Object Groups

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What are they?

- Object Groups are a means of loading additional objects on top of your base terrains/main objects, without having to create additional World Grid assets and World components.
- Your terrains/main objects are loaded first, followed by the object groups.
- The object groups can be ordered so one object group is loaded before another.

What are they?

- This allows you to load base objects (ex: a table) before loading objects that rely on the base objects (e.g., a plate that sits on the table).
- You can off course simply parent these “secondary” object groups directly to your terrains/main objects (in truth, this is the easiest method), but object groups give you more flexibility in terms of performance and memory usage.

Adding Object Groups

- To add an object group, create a new empty game object in your scene.
- With this game object selected, from the top Unity menu bar, choose Component -> Dynamic Loading Kit -> Secondary Components -> Object Group.
- On your World Component, find the field labeled “Object Groups” and increase the number (default is 0) by 1.
- Drag the game object that contains your Object Group component onto the new field that is displayed.

Adding Object Groups

- If using multiple Object Groups, pay special attention to the order of the groups. The kit loads your terrains/main objects first, and then the object groups are loaded in the order they appear in the inspector.
- So, Object Group 1 is loaded first, then Object Group 2, and so on.
- When unloading the objects, the last Object Group is unloaded first, then the next to last, an so on, until finally the terrains/main objects are removed.

Adding Object Groups

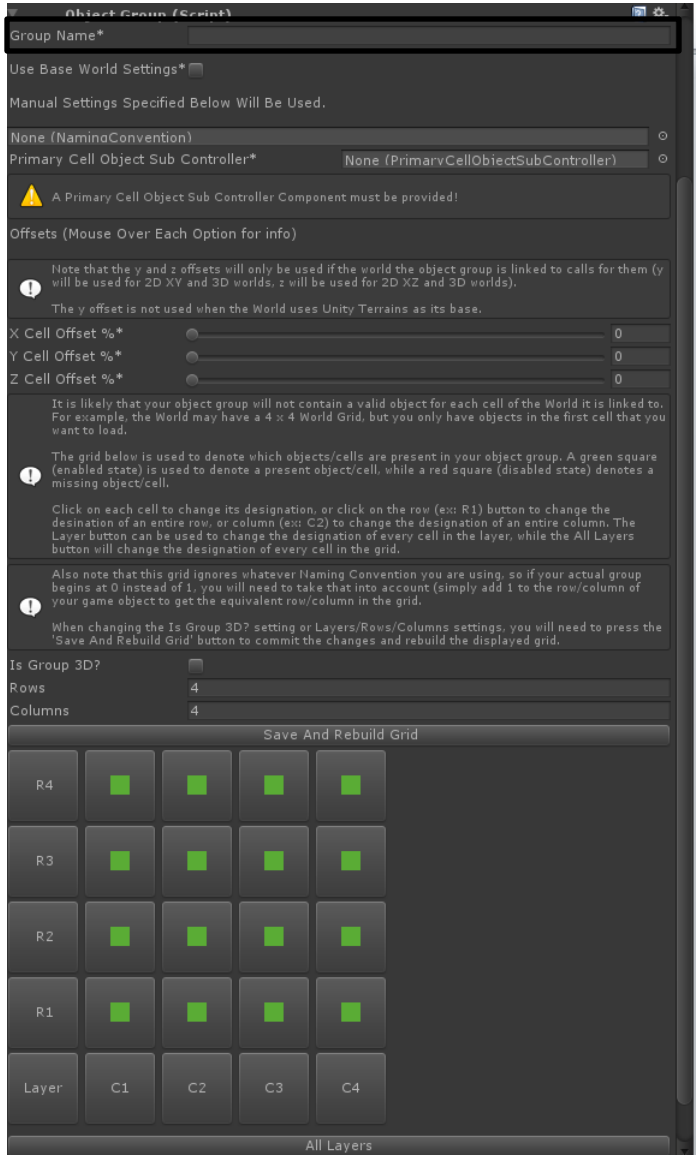
- Note, you can link a single Object Group to multiple Worlds, as long as that Object Group is valid for the World in question (i.e., they have the same number of rows/columns/layers).

Object Group Configuration

- Simply adding the object group references to the World is not enough. You will need to configure each Object Group.
- If configuring multiple Object Groups for use on a single World, configure one object group and duplicate the game object that contains the object group, and then make any adjustments that are needed.

Object Group Configuration

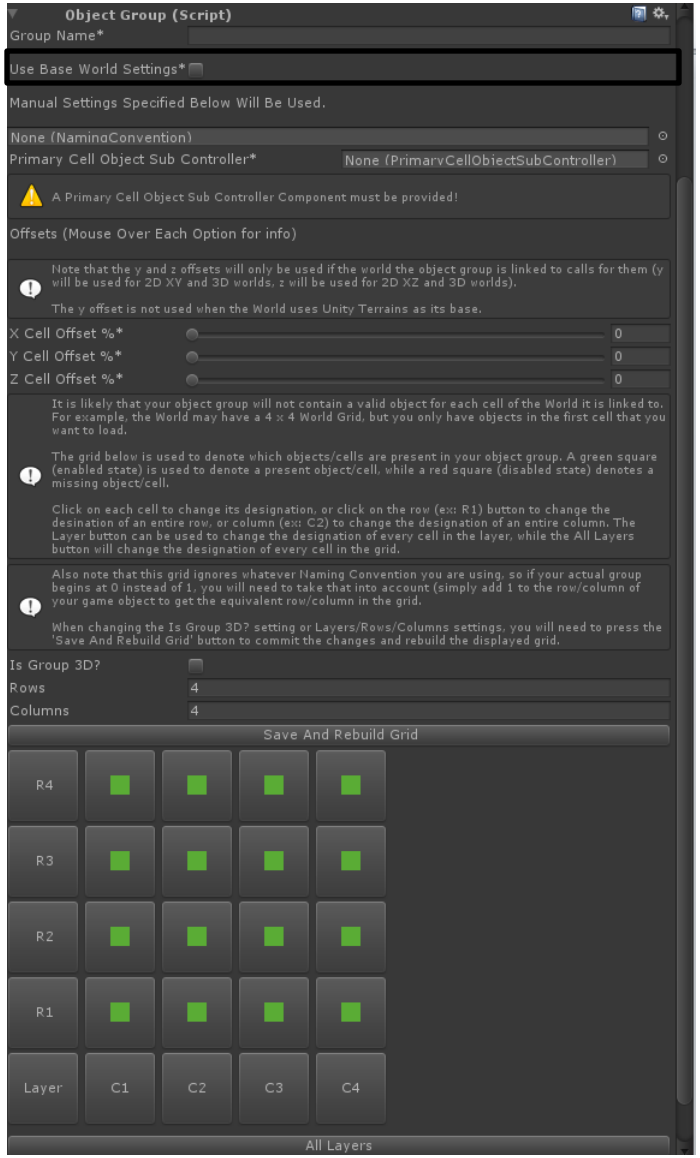
The Group Name of this object group. This should not be the same as the group name found on your World Grid asset.



Object Group Configuration

If checked, the Naming Convention, Primary Cell Object Sub Controller, and Cell Offset values for this object group will be taken from the World the Object Group is associated with.

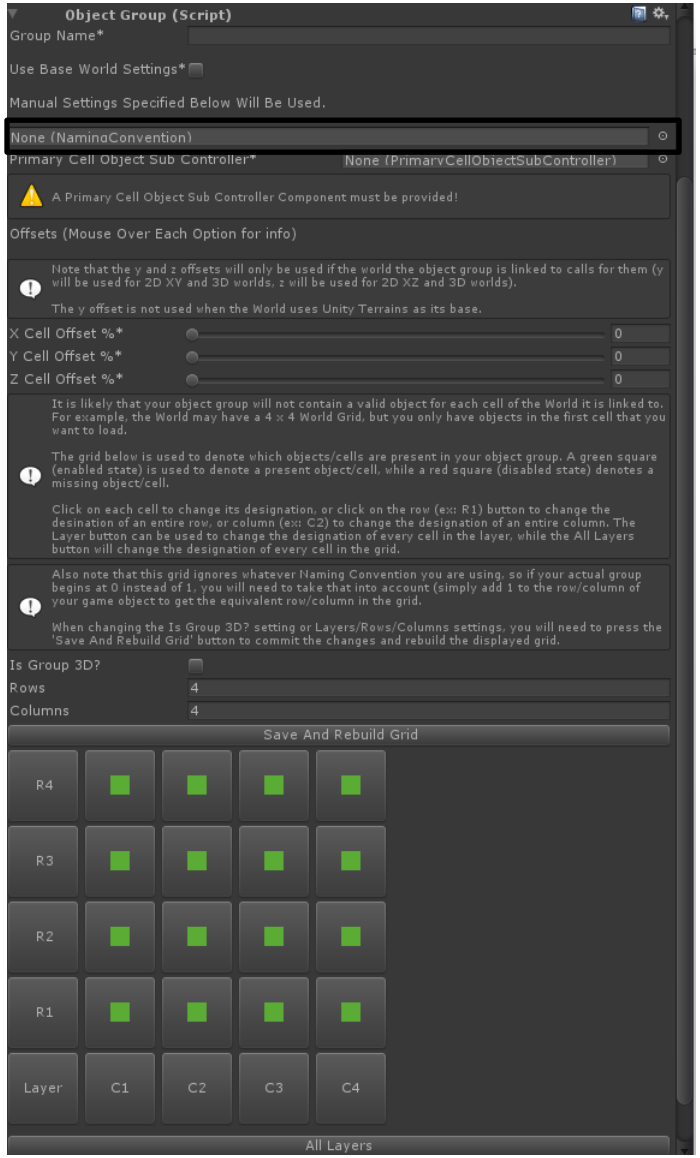
If you want the Object Group to use the same settings regardless of what World it is linked to, leave this option unchecked.



Object Group Configuration

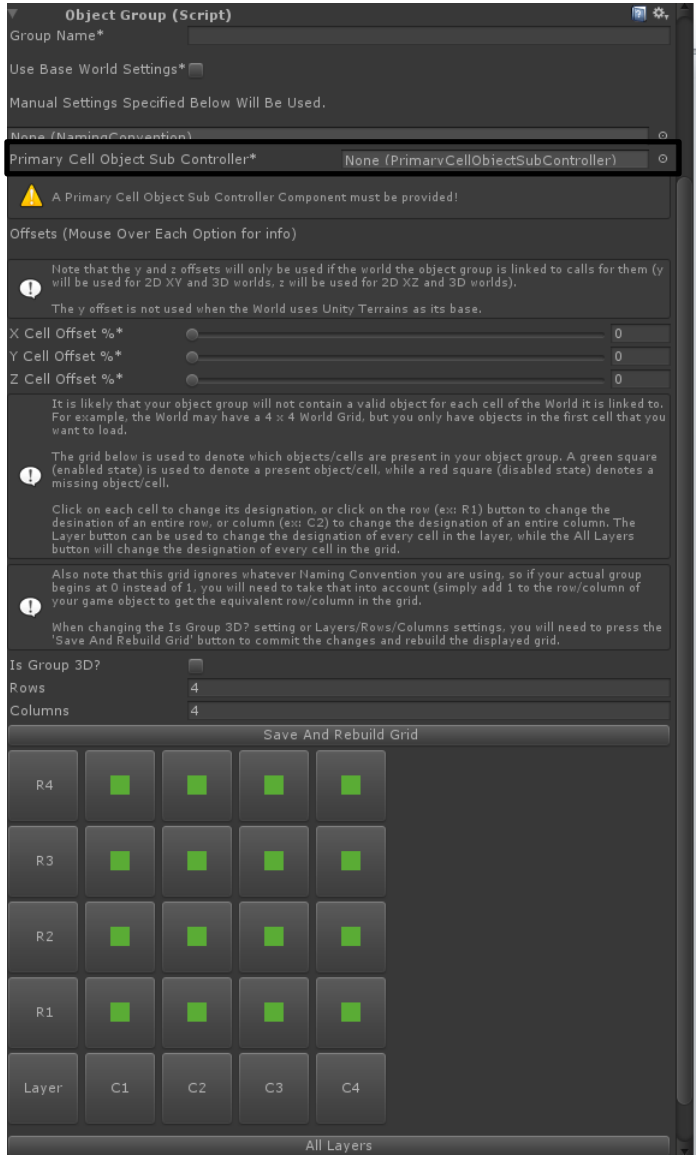
The Naming Convention that the objects in this object group follow. This is used to load and potentially find the objects in the scene.

The default naming convention is used if this is left blank (GroupName_Row_Column).



Object Group Configuration

The Primary Cell Object Sub Controller to use to control the loading/unloading of the objects of this object group. Generally this will be the same as the World's sub controller, but it doesn't necessarily have to be.

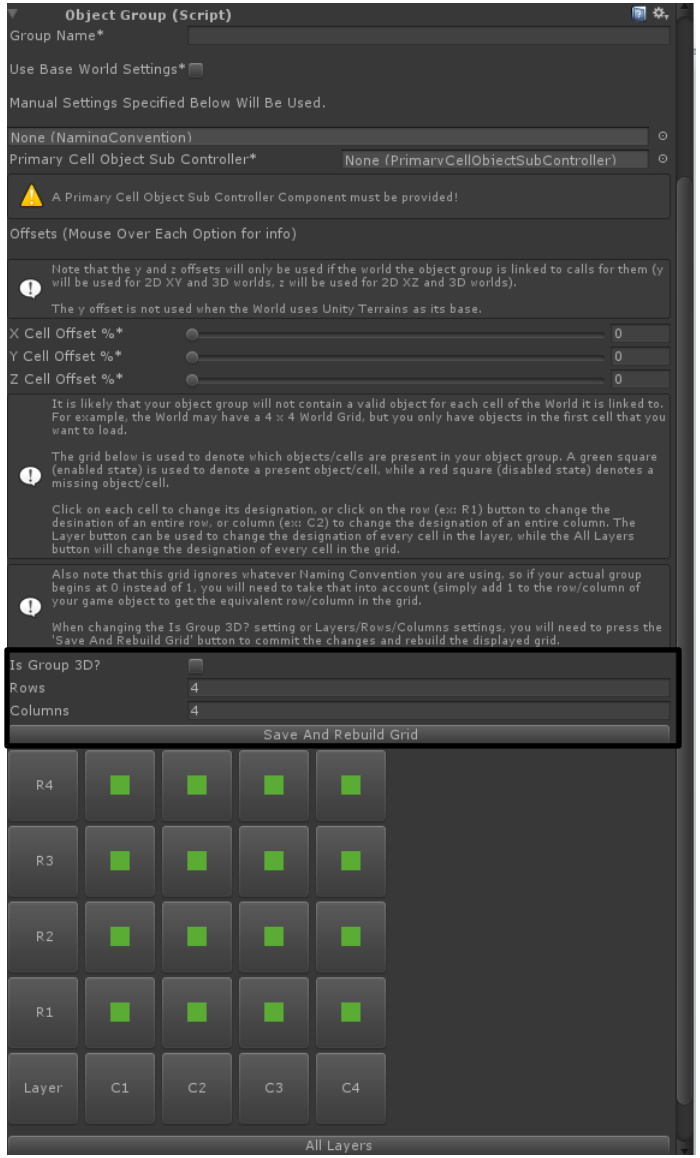


Object Group Configuration

The cell offsets for this object group. You can find more detailed information on Cell Offsets at the end of the Dynamic_Loading_Kit_Quick _Guide pdf file.

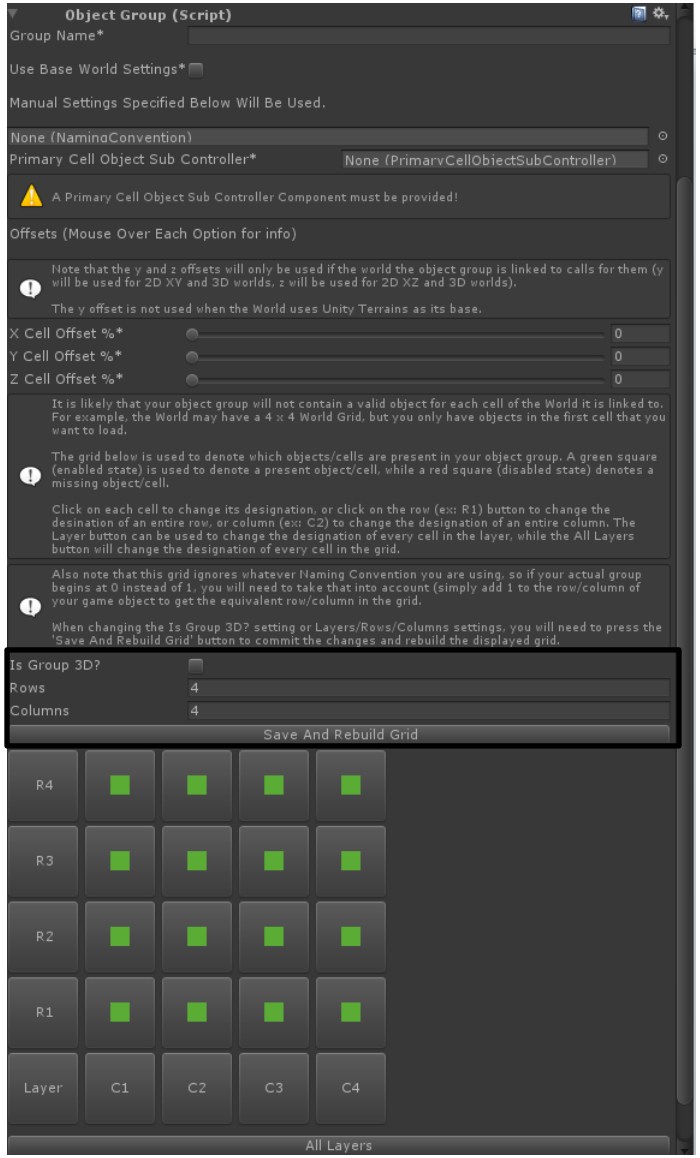
Object Group Configuration

This section controls the number of rows/columns/layers in your Object Group. This is used purely to set which cells are empty/not empty (more later), however you must also ensure that the number of rows/columns/layers matches the rows/columns/layers of the World Grid associated with whatever World you are linking the object group to.



Object Group Configuration

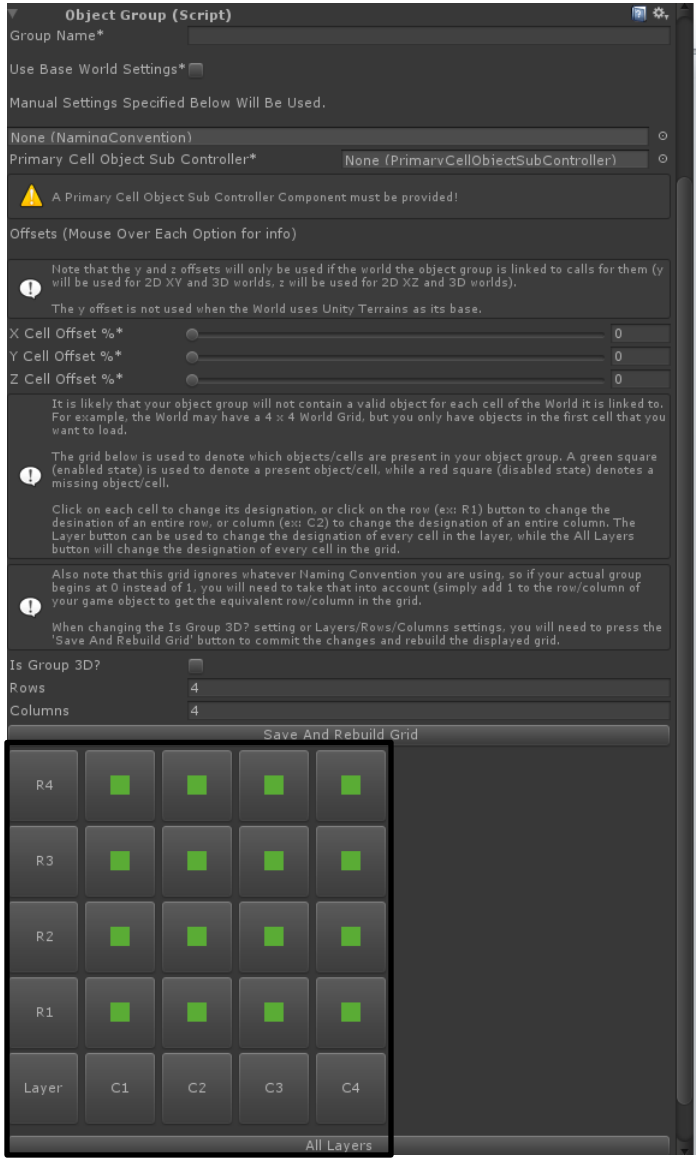
In order for the grid's rows/columns/layers to be updated, you must press the "Save And Rebuild Grid" button after modifying the Rows, Columns, and/or Layers fields.



Object Group Configuration

This visual grid represents your object group's empty/not empty status for each cell.

A green square represents a cell that has an object associated with it, while a red square represents a cell with no object.

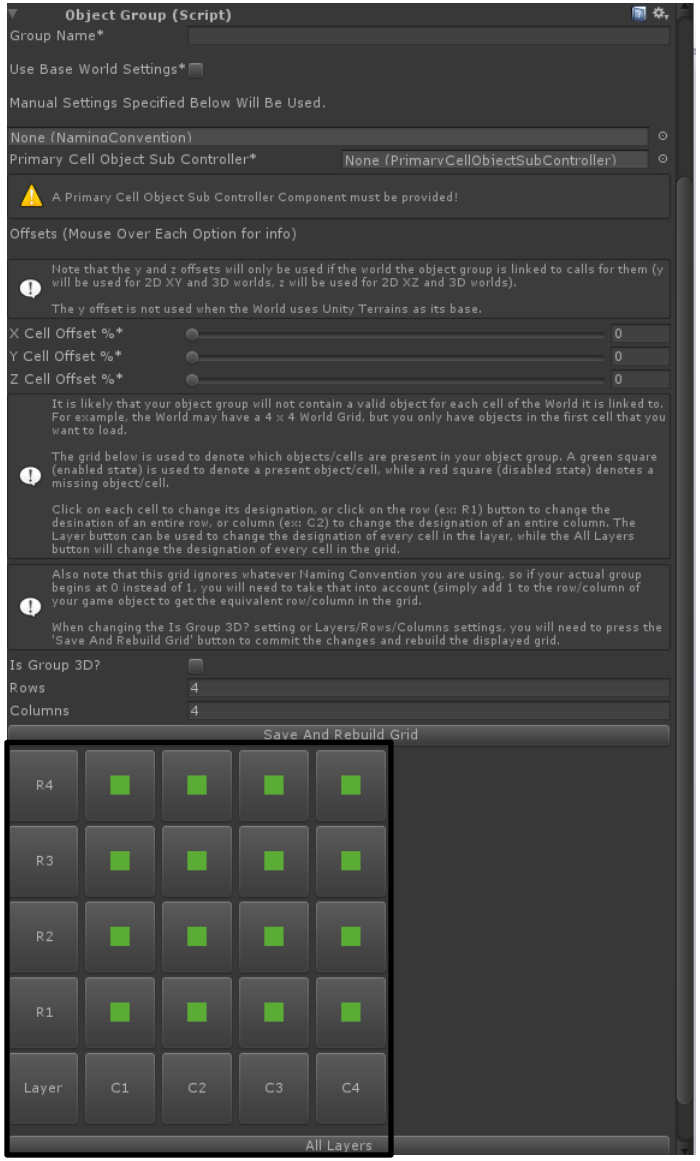


Object Group Configuration

It is unlikely that all of your cells will have objects associated with them. More than likely, only a few cells will be “not empty” (green square).

To change a single cell’s empty/not empty status, click on it.

You can also change an entire row or column’s empty/not empty status by clicking on that row/columns button (R1, R2, C1, etc.)



Object Group Configuration

You can change the empty/not empty status of all cells on a single layer by clicking the “Layer” button.

Object Group Configuration

You can also press the “All Layers” button to change the empty/not empty status of every cell in the object group, regardless of layer (not, layers only matter when the group is 3D).

Final Note

- If a cell on the World Grid associated with a World the Object Group is linked to is set to “Empty”, then it won’t matter what you set the cell on the Object Group to. That cell will be deemed as empty no matter what, and no object (neither main or an object group object) will be loaded for that cell.