

Designing an Exciting Race Game Type

The large majority of map creators, create maps intended for Slayer and CTF. Did you know there are more than 30,000 racers tracked by their scores? Yes, not an exaggeration, and does not include players named "NEW001", "a vehicle" and "masterchief." Source: CC=Filthy founder of Skorcard.net (a player ranking system by game type which rates both Halo PC and Halo CE.) At the time I wrote this, I have been rated #1 racer for the past 5 months, and have achieved #1 status 5 times in the past 2 years. Not a brag, just stated to help you understand I am a credible source of what racers like and dislike in race maps. (player name: {OK} Nerve or NerveBooger).

With this many racers out there, you would be wise to spend time making a quality race (foot or vehicle race) that does not bore the players to tears or confuse them on direction of travel. Doing so will increase the popularity of your map. Not doing so will cause you to be accused of laziness.

Here are some key points to consider when setting up your map for the race game type:

1. Player and vehicle spawns should be created AFTER you have placed trees, rocks and scenery (then scenery or spawns adjusted based on race testing)

2. Vehicle Spawns (net game flag race vehicle) Up to eight per team on giant maps, large to small should be 4 to 6. Team Index 1 = Blue, Red = 0

A) Vehicle spawns should be considered in relation to player spawns and not too far from the first navigation point. Each teams vehicles/player spawns should be equal distance from the first navigation point (but not always with every map type) for fair play. Vehicles spawns should be placed *before* player spawns to prevent vehicle spawns from killing the players. Vehicle spawns should also be centralized in their placement. Since a red or blue player can drive any vehicle, both teams player and vehicle spawns should be near a central spot, and equal distance apart from the first nav point. On large symmetrical maps having separate bases, it is standard to have vehicle and player spawns at their respective bases with the first nav somewhere near the half way distance for each team to arrive at near the same time. But selecting a central location (instead of at separate bases) makes the game much more exciting, AND, what if all the vehicle spawns at the other base? A very long walk indeed, and boring, and a very big reason why racers might not use your map.

B) Create enough vehicle spawns for one vehicle per player 'on giant maps only.' Think about making the players team up on small to medium-large maps. If your map uses a vehicle garage, can players find it? Can they see it? How long of a walk is it? Is there a teleporter that will help? Bloodgulch = Medium size = 4 vehicles per team on 12 players, 6 vehicles in 16 player and a teleporter that takes you almost half distance to the other base. So obtaining a vehicle on bloodgulch is simple, what about your map?

Note: Consider the map 'infinity'. The player and vehicle spawns are at one base. Why? Because the Halo engine will attempt to randomize player and vehicle spawns so each game is a little different. Sometimes all players at one base and all the hogs too, sometimes all players and no hogs. Infinity is a sleeper-boring map. It would NEVER be played if the teams and vehicles spawned at separate bases. Why? Extremely long distances to walk, meaning more than 30 seconds to get half way there by using teleporters. Which means by the time you get in a vehicle, the other team has completed a lap, and has probably killed you twice already.

Tip on Vehicle Placement in Race: Place an actual vehicle exactly where you want the net game flag race vehicle to spawn and the direction/angle you want it at. Then place the netgame flag race vehicle and center it under the actual vehicle by viewing it from exact top view just a few feet over the vehicle (in sapien) and then center/angle the netgame flag to be exactly center of the hog (between seats close to the back of the seats) Also make sure your vehicle is on stable ground, aimed correctly, out of the race path, and not spawning on top of players (not closer than 5 meters/world units). Once you are done placing BOTH Player and vehicle spawn flags, then delete the actual vehicles - but KEEP your netgame flags for players and vehicles. If you have to move a scenery object, make sure you don't cover a player/vehicle spawn or navigation point.

3. Player spawns Always setup 8 player spawns per team at the minimum. Team Index 1 = Blue, Red = 0

A) Players should spawn close to vehicles, but separate from other team separated by small distance or objects that stop spawn killing. Players should not spawn closer than 5 meters (world units) to each other or it will sometimes create exception errors or one player spawning on top of another. Your design should inhibit spawn killing, but not prevent death or promote walking (except foot races). Yes, sometimes the Halo engine will mix it up with players from each team at separate spawn points - this is ok, and it is exciting, but this fact is unpredictable. Bloodgulch has 16 player spawn points 'per team' and up to 6 vehicles per team (hogs and ghosts). This allows for greater diversity of games.

B) Most players begin walking the second they spawn, therefore, you should carefully consider not placing the spawn point near a cliff or deadly object/device. On some maps, the player spawns facing the wall or deadly cliff instead of facing the direction they will find the closest hog or safest footpath. Set player spawns to include having them out of traffic to avoid spawn killing.

Player Spawn Placement Tip: Place player spawns after you have placed vehicle spawns (netgame flag race vehicle). This will help you to place players in proximity to vehicles/bases, but not to be killed when a vehicle spawns. Keep player spawns at least 5 meters away from teleporters.

4. Race Navigation Points. (Netgame flag race track) Team Index (for flag sequence): 0, 1, 2, 3, etc. (Dont use 1 = Blue, Red = 0 ! This is the wrong way!)

A) Team Index: Field that you specify the order of each navigation point in the order of 0 (zero) being the first, then continuing 1, 2, 3, etc. Many have made the mistake of assigning race navs to each team - this makes it un-raceable. In the Map Hypothermia (sorry Killa) there we navs that due to this numbering mistake which are invisible because he made race paths set by team, then by sequence this caused the navs to become invisible. In the map Fragment V2 there are nav points that will not work (wont activate) this error was duplicated by CMT Fragment (sorry Arteen, CMT)

B) Don't place nav points too close to each other, or they wont activate! If your path has an intersection, don't attempt to place navs in the same location. Doing so will cause one nav to work, but the other will fail. Such as Using Nav # 5 in the same exact location as #9. Number 5 will work, #9 will not work or may cause both to not work intermittently.

Your race path should consider:

C) First Navigation Point (#0) Equal distance from both teams spawn points, even if the drive difficulty is not equal, even if the map is not symmetrical.

D) Nav point activation. Foot race nav points should be reachable by walking and jumping without much hassle to activate (complete) the nav point. Vehicle races should have nav points that activate (complete) without allot of hassle or extreme difficulty. Sky races are achieved by increasing/decreasing the z value (elevation) in sapien (to put the nav above ground/objects) and should be reachable with the vehicles that spawn in race – if not, the game is not playable. Sometimes nav points are accidentally covered by moving scenery rocks/trees or below ground level/outside the map making them impossible to activate.

E) Drivability. Make the drive course possible for a person with basic driving skills. Choose a course that challenges the driver, not one that makes him want to quit playing on your map. Yes, your map may be beautiful, but they don't need to see all of it. This is not a tour, it is race - so make it exciting, on the interesting but drivable parts of your map. If you are an expert driver, don't assume that players of your map have your excellent skills, but don't be too soft either. The map "Lost Cove" is a very beautiful and well made map. However, the race path, and player spawns make it a Sunday driving tour that will ensure players blood pressure will drop to 50 beats per minute (sorry Somerhino). Players die just by walking off the very high base to get in a hog. Don't make a tour! Make a race!

F) Design your race course (navigation points) so that there are many points of conflict. Some maps are very boring (like infinity) because you only see your enemy once maybe twice per lap. Design intersections, head on colisions and turn arounds, exits, entrances and escape paths. Maybe throw in ONE area near a nav point that requires the driver to be careful. A small-medium map like bloodgulch has 5 nav points, and most are visible/easy to find. Maps that have allot of hills/turns may need more nav points to clue

the driver where to go. Modifying vehicle speed/physics should only be done as a last resort and is usually not liked by most players.

G) Lap/Drive time. A lap on infinity takes 99 seconds for an expert driver. This time would be okay if there is a lot of conflict and interesting driving areas. On average, this takes 120 seconds for noobs. Even the biggest maps should not go more than a two minute lap (in a hog) or 120 seconds. The map "Siege" (great job Crowpath!) takes 120 seconds for an expert, but because of the many alternate paths, and high conflict, the laps fly by really fast because it is exciting. The map Grove Final (great job Arteen!) takes 84 seconds for an expert driver, AND like Siege, its race course intersects with player spawns, hog spawns, both bases and both also have a first nav point that is equal distance from player/vehicle spawns.

5) Do your vehicles spawn in race? Or do gun turrets and tanks spawn?

A) Setup your vehicles in your global and scenario file using guerilla. If needed, study the old Halo maps to figure out what order your vehicles appear in the vehicles palette in both the globals and scenario files and in what order. Ensure that they are enabled (allowed) and set as default vehicles. (I wish race was listed there) Even well made maps like Yoyorast Island can have screwy vehicles if the server host does not, or cannot spawn the race vehicles by modifying it in the halo game type lobby. Yes, you might even need to re-populate your vehicle placement in sapien to get it right.

B) Test your map on race before releasing it. When you specify Chainhog, Does a gun turret appear? What vehicles do you want on this race? Do they spawn? Test each vehicle to ensure that it spawns. Some maps spawn players and vehicles, but have no race nav points (duh). Using cheat_all_vehicles will NOT prove the vehicle will spawn in race, it only proves they exist in the global and scenario vehicle palette.

6) Teleporters and player movement. Teleporters should only be used to get a person a small distance to intersect teammates and hitch a ride, or to surprise the enemy or to progress to the next nav point, NOT to suddenly appear at the enemy's base. On the giant map like Extinction it takes 2 minutes to walk to a teleporter - which is good because the creators wanted players to use the vehicles (and there are plenty). Both the target and source should be tested. Seen any maps that teleport you inside a tree or rock? What about getting run over as soon as you teleport?

A) Imagine walking on your map - how long will it take to get where you want to go? On sidewinder, a player can walk and use the teleporters and make a lap near the same time as a person driving - this is usually bad as it promotes camping. On infinity it takes two minutes using the teleporters to go from one base to the other - this promotes team work, and camping, and major boredom.

B) Ask your testers to test your race, and give you feedback on vehicles, spawns and race course and listen to what they say.

C) Ask a racer to test your map on race, and give you feedback on vehicles, spawns and race course you will get very 'different' feedback. A beta tester who tests CTF and Slayer maps is usually too lazy to actually test your race, and will lie to you. A racer can usually give you very good useful feedback on race, just don't ask him for Slayer advice.

D) Place some health/power up item collections in the race path– whatever keeps you going, keeps you from leaving.

If you spend the time setting up race in your map, (and all game types), your map will be much more popular – and you will get much more feedback – including negative feedback which will help you improve your map making skills. Most very well done maps have many people who contributed to its development “Before” it was released to the public.

Wishlist:

1) I wish Halo/Halo CE/Future Halo had a utility to emulate a full server in any game type (with the tester as a player, and/or as an observer). This could then give developers a leg up and not have to rely solely on beta-testers and being able to get enough beta testers online – and reduce premature map leaks.

2) I wish Sapien had a default listed for vehicle and game types for 'race' (similar to Slayer, CTF, King, Oddball), not just a netgame flag. The map makers could specify in sapien WHICH vehicle and display on screen that vehicle instead of a stupid yaw/pitch/roll placeholder. Then it would be what you see is what you get, instead of constantly guessing what vehicle will appear. Yes, it is guesswork.

3) I wish sapien would display the default Biped so you can SEE its spawn placement more accurately with relation to direction, other players, objects, vehicles and scenery.

4) I wish more map makers would pay attention to the race game type. Doing so would probably reduce noob modders from creating a hack or insulting version of your map.

5) I wish TheGhost will add this, and other helps by others on the subject of race, to his Tutorial Resource library. You may edit this anyway as you see fit. Perhaps even ask accomplished race-game-type makers to contribute to the subject of race for TheGhosts tutorials.

Thanks,
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