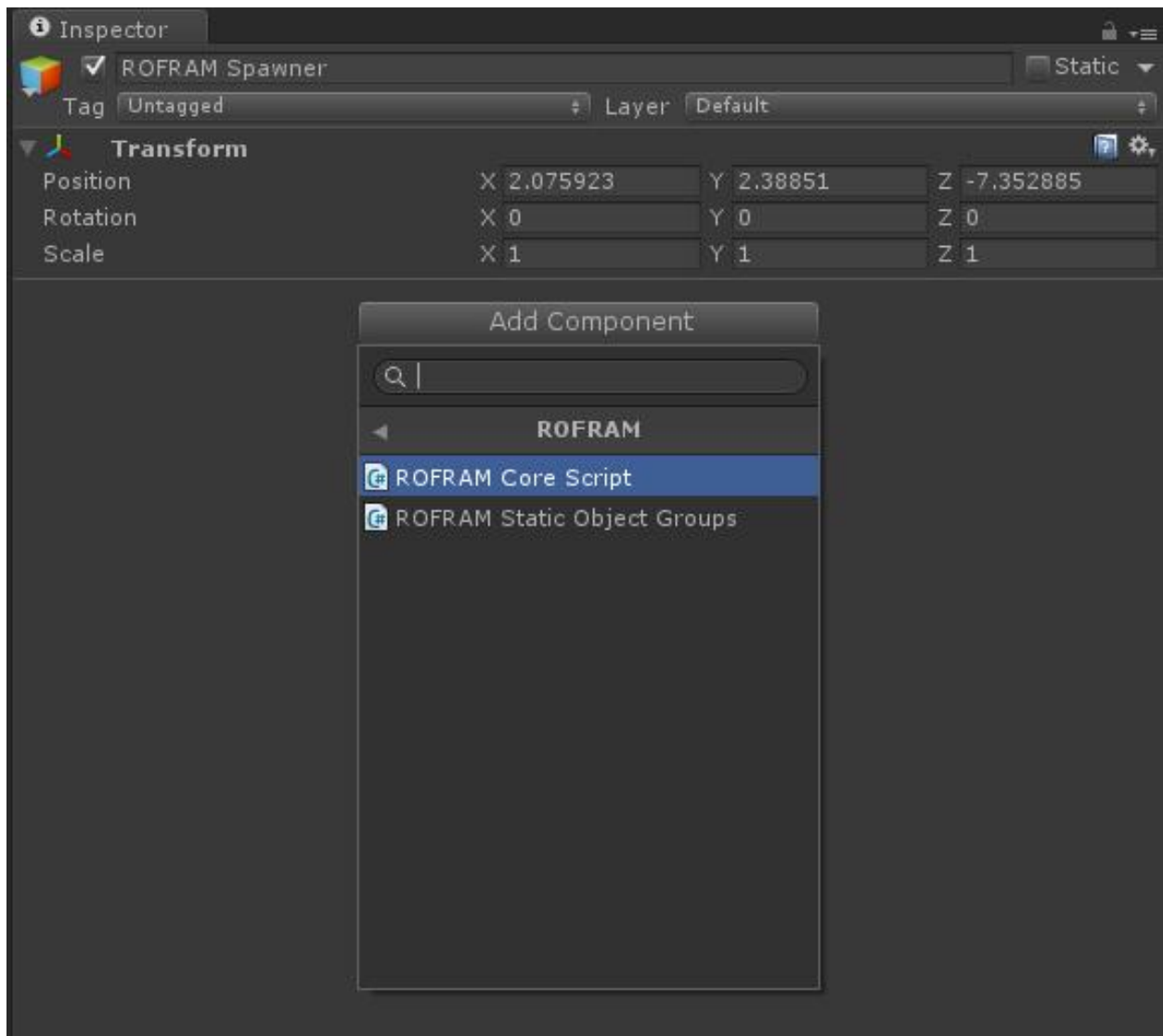


Randomized Object Framework 1.0.x

ROFRAM Setup Guide

Step 1:

Add the ROFRAM Core Script to your spawner. It can be found via search, or by clicking add component > ROFRAM > ROFRAM Core Script.



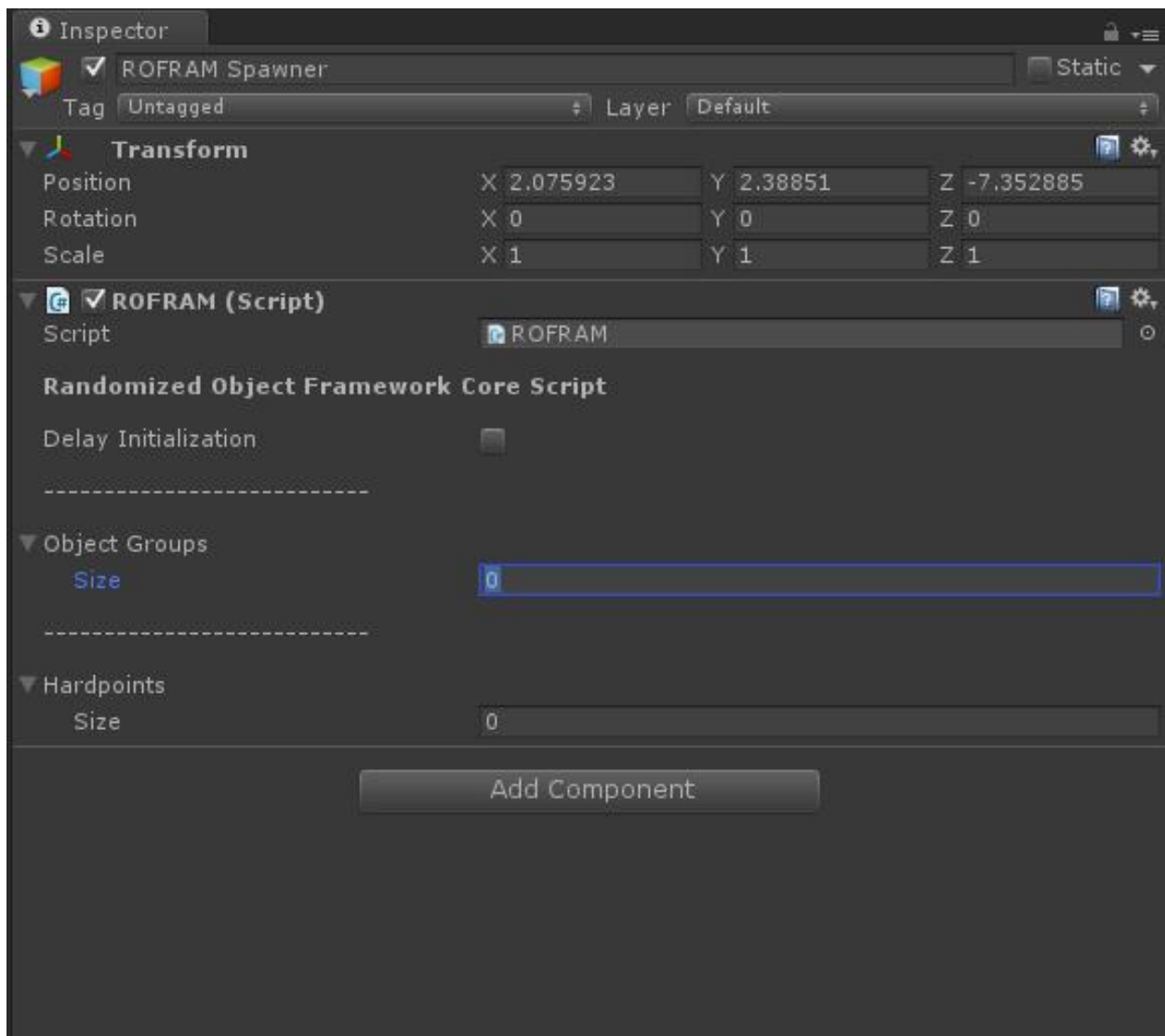
Step 1.1:

This is the blank, unpopulated ROFRAM script. You will see two main groups: Object Groups, and Hardpoints.

Object groups are the groups of prefabs that you want to randomly spawn into the game world.

Hardpoints are where objects from your defined object groups will spawn into existence.

Each of these are set up like a standard list. Enter the size of each list, equating to how many object groups and hardpoints you desire.



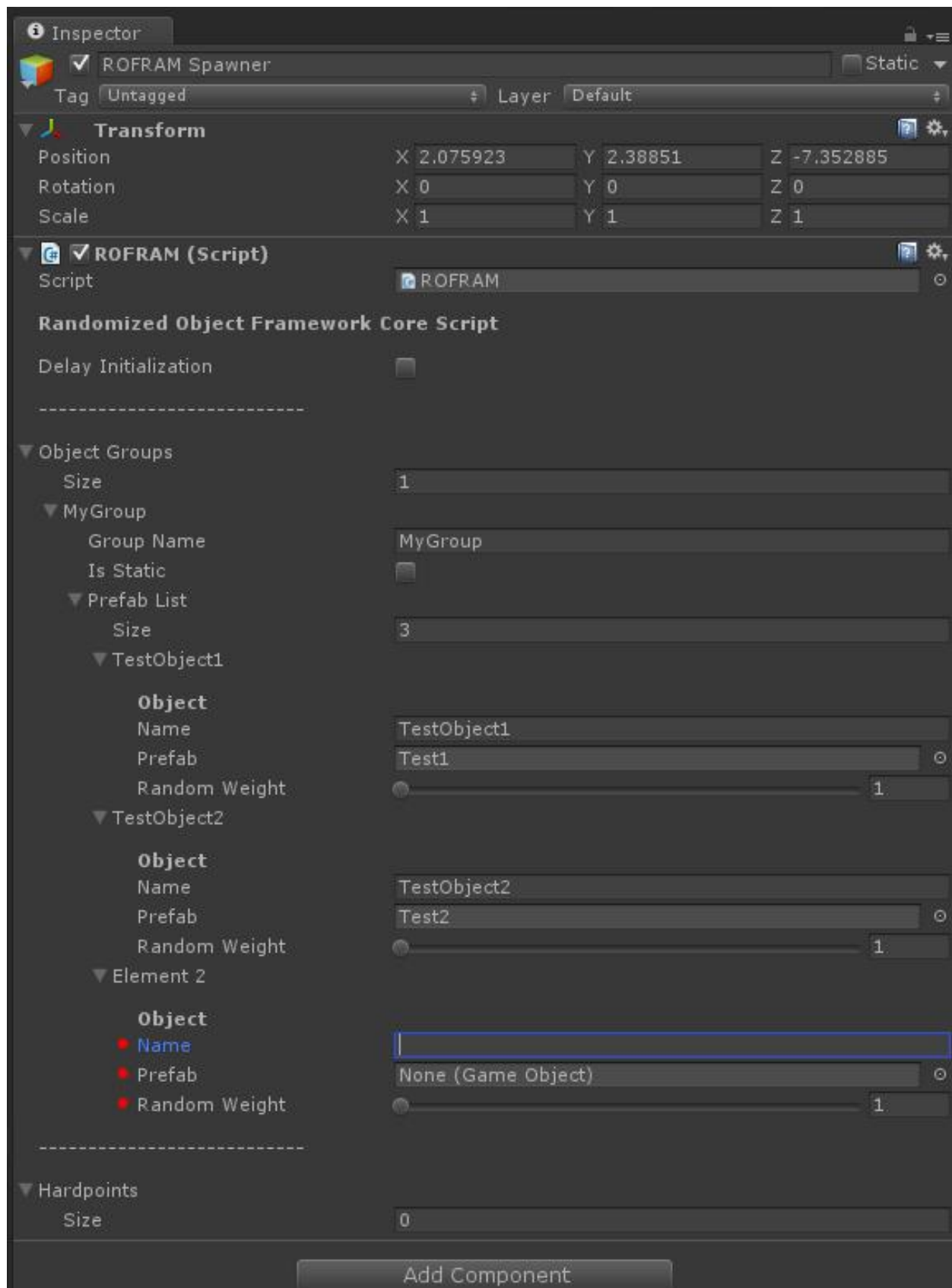
Step 2:

To define an object group, you will need to enter a few basic pieces of information.

Name: This is the internal name that your object group will be referenced by. It is extremely important. ROFRAM does not reference anything by indices, but rather by strings. This results in a more comprehensible interface, as well as increased flexibility when it comes to adding and removing elements.

Is Static: If this is checked, then this object group can be referenced by name from any other ROFRAM spawner. If you so desire, all of your object groups can be set up in a ROFRAM script with no hardpoints, and then referenced from ROFRAM scripts with no local object groups.

Prefab List: These is where you name your individual objects to be spawned, and drag and drop the prefabs that you wish to spawn. Again, the name for each prefab is how it is internally referenced. Be sure not to leave it blank if you intend on modifying any of these via your own code. You may also adjust the random weighting for each object. The higher the weight, the more likely it is to spawn over other objects.



Step 3:

The next step is defining the hardpoints. Hardpoints are simply the transform information from a Game Object. In most cases, your hardpoints will be blank game objects positioned where you want your objects to spawn.

Name: The internal name to reference this hardpoint.

Hardpoint Transform: Drag and drop the Game Object you want to use as your hardpoint here.

Group Name: Enter the name of the object group you want this hardpoint to choose objects from. The name must match either a local or static object group exactly. If a local object group has the same name as a static object group, the local object group will be used instead.

Use Children as Hardpoints: Checking this option will use all child Game Objects exactly one level below the Game Object you dragged in as a hardpoint. In essence, if you have this option checked, the Game Object you initially drag in will serve as the hardpoint container. This is a quick way to set up large amounts of hardpoints that all use the same object group. Please note that if this option is checked, the root hardpoint will not spawn an object, only its children will do so. Create another child with local position (0,0,0) if you need an object to spawn at the root's position.

Randomized Object Framework Core Script

Delay Initialization ☐

▼ Object Groups

Size

1

▼ MyGroup

Group Name

MyGroup

Is Static ☐

▼ Prefab List

Size

3

▼ TestObject1

Object

Name

TestObject1

Prefab

Test1



Random Weight



1

▼ TestObject2

Object

Name

TestObject2

Prefab

Test2



Random Weight



1

▼ TestObject3

Object

Name

TestObject3

Prefab

Test3



Random Weight



1

▼ Hardpoints

Size

3

▼ Hardpoint1

• Name

Hardpoint1

• Hard Point Transform

Hardpoint1 (Transform)



• Group Name

MyGroup

Use Children As Hardpoints ☐

Same Object For All Children ☐

Random X Rotation ☐

Random Y Rotation ☐

Random Z Rotation ☐

▶ Element 1

▶ Element 2

Step 4:

After filling in all the information required for your hardpoints, your ROFRAM spawner is all set and ready to go. When the Game Object ROFRAM is attached to is initialized, all hardpoints will randomly spawn objects from their assigned object groups (Provided you didn't check delay initialization. If so, you will have to initialize it via code).

▼ TestObject2

Object

Name

TestObject2

Prefab

Test2

○

Random Weight

1

▼ TestObject3

Object

Name

TestObject3

Prefab

Test3

○

Random Weight

1

▼ Hardpoints

Size

3

▼ TestHardpoint1

Name

TestHardpoint1

Hard Point Transform

Hardpoint1 (Transform)

○

Group Name

MyGroup

Use Children As Hardpoints

☐

Same Object For All Children

☐

Random X Rotation

☐

Random Y Rotation

☐

Random Z Rotation

☐

▼ TestHardpoint2

Name

TestHardpoint2

Hard Point Transform

Hardpoint2 (Transform)

○

Group Name

MyGroup

Use Children As Hardpoints

☒

Same Object For All Children

☒

Random X Rotation

☐

Random Y Rotation

☐

Random Z Rotation

☒

▼ TestHardpoint3

Name

TestHardpoint3

Hard Point Transform

Hardpoint3 (Transform)

○

Group Name

MyGroup

Use Children As Hardpoints

☐

Same Object For All Children

☐

Random X Rotation

☒

Random Y Rotation

☐

Random Z Rotation

☐

Add Component

Misc:

Every element you can modify in the inspector has a tooltip. If something doesn't make sense, hold your mouse over the element for a moment.

The ROFRAM core script has several helper functions that allow you to do things like dynamically create and initialize hardpoints on the fly, modify the random weights of objects, or add new objects to object groups.

The "ROFRAMStaticObjectGroups" script has static variations of several of those helper functions.

If you still have questions, feel free to email me at: brettg94@live.com

Thanks!