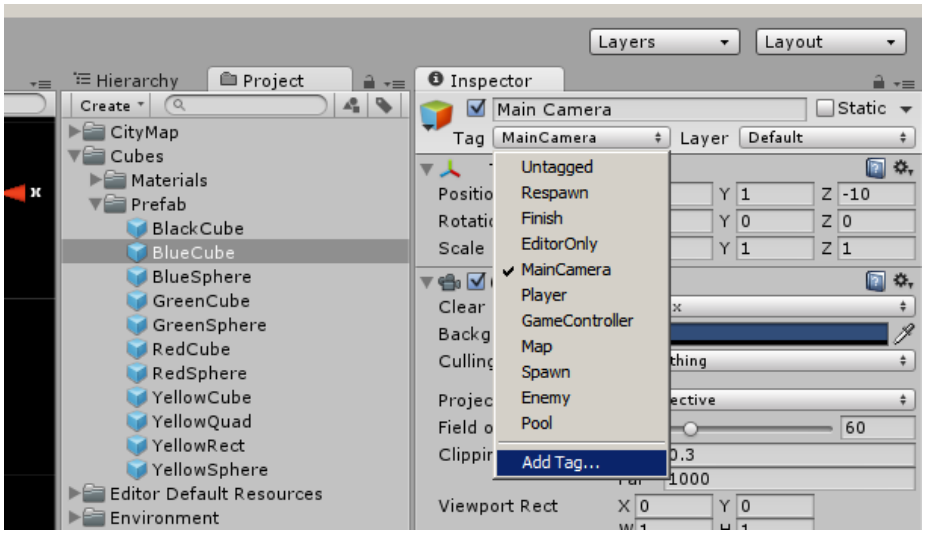
OpenMap User Guide

1 - First Time Set Up

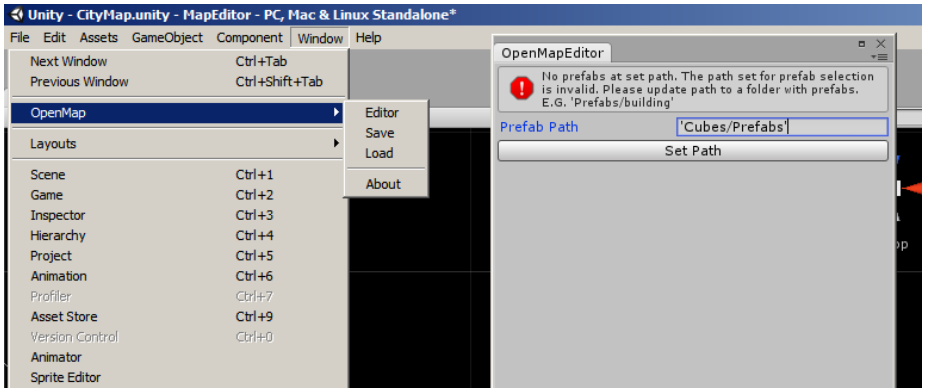
1.1 - Setting Tag and Paths

When using OpenMap for the first time setting up a Tag and path for prefabs is needed. Select a prefab or game objects. In the Inspector click the tag drop down menu and click **'Add Tag'.** The Inspector should show the list of tags. Add the new tag **'Map'**.



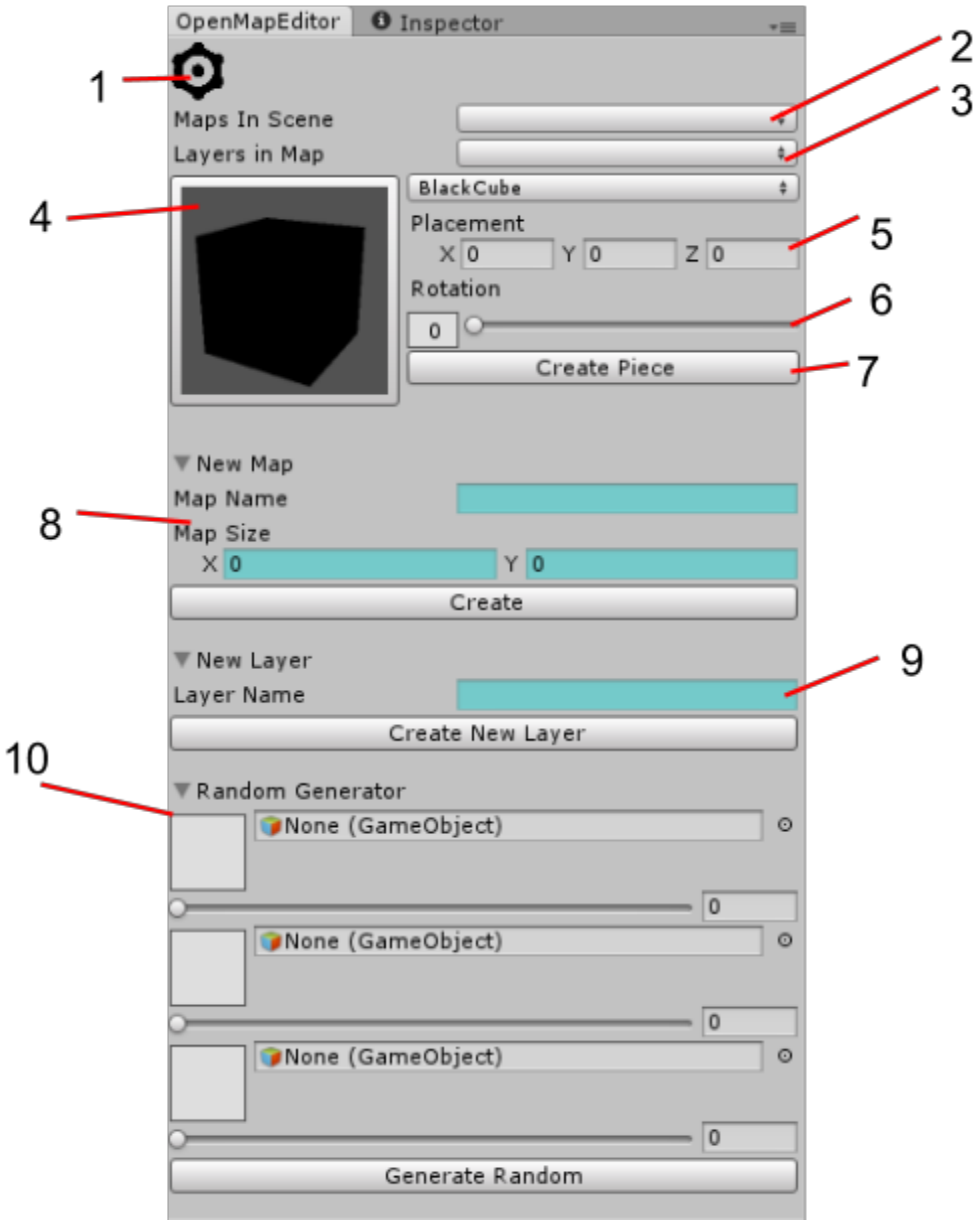
To open the editor for OpenMap go to the toolbar and go to **Window > OpenMap > Editor**. When you open the window it will tell you that there are no prefabs at the selected path. The editor already points to the Asset path in your Unity project. Since OpenMap work off of prefabs you will need to make a few and place them in a folder. An example is placing some cube prefabs under a folder named 'Prefabs' and that folder was in a folder named 'Cubes'. You would

type in then ‘Cubes/Prefabs’ (note you don’t have to worry about letter case when setting the path). Once the path is typed in press ‘Set Path’ and your prefabs at that path will be loaded into the editor.



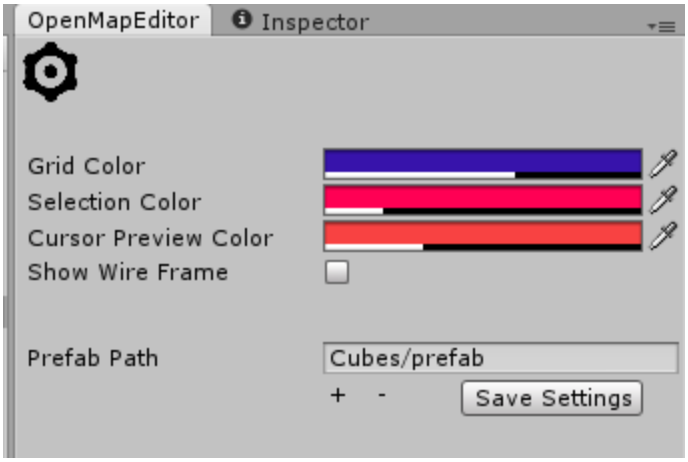
1.2 - Editor Layout

Once you set the tag and path for the prefabs your editor window will look like this. Go over the list of options you have in the main page.



1) Settings Button, 2) Map List, 3) Layer List, 4) Prefab Preview and Selector, 5) Piece Placement 6) Piece Rotation, 7) Manual Placement, 8) New Map Interface, 9) New Layer Interface, 10) Random Generator

1. Settings Button - Access the settings page where grid, selector and cursor colors can be changed, and the current prefab path be set and additional paths added. When in the settings page click the gear to go back to the main editor page.



2. Map List - A list of all the maps in the scene. Used to switch between which map to edit.

3. Layer List - A list of all the layers in the currently selected map. Use to select and edit different layers.

4. Prefab Preview and Selection - This shows an image of the current prefab. It is also a button to open the prefab selection window to select a different prefab to paint.

5. Piece Placement - This shows which grid section the cursor is on. It is also used to set the position for manually placing a piece.

6. Piece Rotation - A slider that increments in 90 degree segments. Used to set the rotation of the object to be painted.

7. Manual Placement - Use this button to place a piece at the set placement and rotation.

8. New Map Interface - Interface for making a new map with set name and size in the current scene.

9. New Layer Interface - Interface for making a new layer in the **current** map.

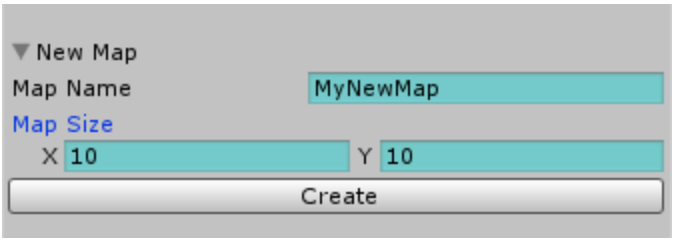
10. Random Generation - This is the interface for randomly generating a layer with set objects and the probability for each

2 - Setting Up A Map

Now that the editor is set up and you know the layout of the editor we will set up a new map and learn how to to add and editor layers.

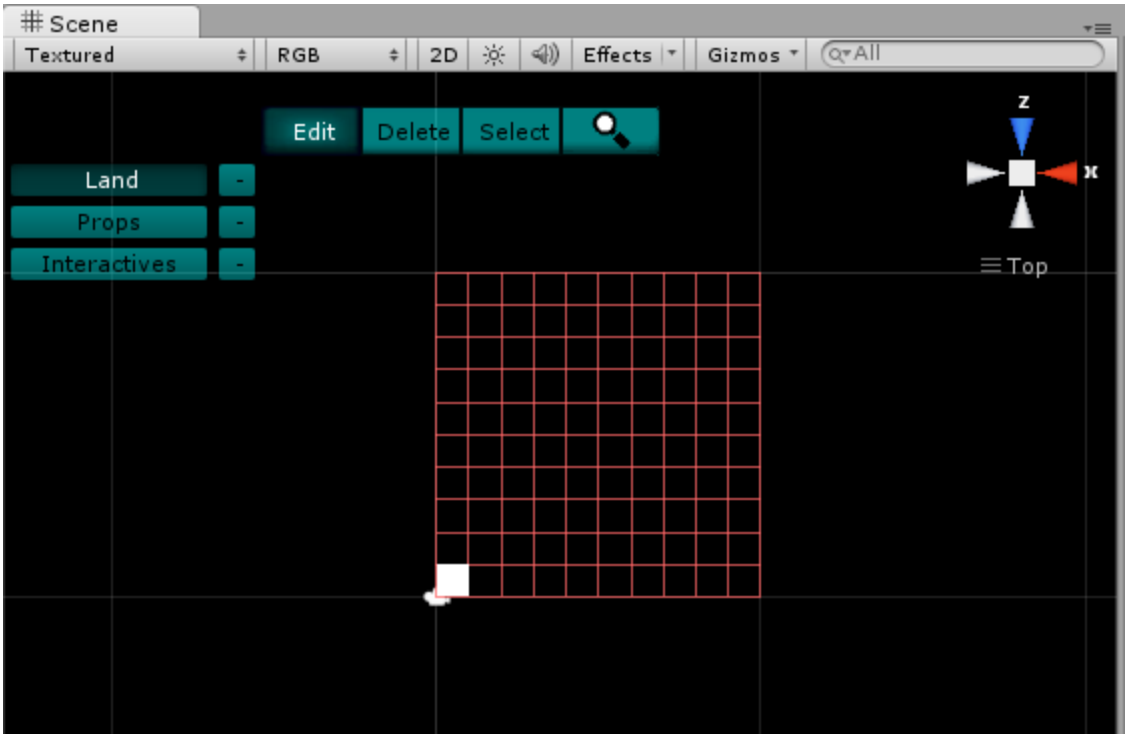
2.1 Making a New Map

The new map interface is in a foldable section. If you haven't already unfold it and you will see three fields. Name your map a unique name. If you have the same name for two maps you may not know which map is which when selecting it to edit.



Once you have a name for your new map put in the size you want your map to be. This is in Unity units, so a 1 x 1 map would be the exact size of a single cube. You can make the map as big as you want but since the maps use an array pattern to store the pieces you may find performance issues when you go higher. A way to help with this is to make multiple maps saving them off the scene and then loading them when building a level.

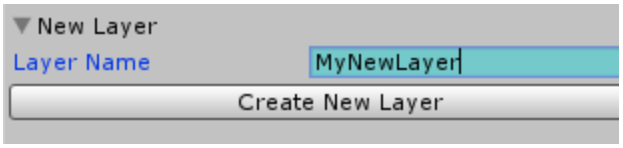
Once you make a map in the editor you will see in the scene view a GUI interface pop up. New maps come with default layers. You can select and remove layers from here. You will see there are other buttons for editing the map. Also in the scene view is the map grid. This shows the size and location of your new map. The whole scene UI is generated by the editor window and so will disappear once closed.



2.2 Creating Layers

Layers are important if you need to overlap objects. Since only one object can occupy a square at a time if you place another object on a square that already has a object on it, the old object will be deleted. The default layers give you an idea of how to set up a map.

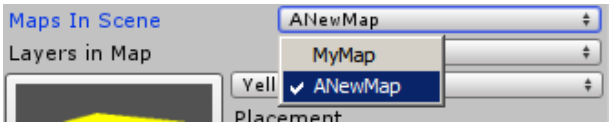
If you go back to the editor window we will make a new layer for the map using the New Layer interface. It is almost identical to making a new map, but all you have to do is give the new layer a name. Again, make sure you use a unique name since you will not be able to tell which layer is which when editing. Once you click the ‘Create New Layer’ button a new layer will be made for the map. Keep in mind the number of layers you have, especially so with larger maps since each new layer requires a new multi dimensional array to store the information.

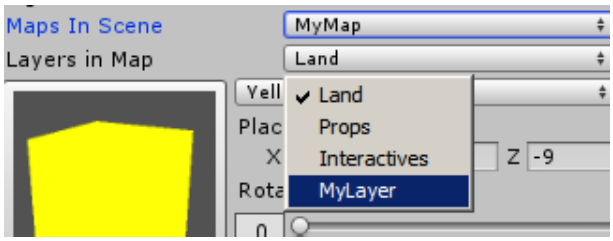


3.3 Managing Maps and Layers

If you make several maps in the same scene you will see that the editor window will update it’s lists, and the same happens with it’s layers. One feature of the OpenMap editor is that it will automatically hide other maps you are working. This is to help with performance as multiple

active maps (with hundreds of objects in each of them) can make the scene view lag and hard to navigate. If you need to see multiple maps at once just select the map in the hierarchy and activate the layers.



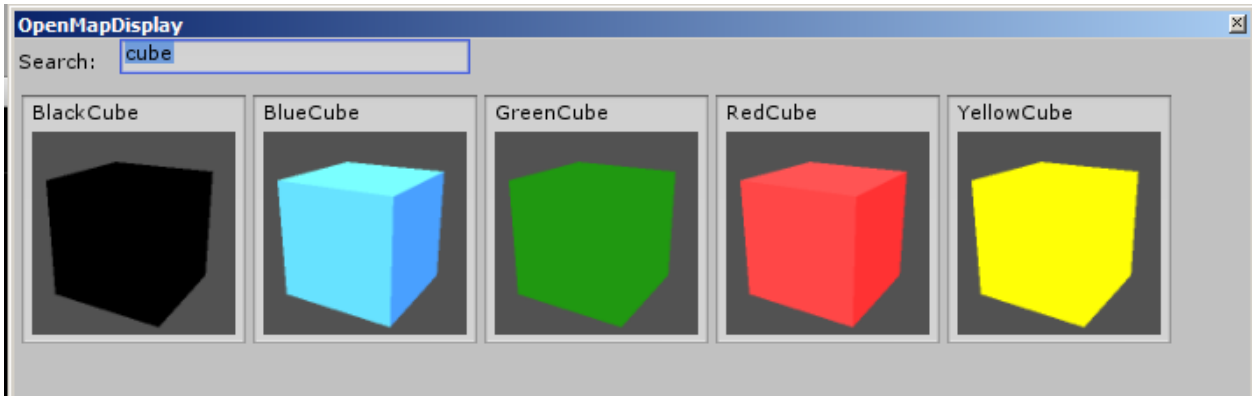


3 - Painting and Editing Maps

Painting is the main editing tool you use for making maps in OpenMap. Painting, like in an art software package, is using the mouse to paint on the prefabs to the map.

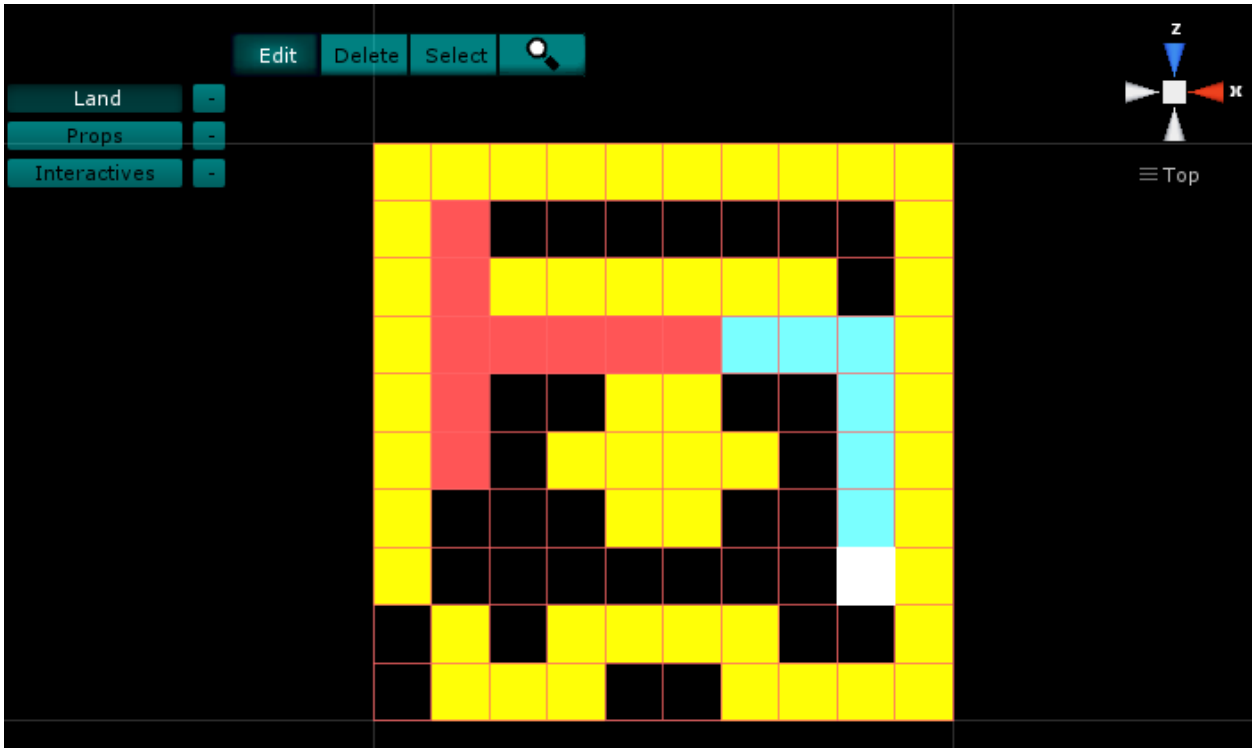
3.1 Selecting Prefabs

To select a prefab to paint with click on the prefab preview. This is a button that will open up the prefab selection window. From here you can either scroll through the prefabs or search using the search bar at the top to narrow down your search. By clicking on the prefab you want to paint with it will replace the selected object and you will see it in the prefab preview.



3.2 Painting

In the scene view make sure you can see the grid of the map. To be able to paint the editor needs to be in the Edit mode, this can be done by pressing the ‘Edit’ button in the scene. The UI should change to a light blue color letting you know you are able to edit the map. Once this is done all you need to do is use the mouse and left click and drag to paint the prefab.



When painting on the map, if the prefab has a 3d model you will see along with your cursor a 3d mesh will appear. The mesh's color and opacity can be changed and also set to be a wire frame instead of a solid mesh. What you see with the mesh preview is what you will get on the map. By using the scroll wheel you can rotate the model on the Y-axis. To switch to a different layer to edit use the in Scene View UI to select a layer. Once selected you will only be able to edit on that layer.

3.3 Deleting

Deleting is simple. Select the 'Delete' button from the Scene View UI and now instead of painting new objects, whatever object is in that square will be deleted from the map. Again, you can only edit the layer that is currently active.