GAIA

By Procedural Worlds

Gaia is a system that enables rapid and precise creation of gorgeous looking Unity terrains.

Version 1.8.0

About Procedural Worlds

Powerful, simple, beautiful. Friendly tools, gorgeous games!

Procedural Worlds empowers artists and developers to bring their vision to life by making it easy to create beautiful worlds. Leverage the latest procedural generation techniques to take the pain out of creating stunning environments and focus on creating amazing games.

The only end to end environmental generation and delivery suite:

Gaia - A world generation system for creating, texturing, planting and populating scenes from low poly mobile, VR and through to high end desktop.

GeNa - A sophisticated localised level design tool that augments Gaia's broad-brush strokes, by working intuitively to give fine grained control.

Path Painter – A powerful path and river channel creation tool.

CTS - Nominated by Unity of as one of the best assets in 2017, a PBR terrain shading system that significantly improves terrain look, performance and usability.

SECTR - A suite of performance-enhancing tools that enable open world streaming, massive mobile games and includes the latest techniques in audio occlusion and propagation.

Pegasus - A cut scene and fly through creator that makes it easy to show off gorgeous environments and also drive characters through scenes with localised avoidance and mecanim animation support.

Learn more at our website here : http://www.procedural-worlds.com/

Tutorials, Chat, Ticketed Support

Thanks for purchasing Gaia!

It is a sophisticated tool with a lot of options, which can at times be a little overwhelming. To help you with this we have created an awesome support network for you. You can also get access to these links from the Gaia menu in Unity.

Tutorials: http://www.procedural-worlds.com/gaia/?section=tutorials

Have A Chat: https://discord.gg/rtKn8rw

Lodge a Support Request: https://proceduralworlds.freshdesk.com/support/home

Setup – do this for every project!

1. Create a new project and import Gaia.

2. Unity will complain the "SpeedTree materials need to be regenerated".

   This is a Unity thing and we have no way of controlling it. Go to Gaia\3rd Party Samplers\SpeedTree and for each of the speed tree's – they are the ones with the little tree – click "Apply & Generate Materials"
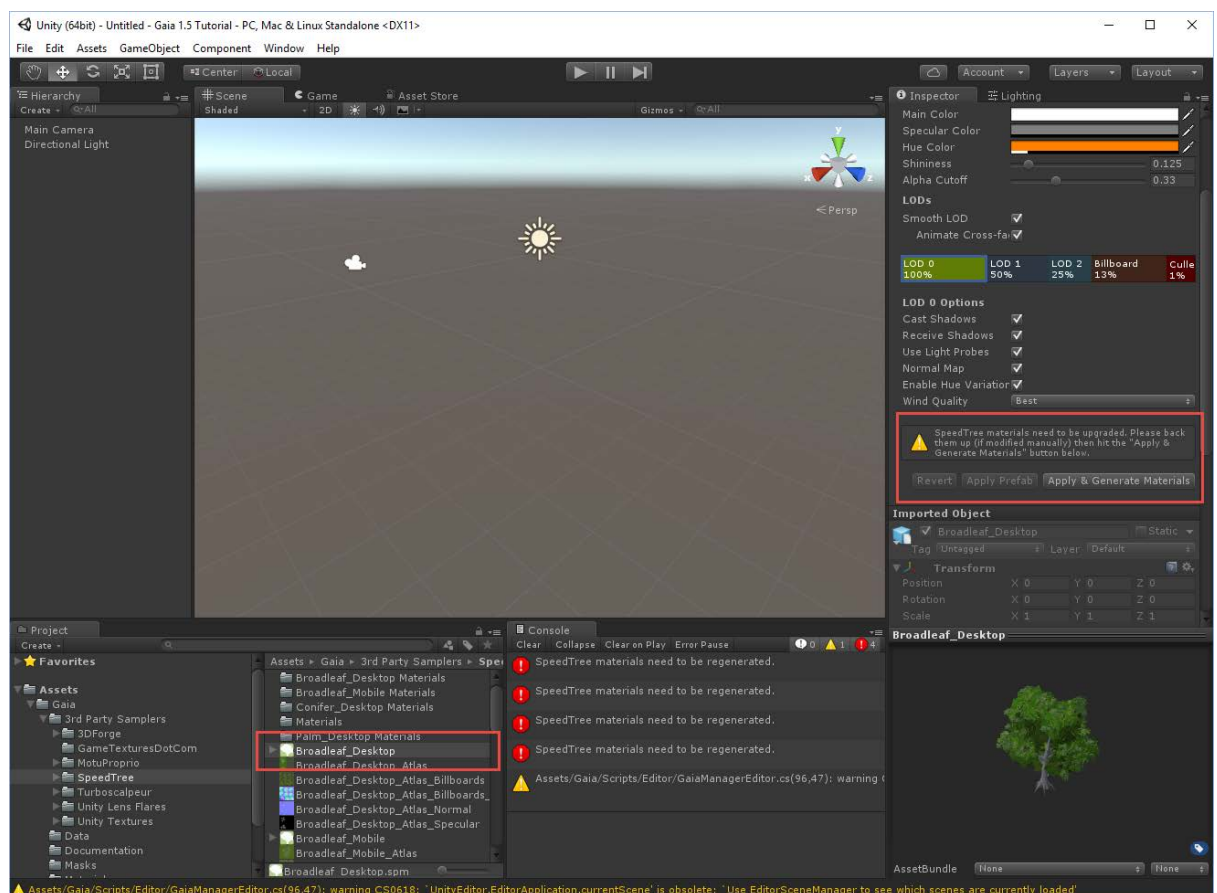
3. Go to Asset Store and import Standard Assets but exclude the SpeedTree directory – we already have SpeedTrees in the project.
   https://www.assetstore.unity3d.com/en/?stay#!/content/32351

4. Go to Asset Store and import Post Processing Effects
   https://www.assetstore.unity3d.com/en/?stay#!/content/83912

   NOTE: Watch this video to learn how to import assets from the asset store if you are unsure how: https://www.youtube.com/watch?v=q5ejxITvEh8

Option 1 – Random Generation!

In this scenario we will use Gaia to randomly generate an entire new scene.

1. Create a new scene.

2. Open the Gaia Window by pressing Ctrl G or
   Menu : Window / Gaia / Show Gaia Manager…

   Make sure you select the 2048 environment size – the settings are
   optimised for this size – if you change then you will need to adjust your
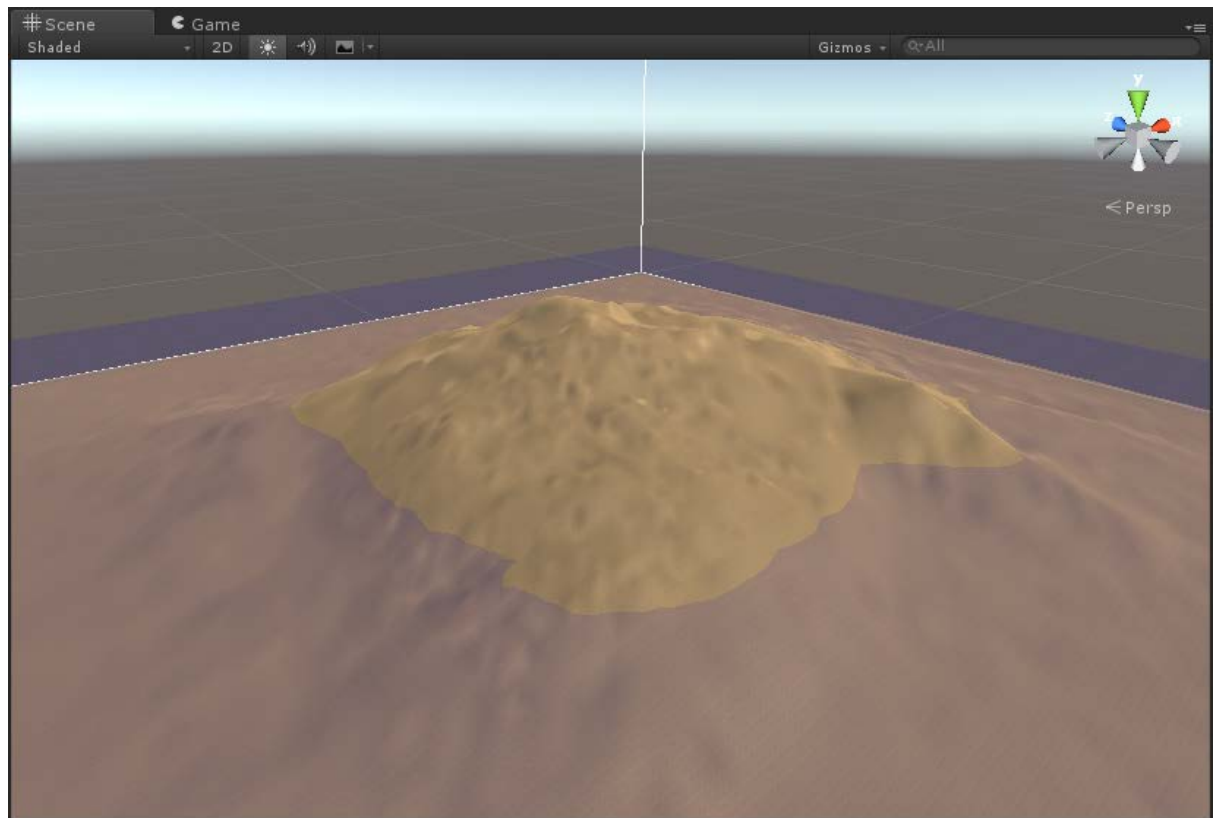   width and height scale settings in the random generator in step 4.
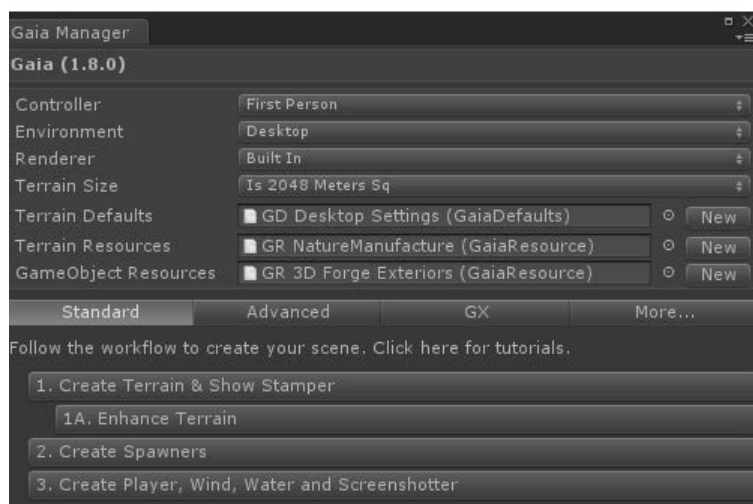
3. Select the ADVANCED tab and then click on Show Session Manager…
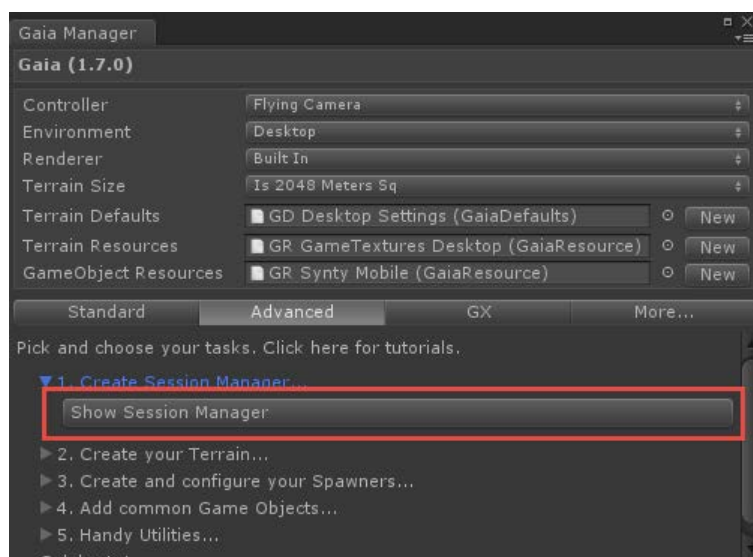
4. Check the Random Terrain Generator box to show it, and then click Add Stamps…
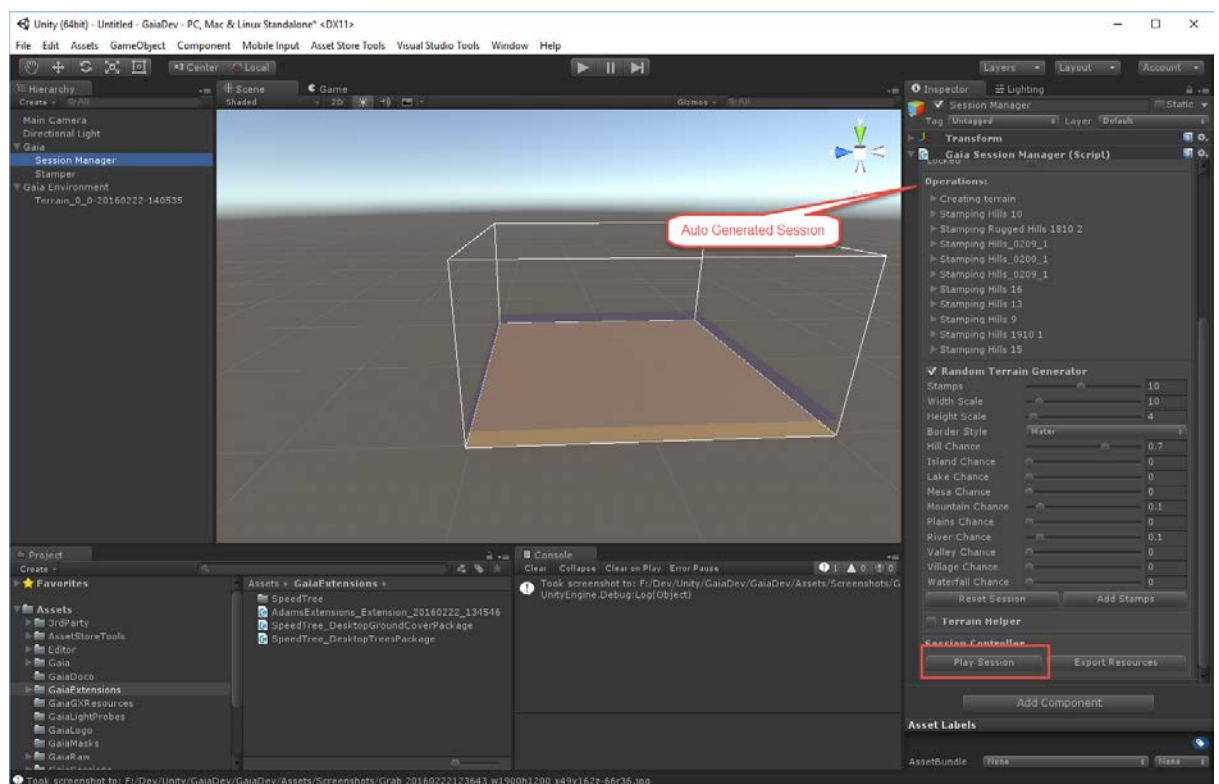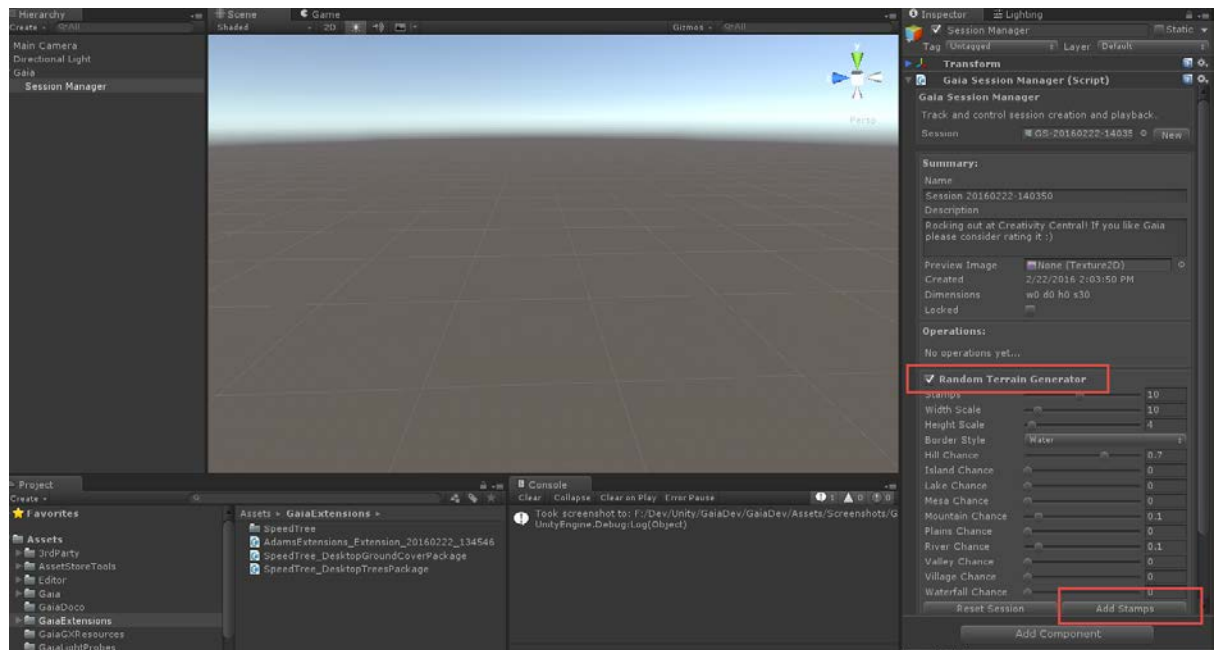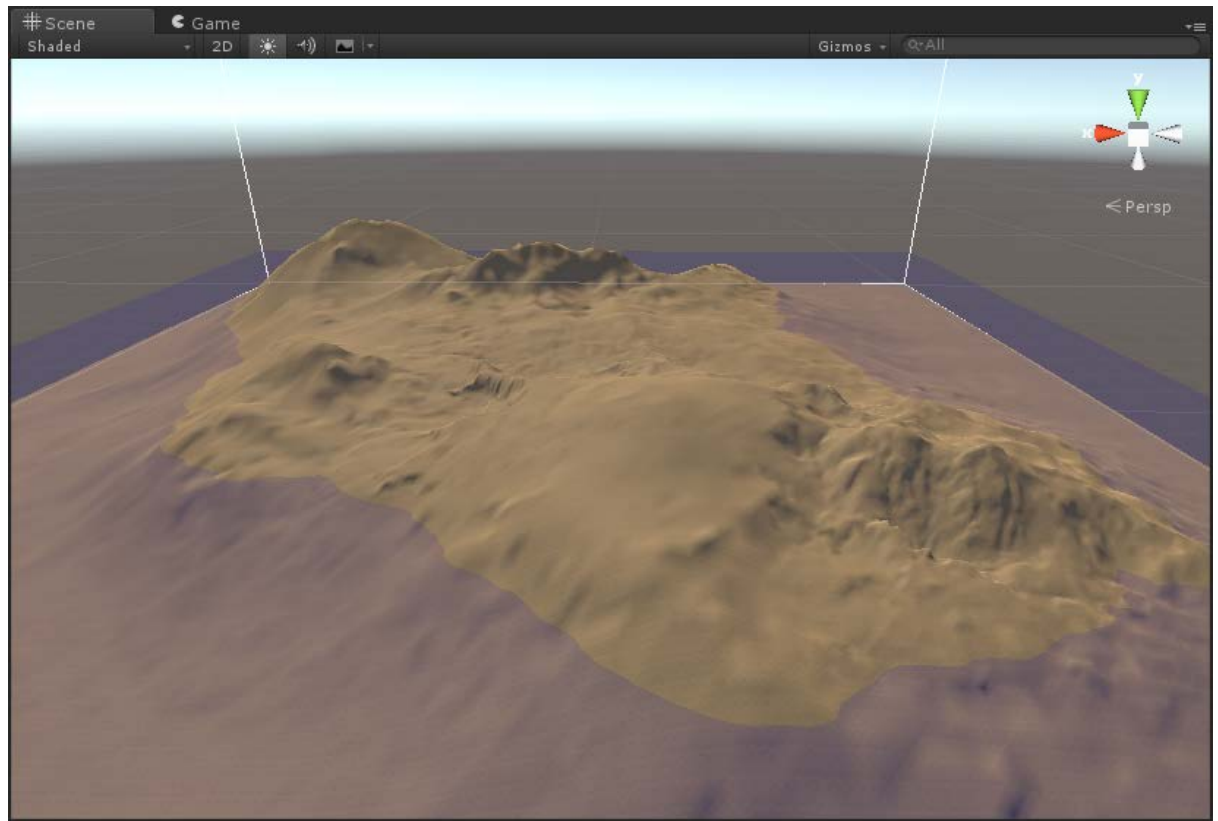
5. Now click Play Session…

This one wasn't very interesting let's try again…

6. Check the Terrain Helper box to show the terrain helper and then click on Flatten Terrain and then click Reset Session and finally click Add Stamps and Play Session again.
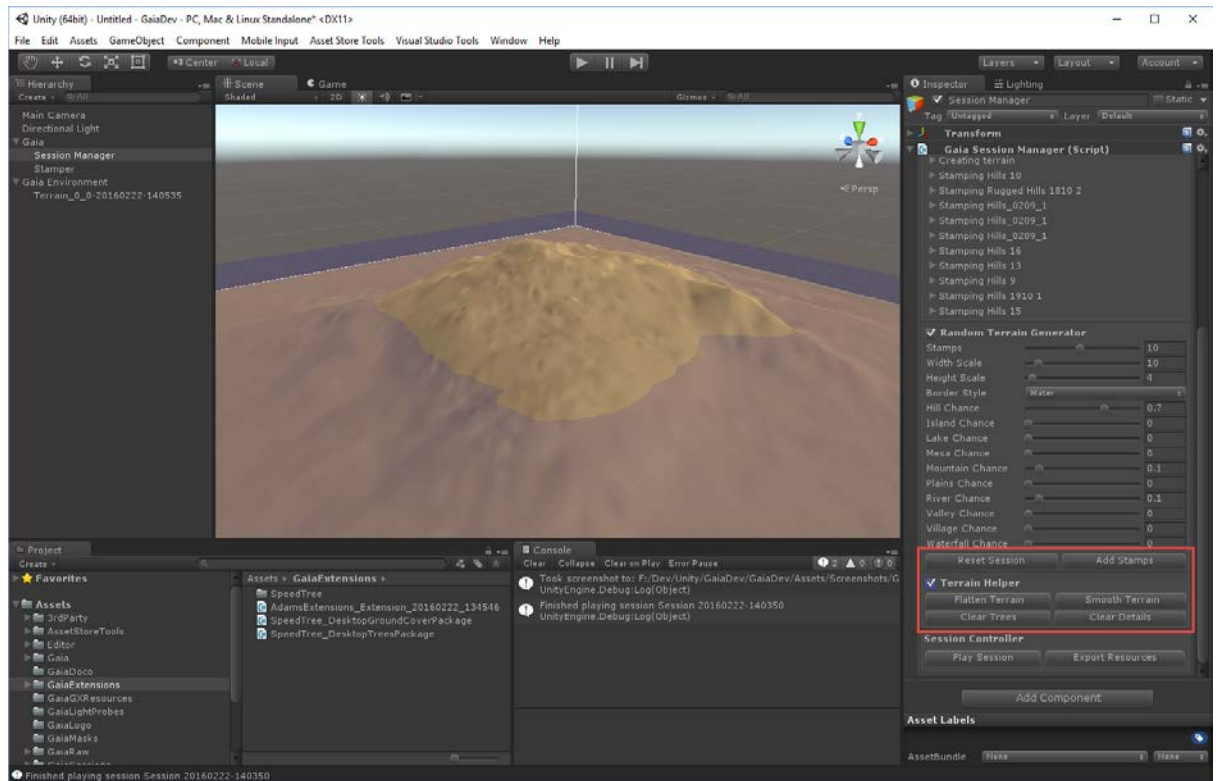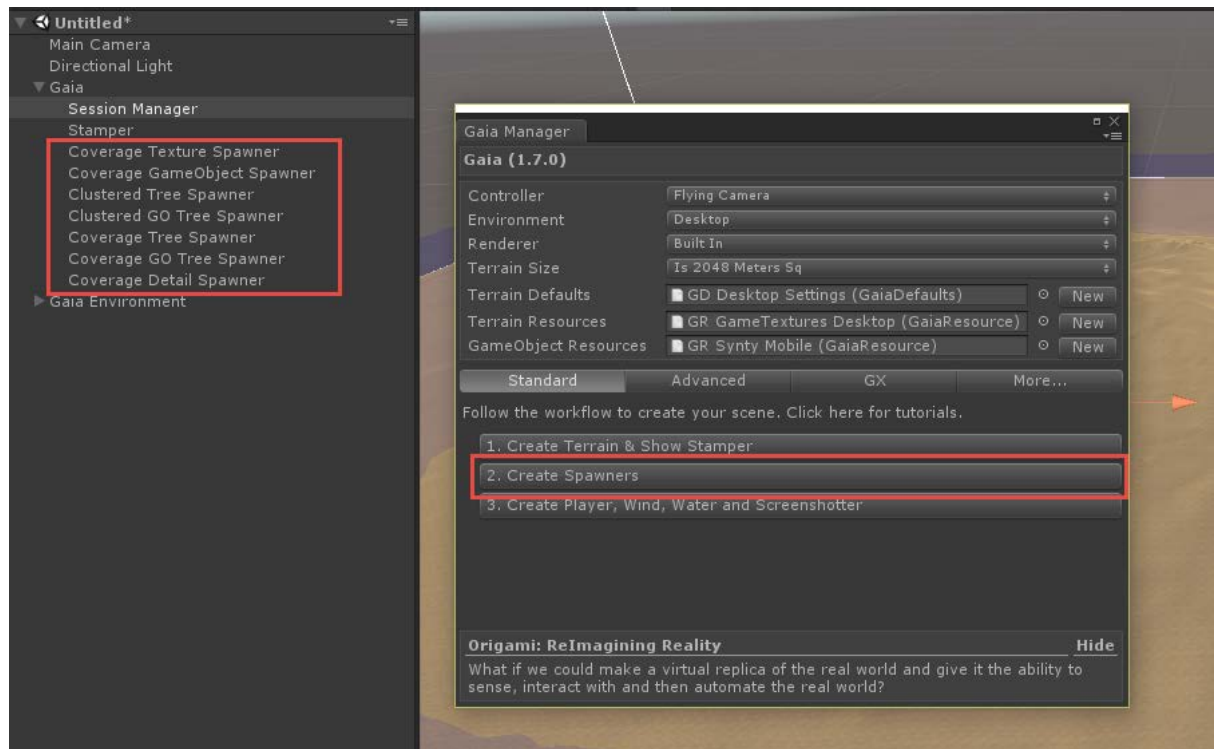
7. This one looks a little better… but don't be afraid to roll a few different sessions up…

8. The go back to your STANDARD tab in Gaia Manger and click on 2. Create Spawners.. then iterate through each spawner and click "Spawn", and when its done move to the next… you will need to wait a little they do their thing…


Note : If you want more game objects or more trees, then click spawn multiple times.

Also, don't be alarmed if you do not get many farms – you need to ensure your terrain is flat enough to show them, and also you can hit spawn multiple times to get more of them.

9. So now lets finish it off.. click 3. Create Player, Wind, Water and Screenshotter...
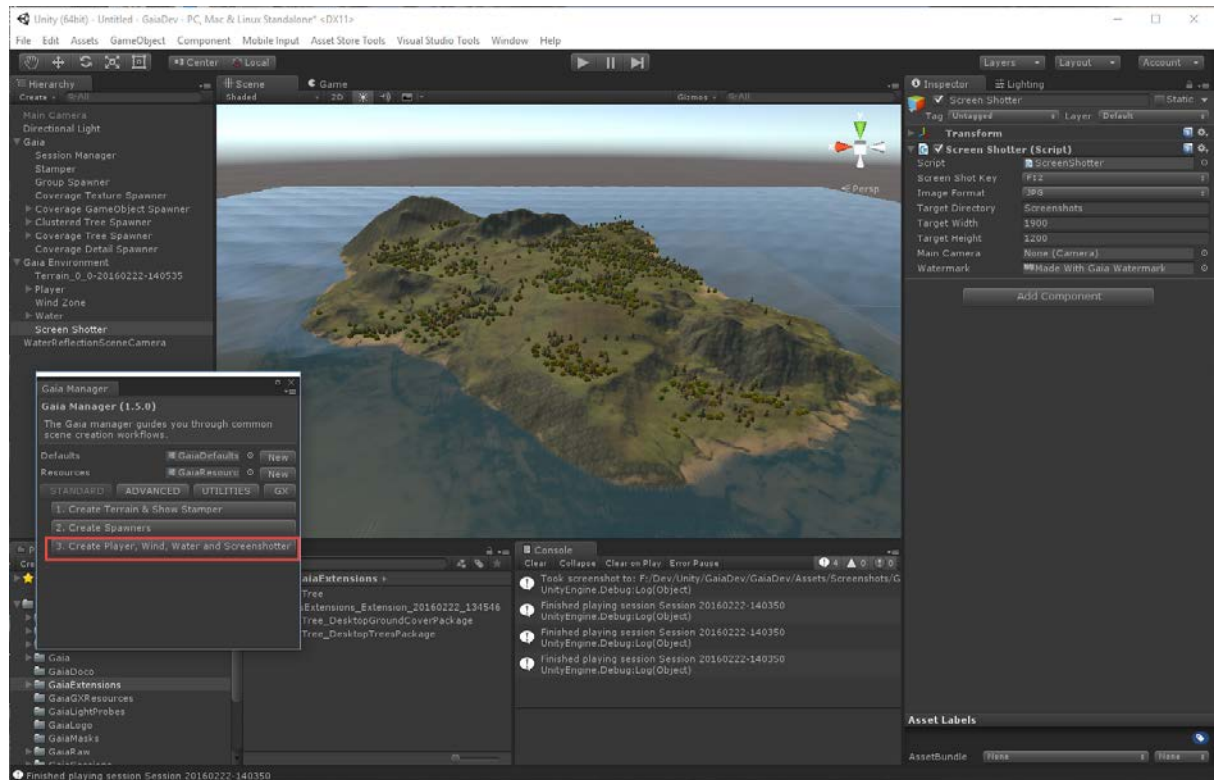
10. Then select the GX menu, Procedural Worlds (that's us), then click
    Set Linear Deferred Lighting, then click Create Camera Effects, then click
    Set Afternoon Light…
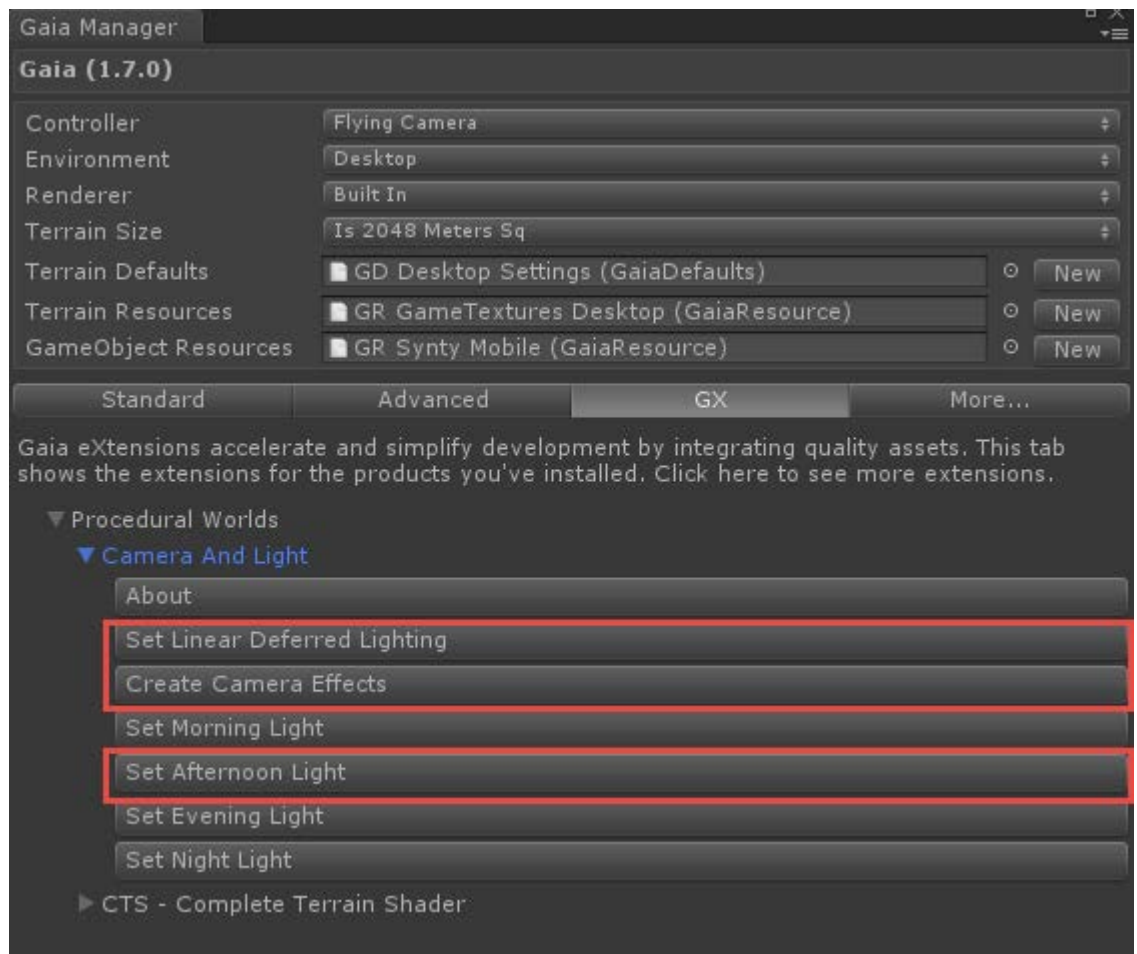
11. Then click Play… take a wander around hit F12 when you find something
    cool! Then stop playing the scene when you have finished and take a look
   in the Screenshots folder.
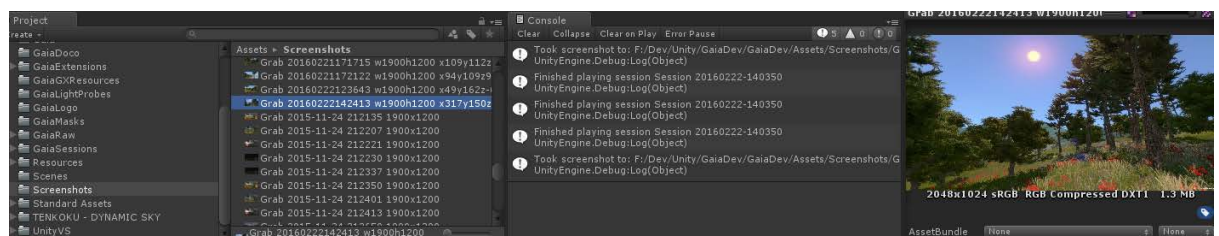
12. And double click on the screen shot…

13. Now create a new scene and start it all again… a little hint.. you will find interesting things in flatter areas ☺

Option 2 – Manual Generation!

In this scenario we will control the creation of the terrain ourselves. What we are going to do is design the environment to suite the game play we want!

1. Create a new Scene.

2. Open the Gaia Window by pressing Ctrl G or
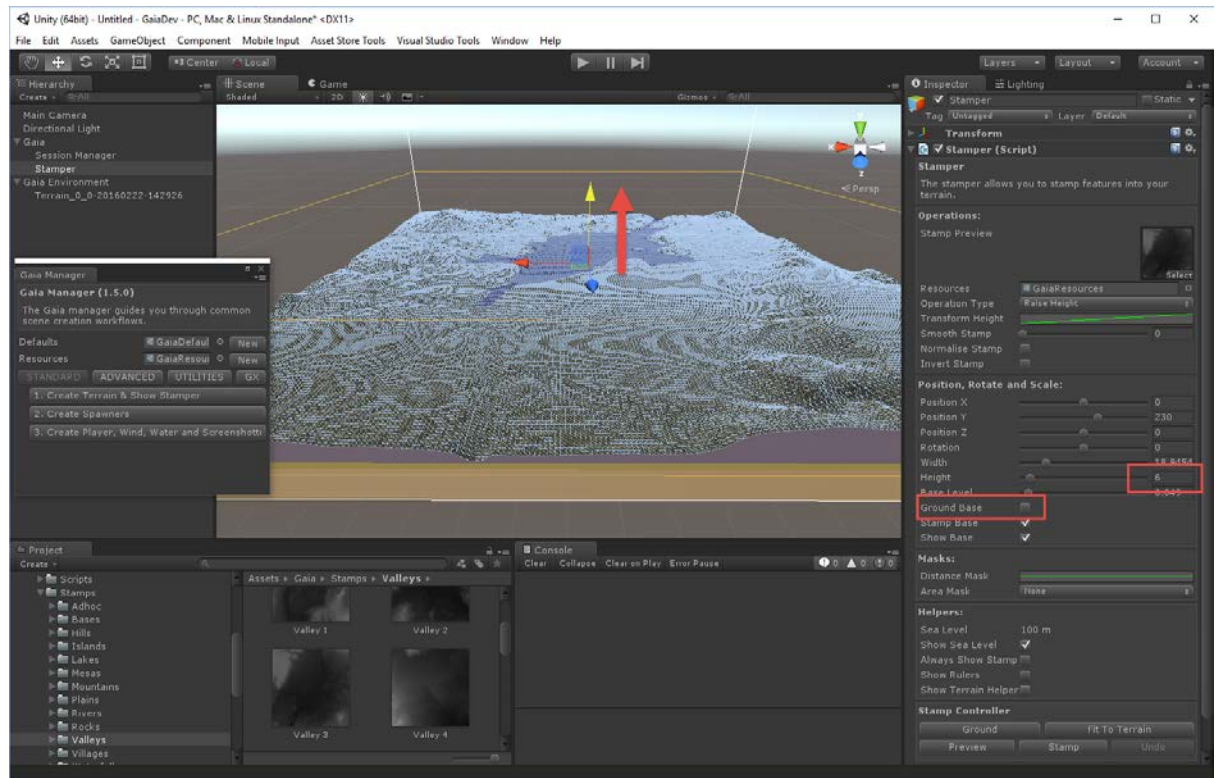   Menu : Window / Gaia / Show Gaia Manager…
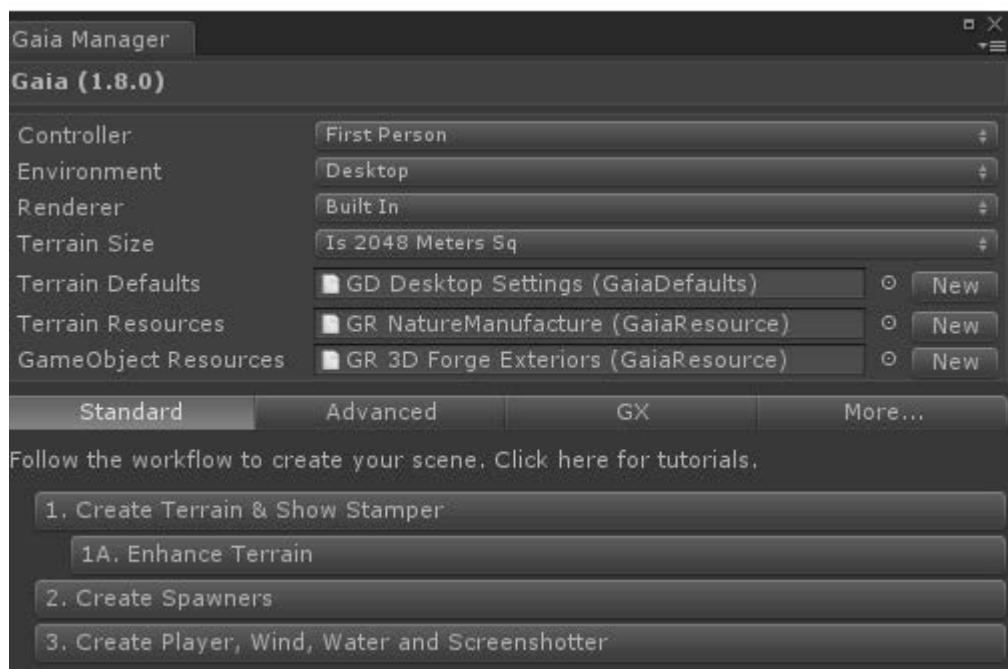
3. Click 1. Create Terrain & Show Stamper… then select Valley 3 in the Gaia / Stamps / Valleys directory and drag it onto the Stamper…
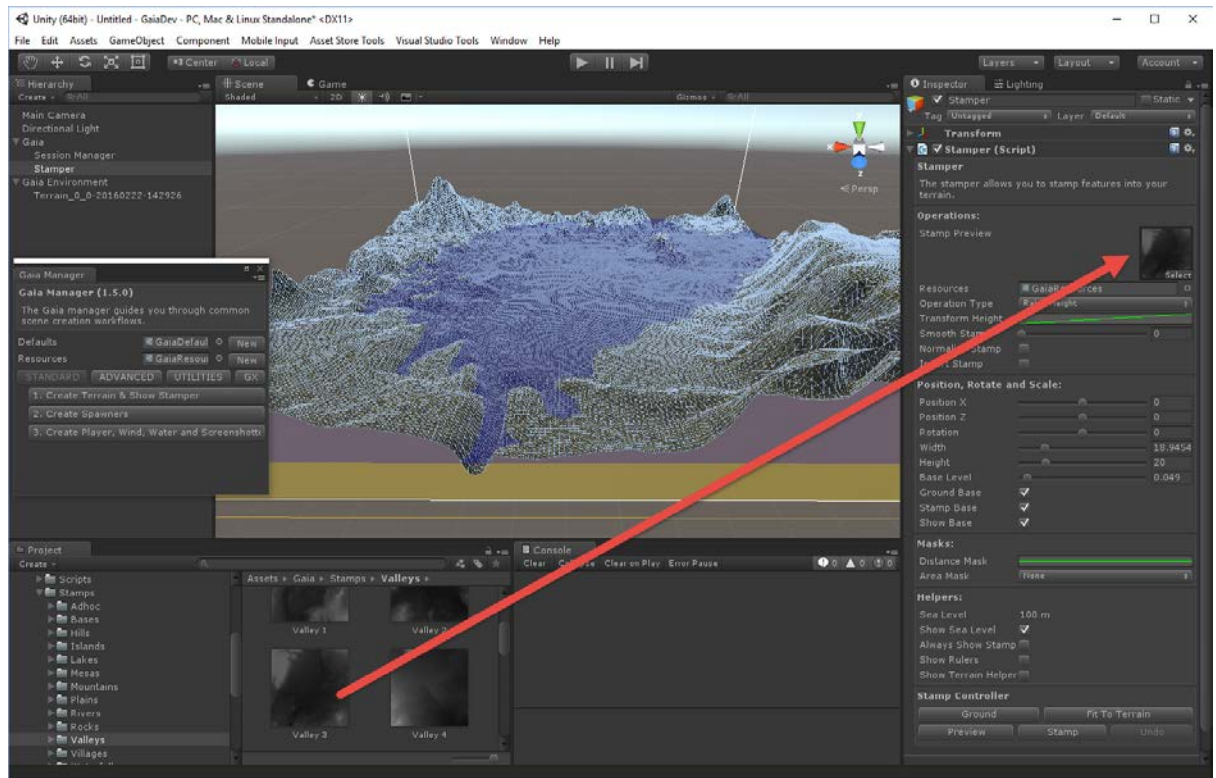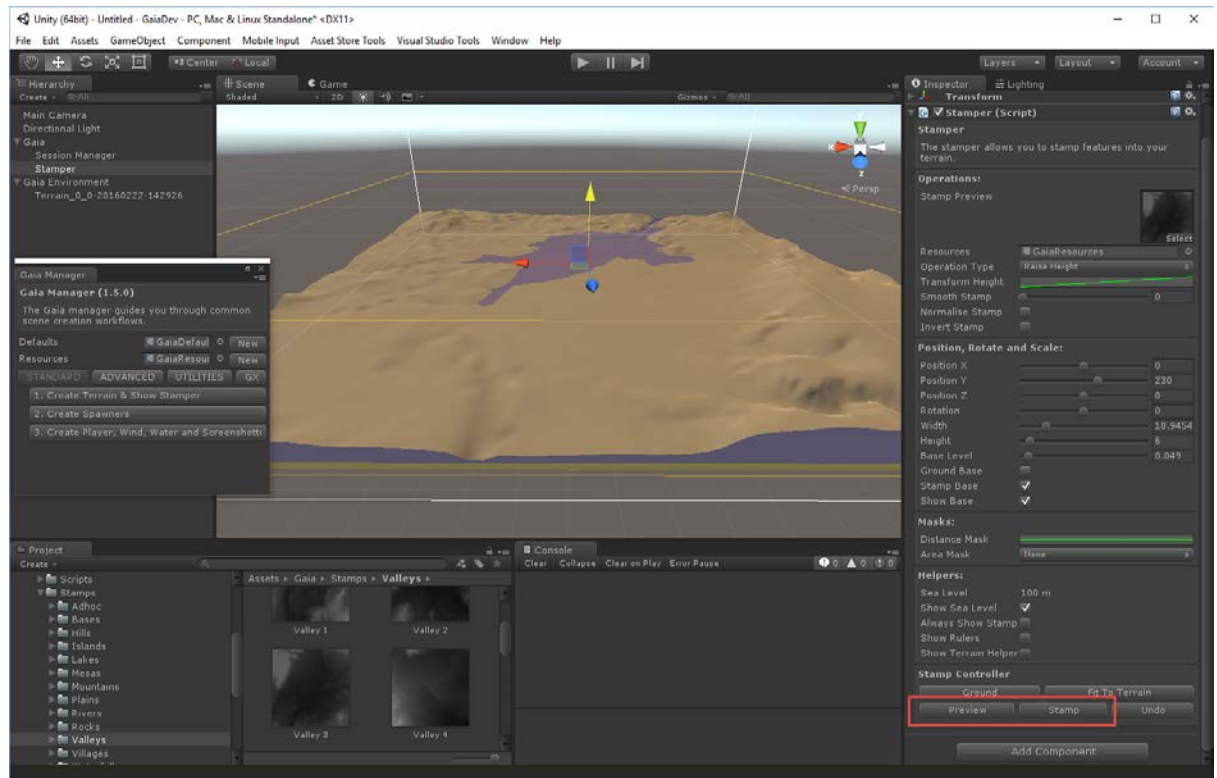
4. I want to raise and flatten this stamp so type in a height of 6, then unselect Ground Base and raise the stamp so that only a little bit of water is visible…

5. The click Stamp to apply the stamp to the terrain... after this click the Preview button to hide the preview mesh so we can get a good look...

6. Looking good… now let's add a new feature… click the preview button to show the mesh preview again then and drag Colima B from the mountains directory on the stamp preview – then let's resize, reposition and rotate the stamp to put it where we want it… finally press Stamp to apply it…
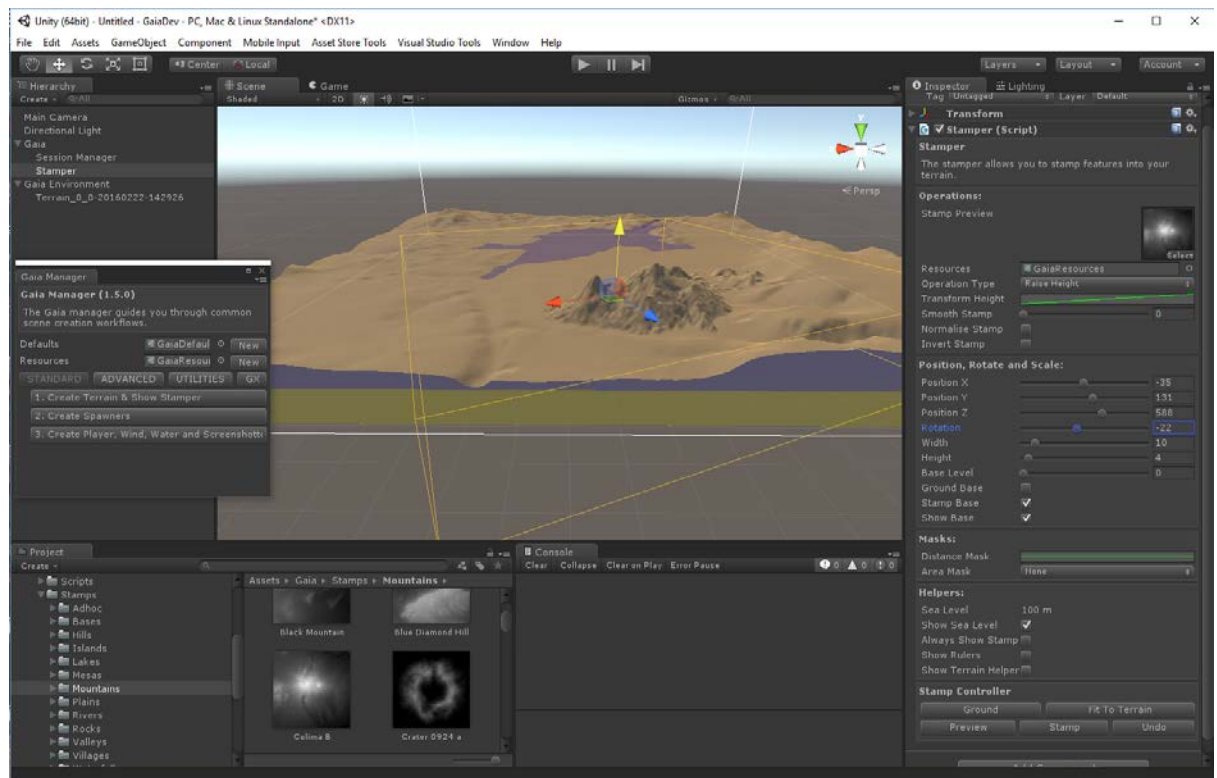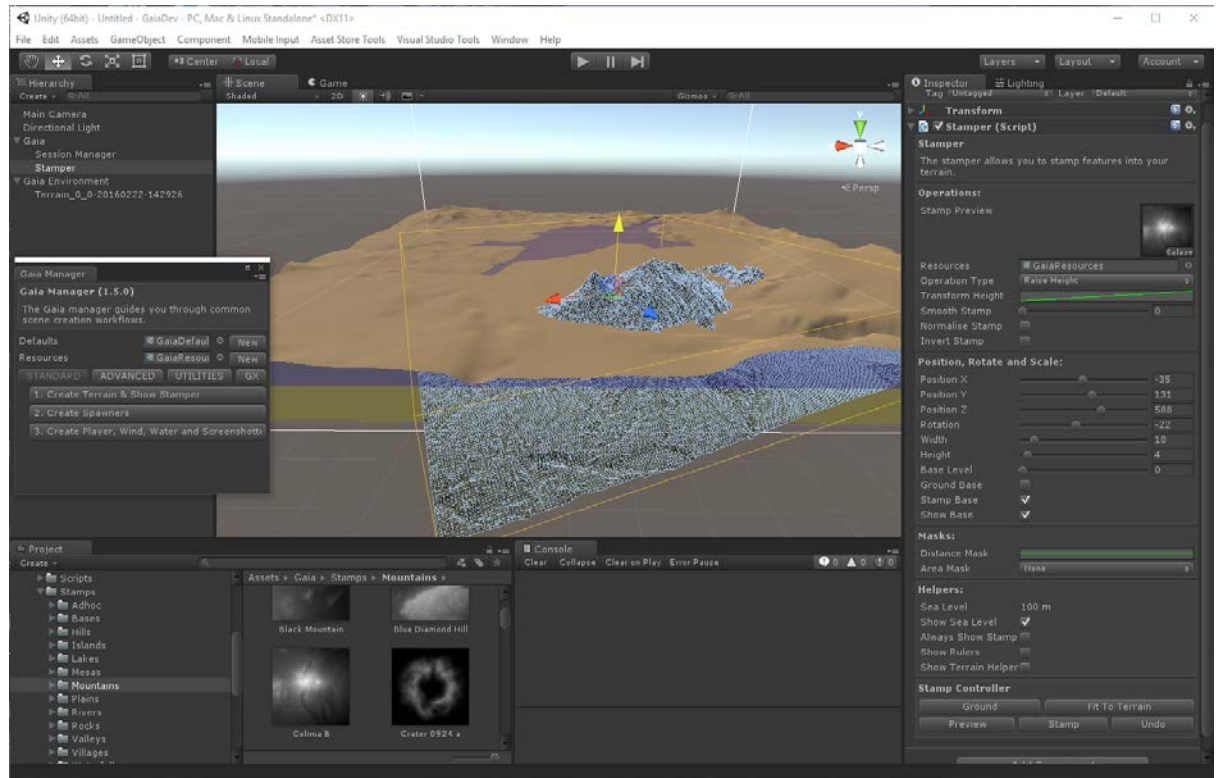
7. Ok time wrap this up… but this time we control the spawning manually… click 2. Create Spawners from the STANDARD tab of Gaia Manager… then select the Coverage Texture Spawner and click Spawn…
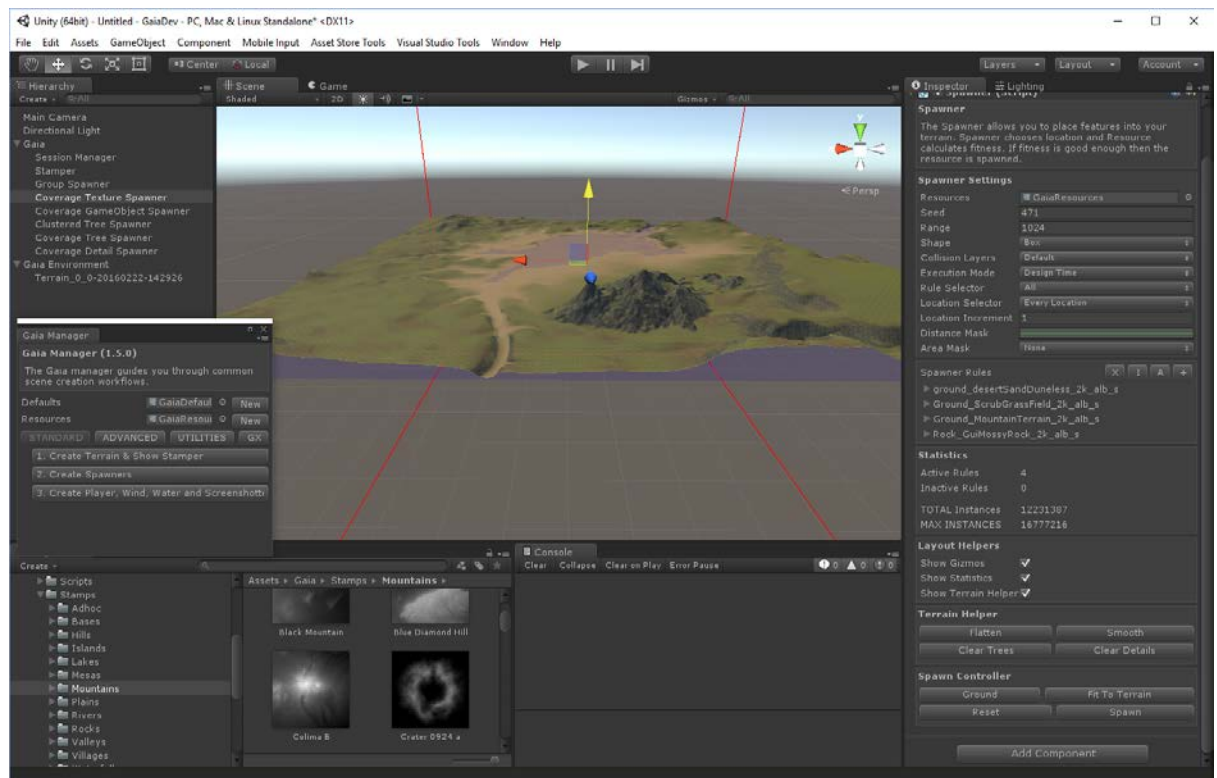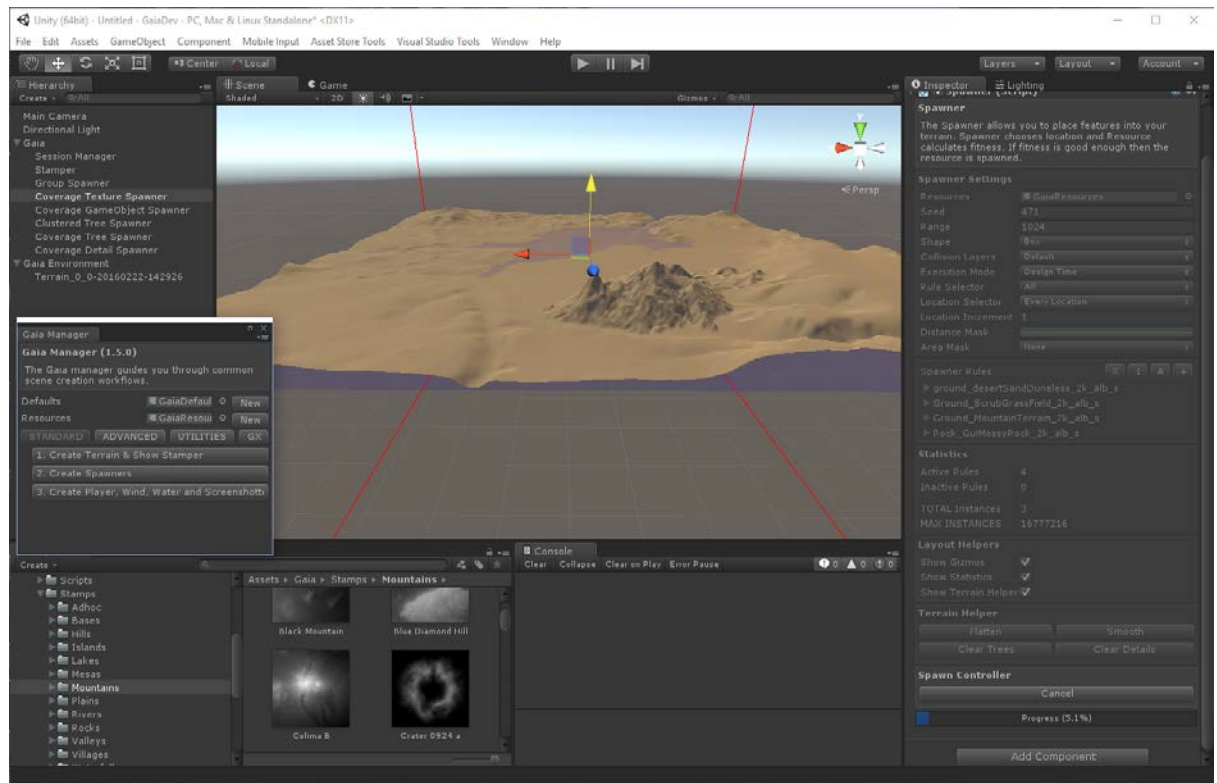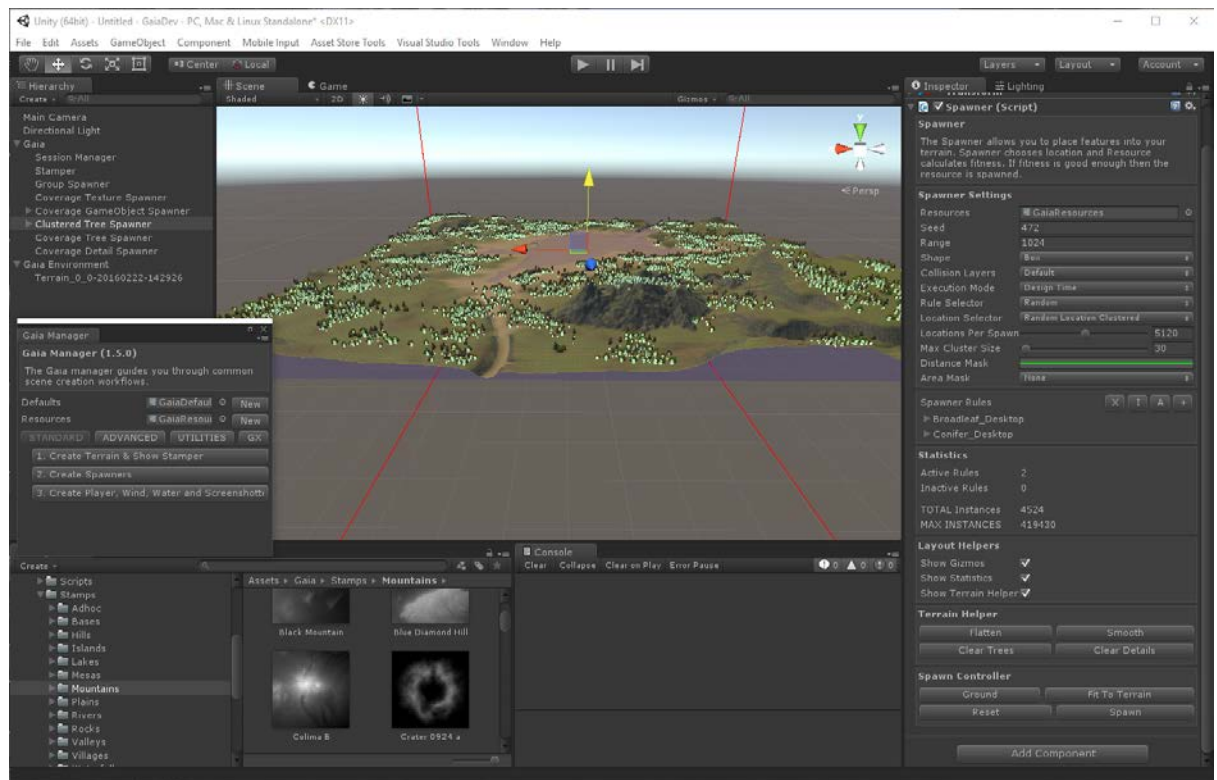
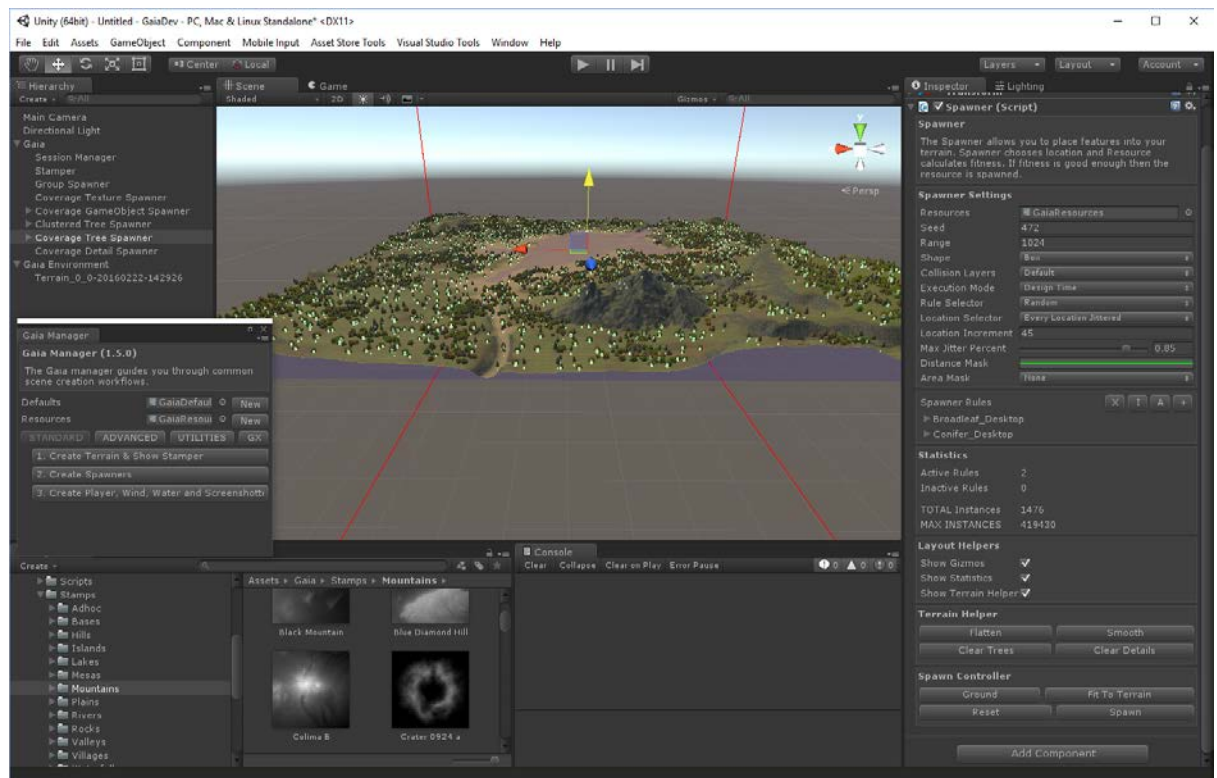8. The select the Coverage Game Object Spawner and click Spawn…
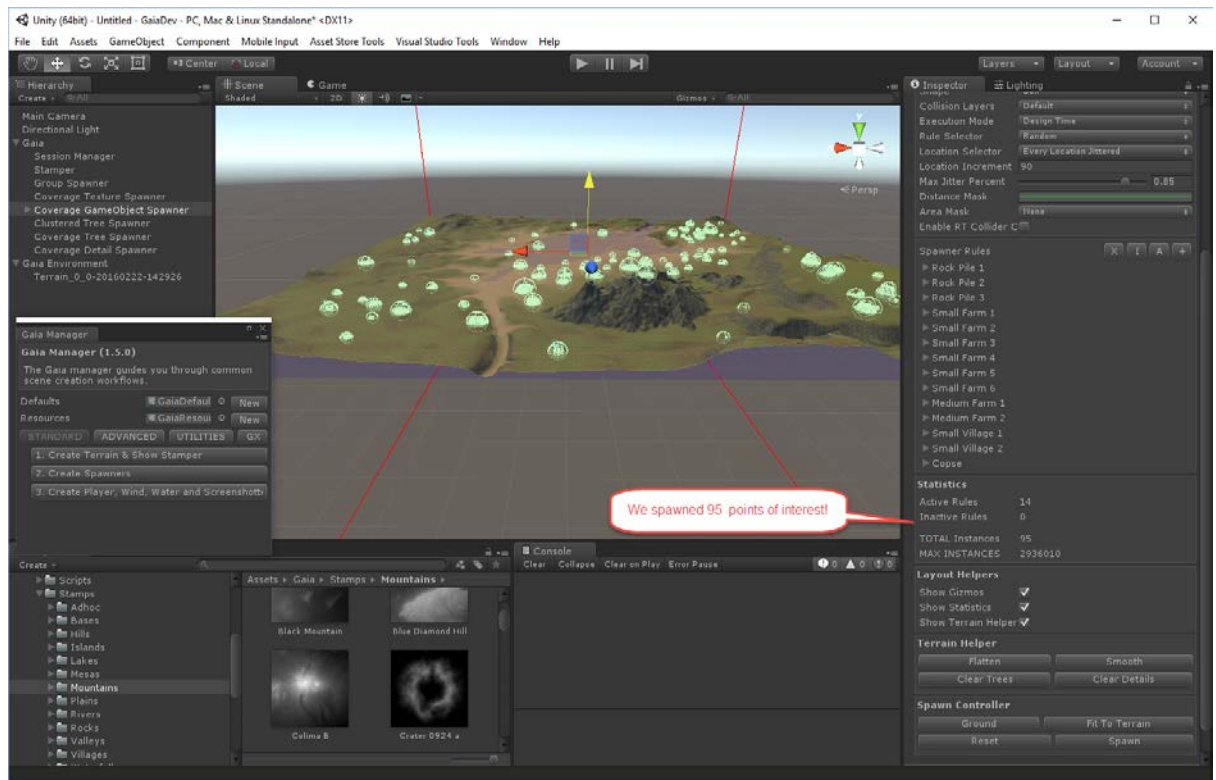
Notice we spawned a lot – I deliberately chose a relatively flat terrain so that it would be suitable for these points of interest… you will see why in a minute!
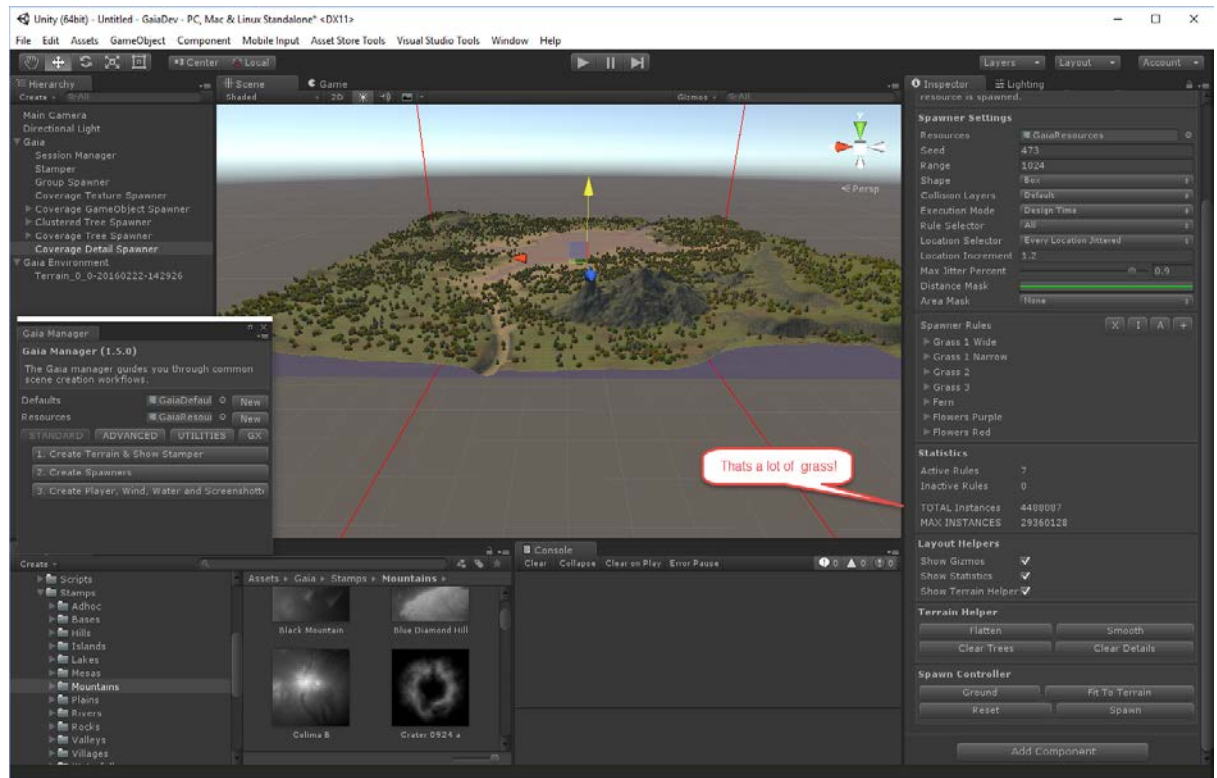
9. Then select the Clustered Tree Spawner and hit Spawn.. when its done if you think you want some more trees then hits spawn again… I did ☺
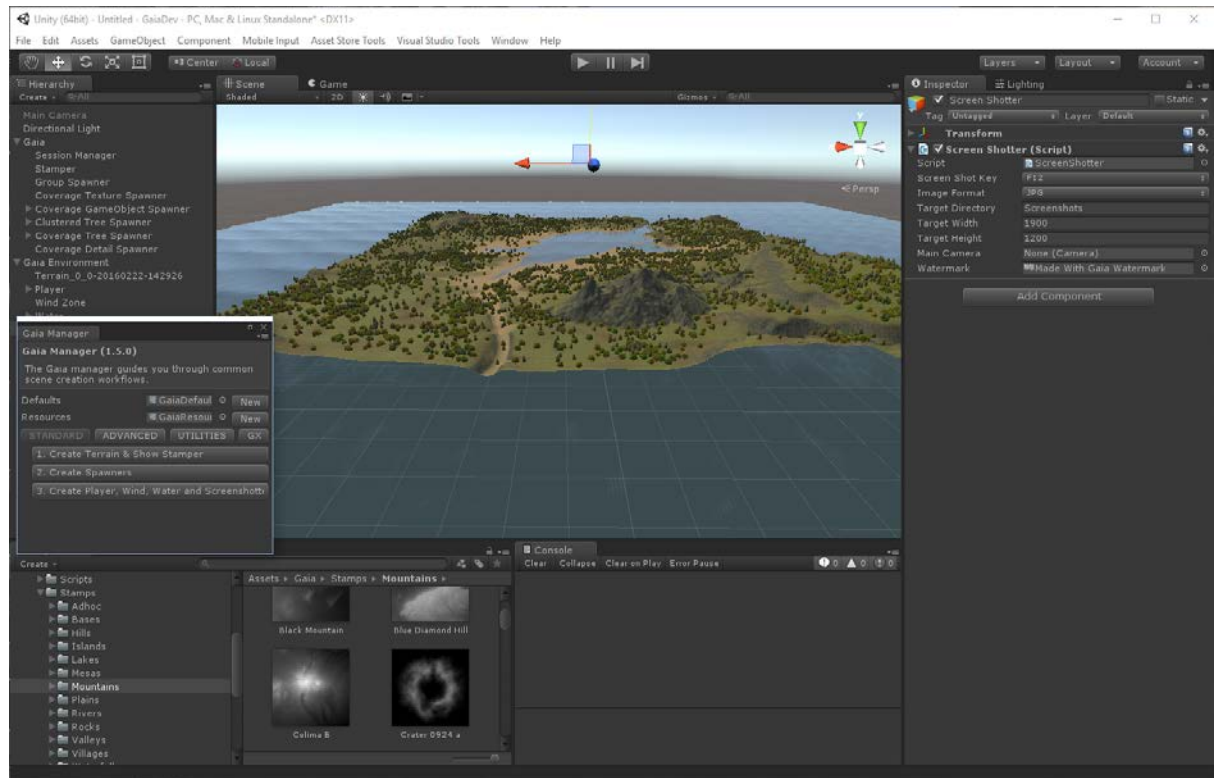

10. Then select the Coverage Tree Spawner and Spawn it twice…

11. Now select the Coverage Detail Spawner and hit Spawn... check the instance count.. we placed a lot of grass...

12. Ok let finish this up... in Gaia Manager hit 3. Create Player, Wind, Water and Screenshotter...

13. The select GX, Procedural Worlds, then click
    Set Linear Deferred Lighting, Create Camera Effects, Set Afternoon Light...
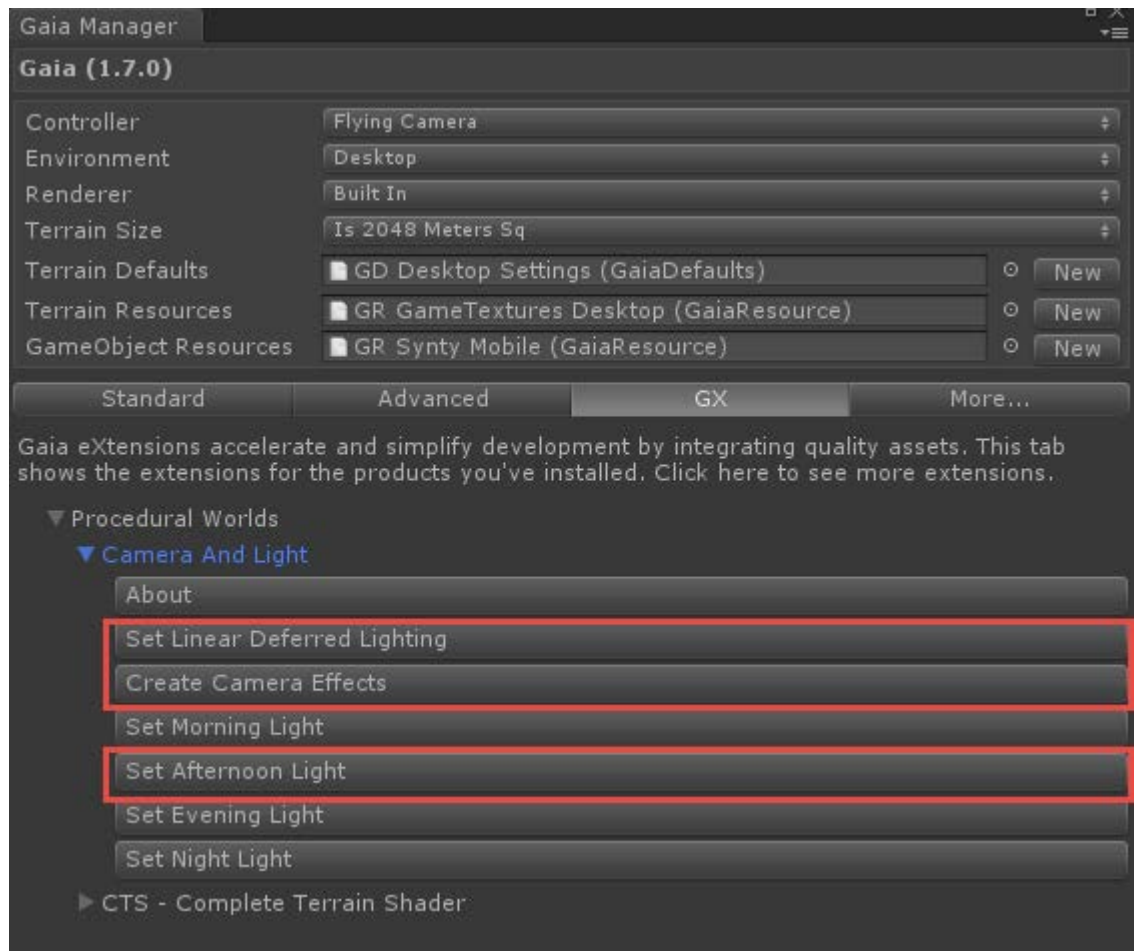
Note how the objects are automatically added and configured.

14. Press Play, explore and when you find some cool stuff – hit F12 to take a screen shot… here's some of what I found…

15. I hope you enjoy Gaia. If you would like to add more cool things to make your environment look even better then check out the Gaia Extensions : http://www.procedural-worlds.com/gaia/?section=gaia-extensions