In order to take full advantage of the massive to Maya to Renderman pipeline you must be able to visualize where your agents are relative to your scene. In order to do this effectively without any significant overhead a particle system must be exported that defines where any given agent exists in the bounding volume. Rather than going through the full procedure this tutorial will show you how to export your agent placeholders from massive to Maya and use them as stand-ins for your characters.

1. Folder structure is very important when it comes to Massive and Maya. To make life easier you should nest you massive folder structure within the Maya folder structure. So start by creating a Maya project and setting your project.
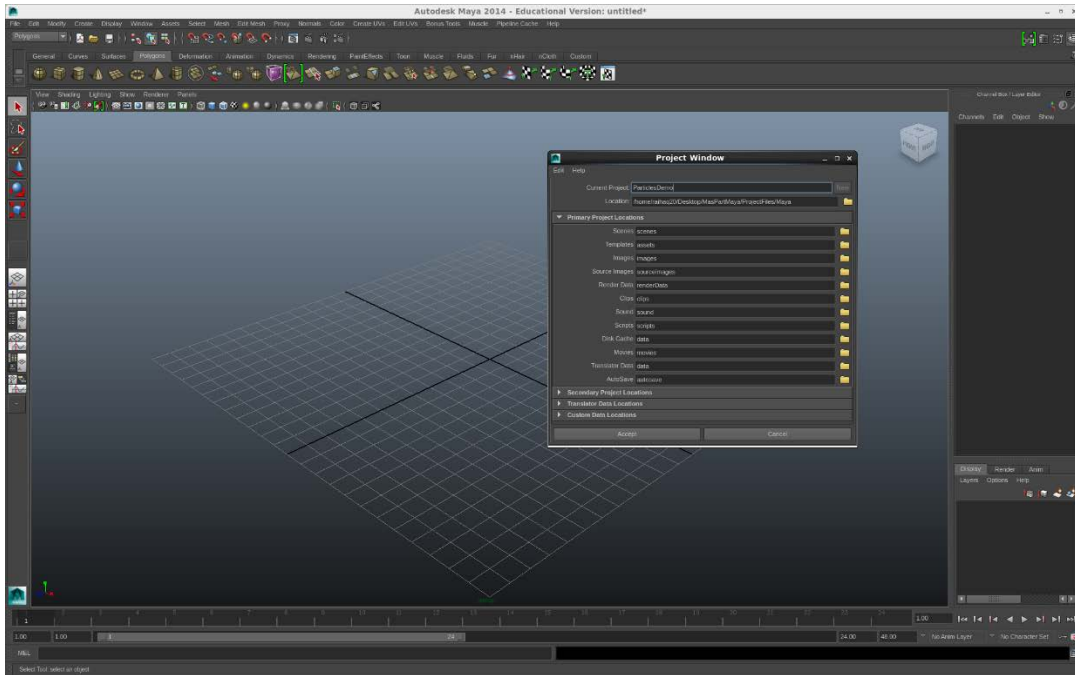
2. Now that you have set your project, close maya. Open your file browser and browse to the location of your assets folder within the Maya folder structure. Here is where you want to create your Massive Directory. Create and name a folder whatever it is that your massive project consists of. In my case I am going to call this project "ballTest". Please note that if there are any spaces in your naming this will cause massive to error out.
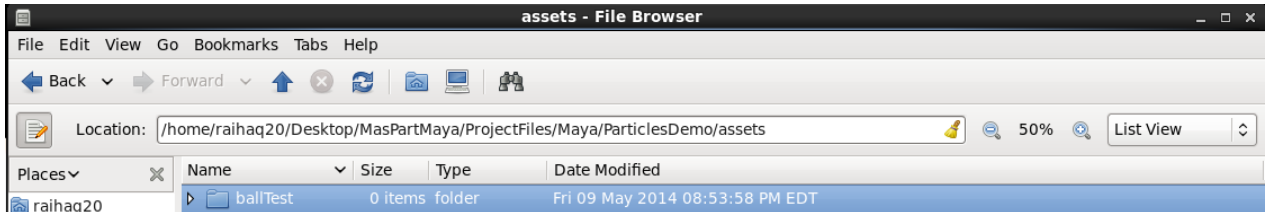

3. Properly create inside of your Massive folder all of the folders that you will need. Follow Professor Fowler's documentation for this.

4. Now open a terminal session. Navigate to where you have stored your Massive project folder. In my case I would type in the terminal window "cd /home/username/Desktop/MasPartMaya/ProjectFiles/Maya/ParticlesDemo/assets/ballTest"

5. Once you are in the correct location type in "massive" to launch the application at this location. This will help with dealing with Massive's sometimes difficult to navigate interface.
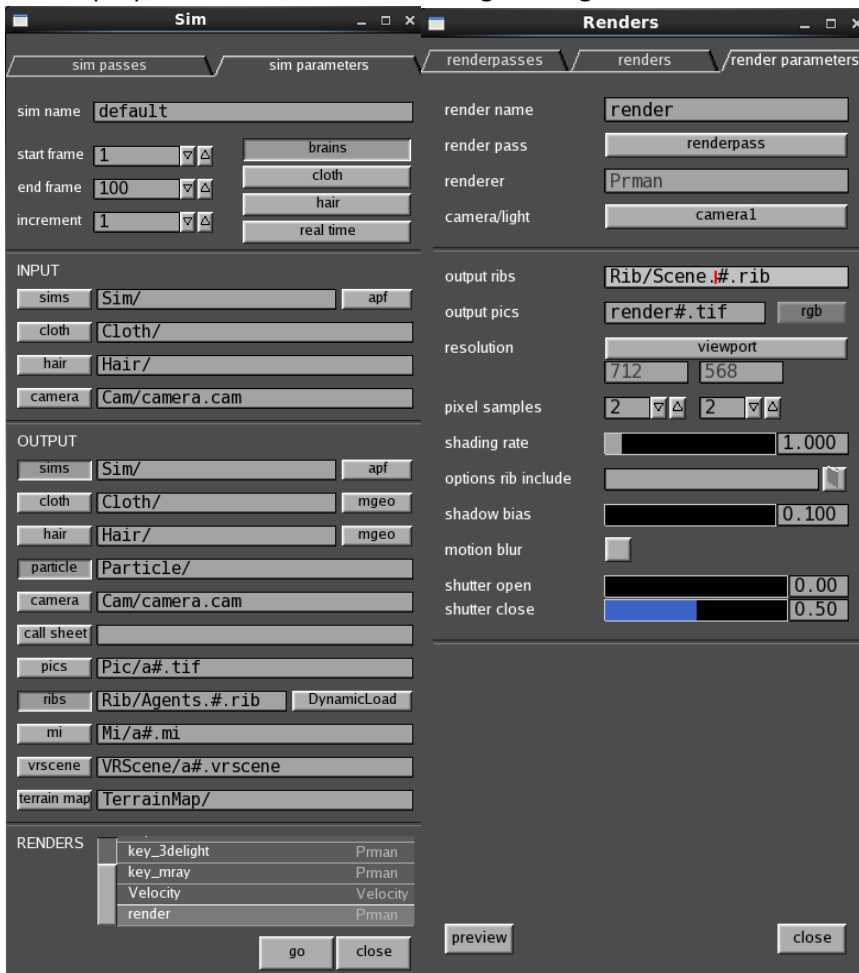

6. Import your terrain into Massive.
7. Set up your agents.
8. Place your agents scattered throughout the scene.
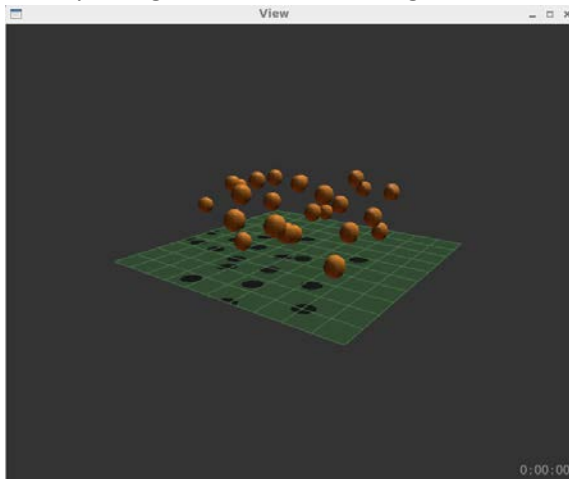

9. Give your agents some basic movement.

10. Now it's time to set up your simulation and render settings. (render settings are not necessary for the purposes of this tutorial but it is good to get into the habit of setting this up.)


11. Now that you have set everything up, go to Run>Sim>go. This will output all the necessary files for use in Maya.
12. Save your agent, then your setup (order does matter.)
13. Close Massive and return to Maya. In Maya, import your terrain.
14. Change the toolset to dynamics. Then go to Particles>Create emitter.
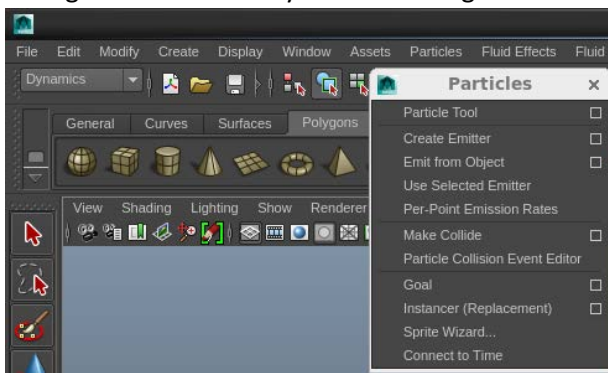
15. Go to the solvers>Create Particle Disk Cache.

16. Hit the play button. You will see that your particles are being counted.
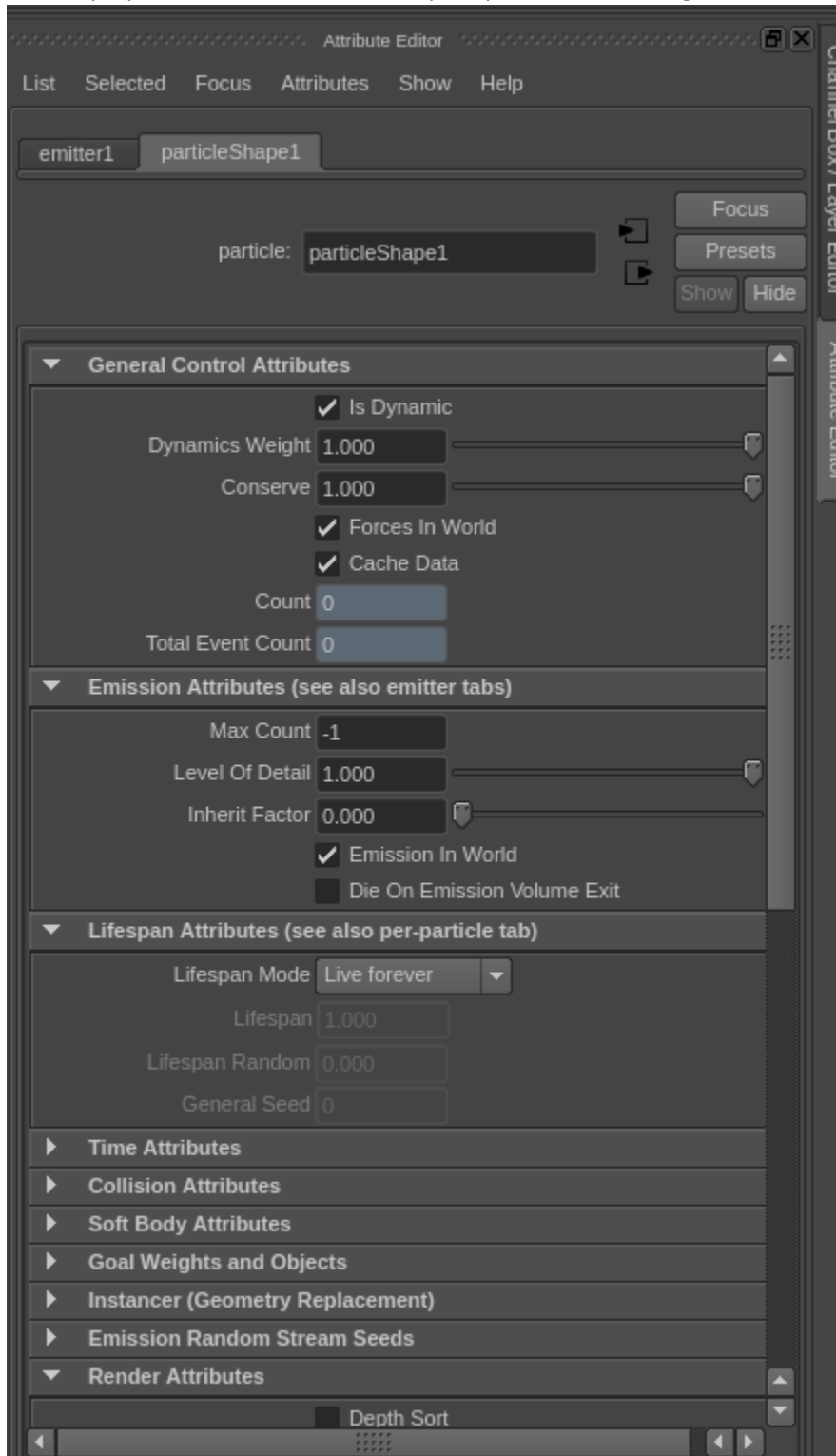
17. Use the file browser to navigate to your Maya project directory.
18. Navigate from root>cache>particles>$YOURCACHE.
19. Delete the contents of this directory. Navigate to your Particle directory in your Massive project directory. Copy all of these files and paste these to the Maya cache folder.

20. Reset your Maya timeline. Your Massive particles should now show up but may be difficult to see.
21. Select to the emitter and open its particleShape attributes. Change the display type from dot to Spheres. Click on "Current Render Type" This will give you a radius to adjust to make your particles more or less visible.
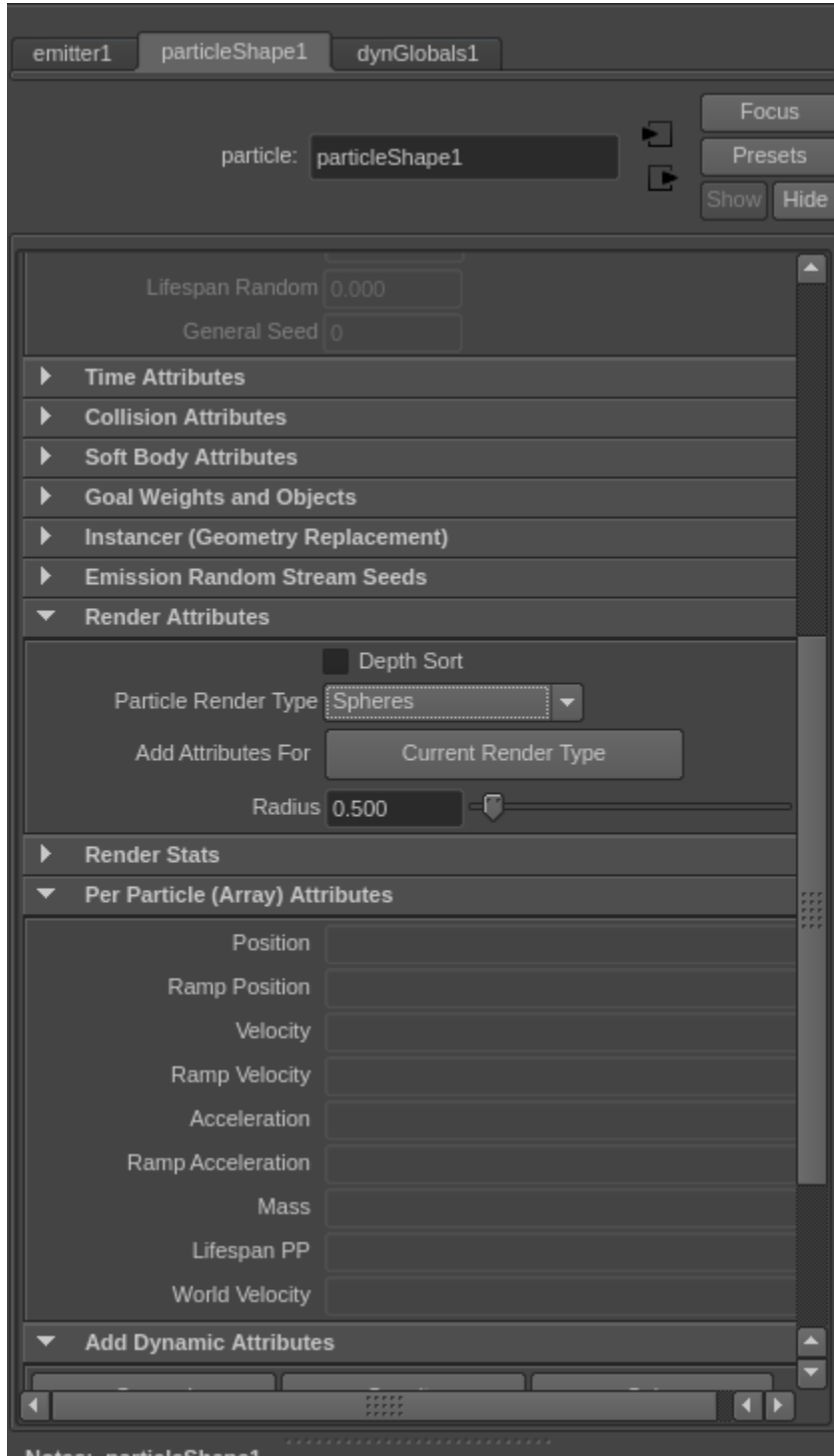
22. That's it now you can preview the locations of all of your agents within the bounding box. Doing this will allow your lookdev artist to set up the scene without having to constantly be guessing at the location of an agent.