Note from TheGhost: It may be easier to extract the detail object collections from the single player maps using the HEK+ or downloading the tags online. If you have obtained the tags in this way, you can skip the section about creating your own detail objects (steps #1-15), and move down to step #16.

ZexGX's h4xalicious detailed_object_collection (DOBC) tutorial

Requirements:

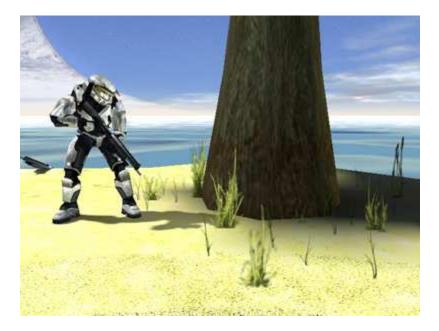
- A computer that can run Sapien and Guerilla
- Photoshop or Paint Shop Pro (**DDS Plug-in** (download: <u>http://ghost.halomaps.org/tutorials/tuts/files/dds.8bi</u>) must be installed)
- Halo Single Player Maps
- Halo Map Tools (HMT) 3.0 or higher

Steps:

- Using HMT, open a Halo SP map (see below for a list of the SP maps with DOBCs), Go to the **Bitmaps** section, and save the DOBC **bitmap[s]** to a place that you can remember
- 2. Open the DDS in Photoshop or Paint Shop Pro, and **when it asks if you want to display Mipmaps, select** <u>No!!</u>
- Save the image in its corresponding directory (i.e. effects\detail_objects\grass_field\grass_field) in your data folder as a .tif with alpha, no compression, no layers.
- Run tool.exe and convert the .tif you just saved (i.e. tool bitmaps effects\detail_objects\grass_field\grass_field)
- 5. Open the .bitmap tag in Guerilla, change its type to "sprite", and its format to "compressed with explicit alpha", then save it, but don't reconvert it with tool
- 6. Change the collection type to screen-facing
- 7. Leave the global z offset at 0
- 8. Choose the image you just converted to a .bitmap
- 9. Add a new Type, and name it something related to the sprite
- 10. Leave the sequence number at 0
- 11. Leave the near fade distance at 0
- 12. Set the far fade distance to a number somewhere between 10 (close) to 45 (far)
- 13. For this example, we'll set the size to 0.0015 . This is a good size for small grass. 0.0065 is a good size for tall grass, or swamp pods
- 14. Set all three colors on the bottom to pure white (you can change this later to better match your level)
- 15. Choose File->Save and move on to the next step
- 16. Open Sapien and load a scenario tag
- 17. Select the Hierarchy view and navigate to the Game data folder
- 18. When you open the Game data folder, click on the folder that says Detail Objects
- 19. Click on the Edit Types button, and add the DOBC tag you just created
- 20. Then, open the Tool window and set the brush radius to 10, and the density to 1 percent. This is because there is a limit of around 4000 detail objects per cell. Also, make sure the "Use random subtype" box is checked
- 21. Then just click on the areas that you want to apply the detail object to
- 22. When you're done, click File->Save scenario_structure_bsp
- 23. Enjoy!

Map listings:

- a30 [Halo] effects\detail_objects\grass_field\grass_field effects\detail_objects\grass_small\grass_small
- 2. b30 [Silent Cartographer]
 effects\detail_objects\grass_field\grass_field
- 3. b40 [AotCR] effects\detail_objects\snow_grass\bitmaps\snow_grass
- a50 [Tru7h and Reconciliation] effects\detail_objects\d20_rocks_and_grass\d20_rocks and grass (May not work)
- c10 [343GS]
 effects\detail_objects\fungus buds\bitmaps\fungus buds
 effects\detail_objects\swamp pods\bitmaps\swamp pods



Problems?

Q: I KANT OPEN DA DDS THING WITH THAT PHOTOPAINT PROGRAM THINGY!1 WUT DO I DO????

A: Install the DDS plugin for Photoshop or Paint Shop Pro. You can download it here (right click-> save as): **DDS Photoshop Plug-in** (download: http://ghost.halomaps.org/tutorials/tuts/files/dds.8bi)

Q: OGMZ LIEK, SAPIEN CLOSES WHEN I LIKE TRY TO OPEN MY MAP! WTF? A:

Probably a bad or missing DOBC tag. Most likely the latter... If it isn't that, then it could be that you screwed up somewhere when making the bitmap.

Q: OMG DERE'Z LIEK A BIG THINGIE DAT HOVARZ ABOVE DA LEVEL N LIKE LAGZ AN KILZ MY COMP AND SHTUFF!

A: You set the size WAY too big in Guerilla. Try using the size values mentioned above.