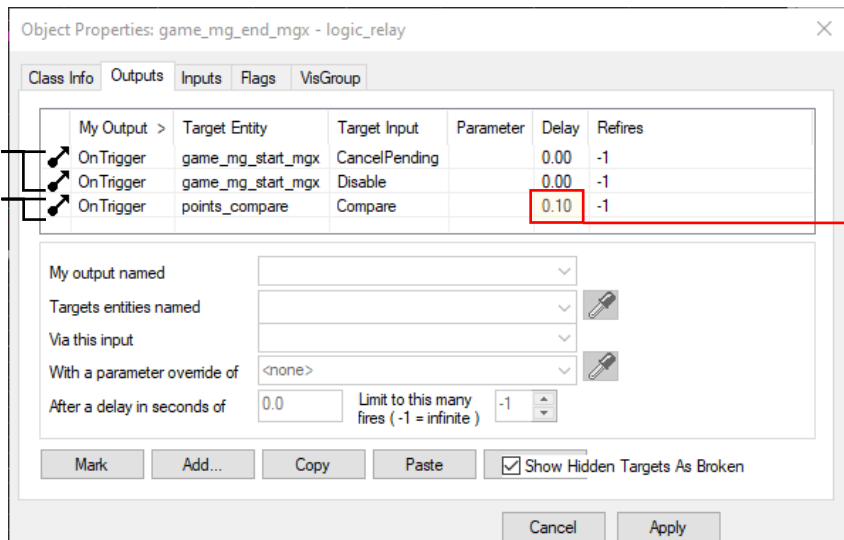[These delays are customizable as long as the fire order is preserved]

The minigame start relay handles actually starting the gameplay. Most outputs can be put here on a delay to affect the minigame as time progresses.

*Technically by not firing these, a minigame could have respawning. However, because respawn waves are set to be really long to prevent respawns, there can be unintended side effects to forcing respawns. Basically, if you want respawning minigames, it is at your own risk.

3. *Minigame End Relay*

Object Properties: game_mg_end_mgx - logic_relay   ✕

Class Info | Outputs | Inputs | Flags | VisGroup

My Output >	Target Entity	Target Input	Parameter	Delay	Refires
OnTrigger	game_mg_start_mgx	CancelPending		0.00	-1
OnTrigger	game_mg_start_mgx	Disable		0.00	-1
OnTrigger	points_compare	Compare		0.10	-1

Stop any pending outputs in start relay

Compare total points values to set winning team

My output named _____ ⌄

Targets entities named _____ ⌄ 🖋

Via this input _____ ⌄

With a parameter override of <none> ⌄ 🖋

After a delay in seconds of 0.0   Limit to this many -1 ▲▼
                             fires (-1 = infinite)

Mark | Add... | Copy | Paste | ☑ Show Hidden Targets As Broken

Cancel | Apply

[Increase this delay if your minigame has additional score updating after the minigame stops (max 2.9 seconds)]

The minigame end relay handles outputs for when a minigame stops/ends. Minigame end is automatically triggered by the timer hitting zero, but can be triggered early by triggering "tfp_mg_finished_relay."

+ OPTIONAL – Additional Outputs

> Read the comments provided in the entities for specific information, but this section provides outputs that can be added to the corresponding entity for more custom functionality. Do not actually use the entities in this section, only copy and paste their outputs.

++ OPTIONAL – Additional Functionality

Difficulty Scaling

> The logic_compare is what compares the current player count to a target number. If the current player count is greater than (or less than) the target number, then a difficulty scaling iteration is fired. The math_counter adds 1, to count up the iterations, and the current iteration number gets sent to the logic_case. The logic_case's outputs correspond to each iteration.

> The first iteration, OnCase01 should have outputs that modify the minigame entities to the appropriate level for the number of target players in the logic_compare originally. Next, the logic_compare gets a new target number of players to compare against. If the current player count is greater than (or less than) this new target number of players, then iteration 2 will output when the math_counter adds 1 again. This will be OnCase02… This loop continues until the current number of players is not greater than (or less than) the target or until there are no more iterations in the logic_case

> See TF2 Party's *Pootis Spencer*, *LEAKED*, and *Pick-a-Door* minigames for examples on how difficulty scaling is utilized in practice.

Winner Outputs

> A minigame can have a custom end sequence depending on who wins the minigame by using this logic_case.

> For example, TF2 Party's *Hammer Time* kills the losing team when the minigame ends.

Other Templates Included

- point_template and env_entity_maker setup with naming convention
- math_counters that give current points totals for use in minigame I/O
- Triggers for counting players as minigame points

Other Global Entities and Notes

- Be sure to check the stack of filters in the core logic. Those are all usable by a minigame.
- The minigame points counters do not support setting a value. Only add or subtract from the buffer counters.
- If you have any questions at all, do not hesitate to reach out to me, BigfootBeto.

How to Test a Minigame

After you have put together your template and are ready to start testing the minigame, place all relevant entities into the main TF2 Party map vmf. The minigame should be within the giant map-wide triggers on the North side of the map.

***Start minigame*:**
In-Game, send the following command to start your minigame.

<div align="center">ent_fire temp_mgx_contents ForceSpawn</div>

When the minigame is over and players are back in the main area, wait through the board events and until the minigames selector finishes its sequence before spawning the minigame again.

***Disable board events*:**
To test the minigame more quickly, use the following command. However, you must wait about 3 seconds after respawning at the blimp before spawning the minigame again to allow all the minigame entities to be killed.

<div align="center">ent_fire results_relay disable</div>

***Minigame timer*:**
To pause/resume the minigame timer for testing purposes, send the following command(s).

<div align="center">ent_fire tfp_mg_time_timer pause
ent_fire tfp_mg_time_timer resume</div>

To set the time of the minigame timer to skip through a long timer, use the following command (replace the number with your desired time).

<div align="center">ent_fire tfp_mg_time_timer settime 3</div>