

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: <http://ghost.halomaps.org/tutorials/tuts/files/dds.8bi>) must be installed)
- Halo Single Player Maps
- Halo Map Tools (HMT) 3.0 or higher

Steps:

1. 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 No!!**
3. 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.
4. 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:

1. 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
4. a50 [Tru7h and Reconciliation]
effects\detail_objects\d20_rocks_and_grass\d20_rocks and grass (May not work)
5. 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 CLOSSES 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.