

Adding AI to a Map with Sapien

Tutorial by Polamee

Ok, so you've obtained the .scenario file and your Actor_Variant tags. Now what? Ok, so I assume you have the Halo Editing Kit, look in your Halo CE directory (somewhere like C:\Program Files\Microsoft Games\Halo Custom Edition) and you'll find something called Sapien. Click on it. A small window, like the one featured in Image 1 (Look in your Tutorial folder. From now, I'll refer to Image *something*, which refers to the images in the tutorial folder.), will appear.

Ok, most tutorials use Blood Gulch, but I choose Gephyrophobia for this. Why? 'Cause I like Gephyrophobia. Find your Gephyrophobia .scenario, and open it in Sapien.

Sapien will freeze for a few minutes, and then will open your map. This is perfectly normal, don't worry. Now, as you've loaded your map, press shift. This will increase your camera speed. Hold the middle mouse wheel and use the "WASD" keys to move around. Try to find a camera speed you're comfortable with. Then, press "R" and hold the mouse wheel to move the camera up, and enjoy the view. Get used to Sapien; you'll be using this for some time.

Note: I have customized the windows to full screen for your viewing convenience. It won't appear like that for you, but you can drag the windows to any size you like.

Open your "Hierarchy Window" and select "Edit Types". Open the bar on top and look for actor_variant (image 3). Click "Add", and go to the folders which you placed both Actor Variant tags in. It'll take some time for them to load, don't worry either. When the Elite tags and marine tags are extracted, go back to the Hierarchy window and open "AI". Click on "Encounters", and select "New Instance." Good. Now you've created your own AI encounter!

Firstly, open your AI encounter in the Properties window (select the "encounter_block_0" thing and look it up in "Property view"). See your Image 4 to see how it looks like. Change the name to...let's say "Elites" for easy reference. For kicks, enable respawn and set your respawn time. Oh yes, and also change its team from 0 to whatever you want.

Go back to Hierarchy View, and choose "Firing Positions". Look in the Game view, and you *right click* to add firing positions. These are the positions your AI shoot from, place these about **everywhere**.

Done? Good. Go back to Hierarchy view. You should see an option with the words "Fake Start Positions". Its self-explanatory, we won't need any of those. Below that is an option labeled "Squads" select it, and open a new instance. Change its properties so it looks like Image 5, or whatever you want, if you understand what it means.

Open your new squad in Hierarchy, and select “Move Positions”. These are the places your AIs move to. Select wherever you want them to go, *right-clicking* to add stuff. Then add starting positions (below “Move Positions”) and right click to add them. These are where your AI will start.

Ok, most of the things are done, to see if your AI work, create a new encounter and.....here’s your first AI! If you set it to an Elite, the elite will spawn on your starting points. Yay! You’ve spawned your first AI!

Repeat the procedure with the Marines, except putting them in different teams, and watch them fight!

Compiling the scenario with tool

Ok, you’ve made your first AI map, but how do you change it to a map? Ok, firstly, save the file, exit Sapien, and open your startup window. You should find an option called “Search”. (If you’re using a standard Windows XP or Vista). Click on “Search all files and folders”. Type in “cmd” in both boxes (Image 6). You will find a result which shows a Windows Command Prompt icon. Right Click to copy it, and paste it in C:\Program Files\Microsoft Games\Halo Custom Edition

Once that’s done, open it, and type in the following : “cd C:\Program Files\Microsoft Games\Halo Custom Edition” without the quotation marks. Then, a line of text with the words C:\Program Files\Microsoft Games\Halo Custom Edition *arrow* will pop out. Type in “tool” without quotations.

Quite a lot of output will appear. Now, type in the following: “tool build-cache-file levels\test*folder your map is in**name of map*” Without the quotations. So if my map’s name is “gephyai”, I type in what is shown in Image 7 and press enter.

A lot of output will appear. After its done, start up Halo CE and you can play your new AI map!

Difficulty

When making AI maps, a good tip is to *never* include too many AIs at one location. And lots of AI on small maps make the game chaotic, unless that is the desired effect. When including AI, be realistic, like don’t include twenty Elite commanders at one spot and no one will be able to survive, generally ruining gameplay. Instead of twenty Elite commanders, why not five Elites and fifteen Grunts? Or perhaps twenty Flood? The choice is up to you.

Creating custom colors for your AI

Want Green Grunts, purple or white Elites? Then go to the program called “Guerilla”, in your main Halo CE directory, and open your Elite/Grunt Actor Variant tags, scroll to the very bottom, and there, you can change the color.

Troubleshooting errors

If you encounter any errors when creating a map, look in your debug.txt located in your Halo CE directory. It details the error reports of HEK, and is useful for knowing what went wrong. If you’re a newbie, try to ask Halo CE mappers on forum.halomaps.org.