

Scene Object Editor Tool Guide

Introduction

This tool is used for generating scene object configurations files to achieve dynamic deployment of a scene template.

How to Set Up

1. You can find a prefab in the prefab folder called **SceneObjects**, drag that into the scene. Under **SceneObjects**, you will find an empty object named **NPCSpawner**, and an empty object named **DynamicObject**. If any of these objects are missing from the hierarchy, create a empty object with the exact naming and add it to the hierarchy as shown in *1.0*
2. **SceneObjects** should have a script called [GenerateObjectConfigFile.cs](#), which is used

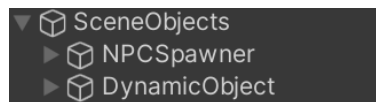


Figure 1.0

to generate the configuration file for the current setup in the **DynamicObject** and **NPCSpawner**.

3. To set up the **NPCSpawner**, you will need to create sections from A to Z as needed and

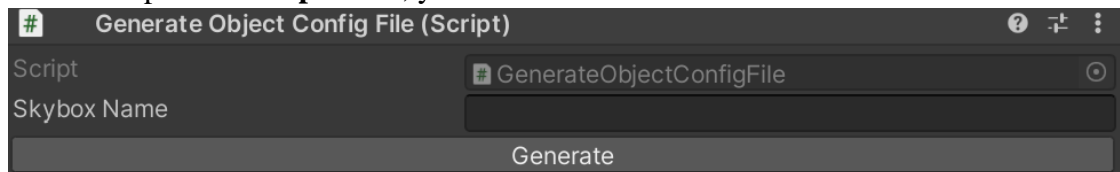


Figure 1.1

under each section A to Z, it will include individual positions starting from 1 as shown below. Make sure to attach [NPCSceneTool.cs](#) to add the positions (marked as red in *1.2*) in the **NPCSpawner**.

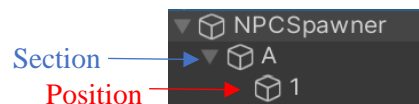


Figure 1.2

4. To set up the DynamicObjects, it is similar to setting up the NPCSpawner where you will need to create sections from A to Z and add individual position under sections A to Z as needed (Shown in 1.3) Make sure to attach [SceneObjectTool.cs](#) to all the position added, otherwise it will not be included in the generated object configuration JSON file.

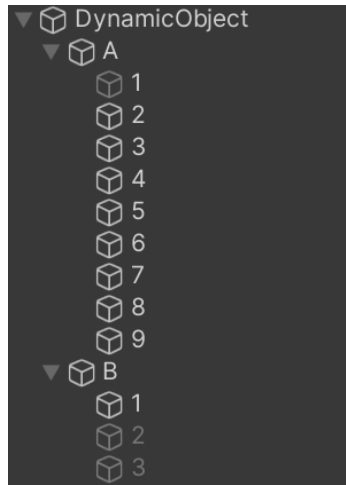
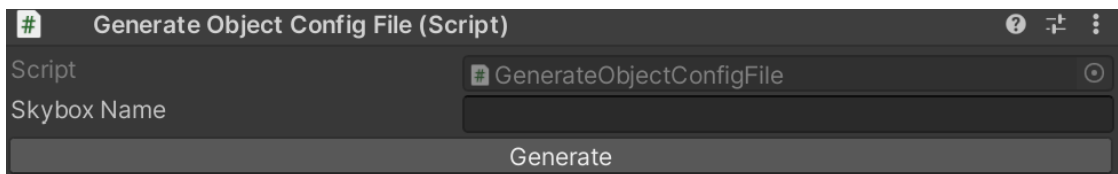


Figure 1.3

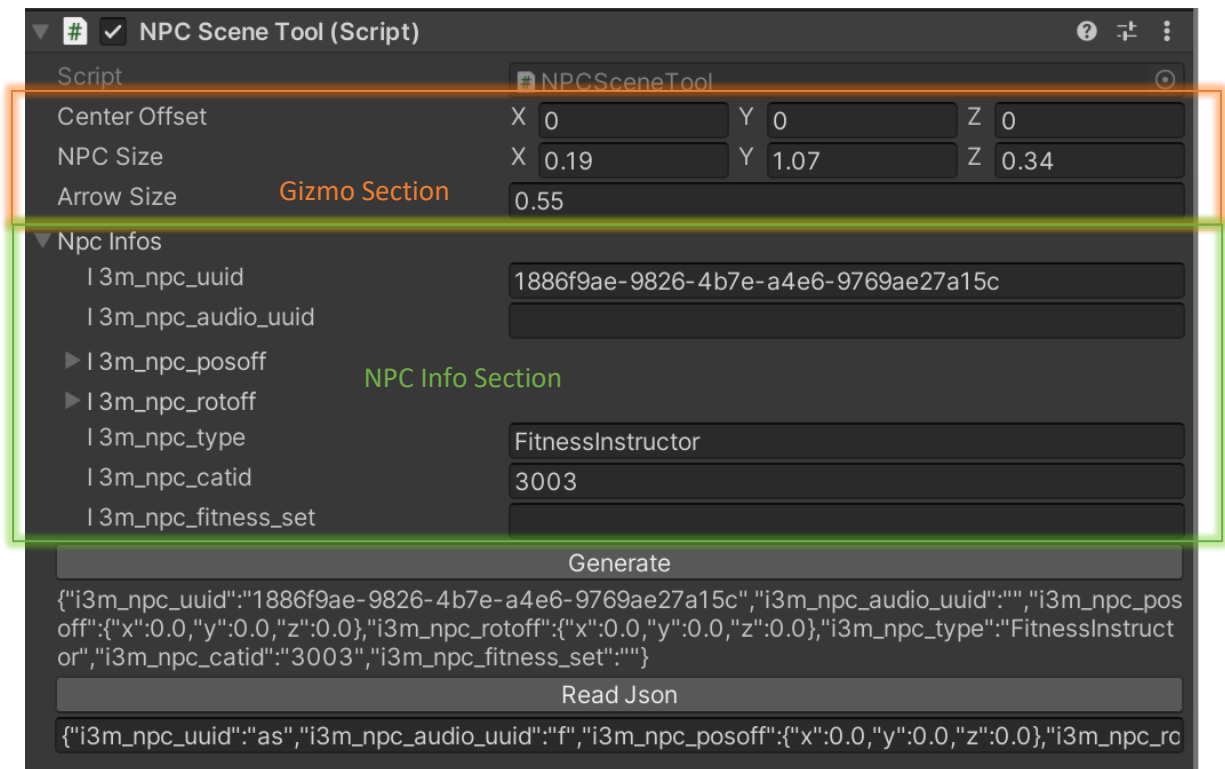
How Each Script Works

[GenerateObjectConfigFile.cs](#)

1. This script should only be attached to the game object called SceneObjects, and it is used to gather all the information from its child object and generate an object configuration file.
2. Variables
 - a. **Skybox Name:** if it is needed to change the skybox for this template, include the name of the skybox here. (Note: it will only switch the skybox if it is founded in core project)
 - b. **Generate:** click this button to generate the object configuration file.



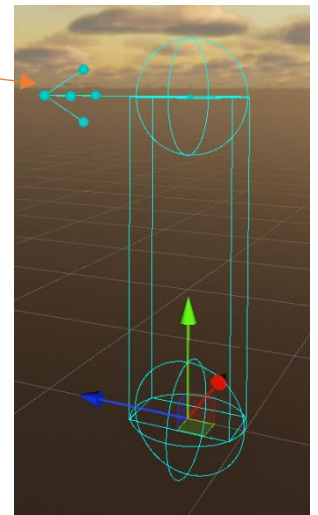
NPCSceneTool.cs



1. This script is attached to all the position objects inside of **NPCSpanwer**, and it is used to show NPC gizmo, input NPC information, generate NPC information in JSON format at this position, and read JSON format NPC information.

2. **Gizmo Section** is used to adjust the gizmos displayed in the scene when selected,
 - a. **Center Offset** could be used to adjust the center of the gizmos, by default the center of the gizmo is at their feet.
 - b. **NPC Size** is used to adjust size of the overall gizmos.
 - c. **Arrow Size** is used to adjust the length of the look vector.

Look At Vector



3. **NPC Info Section** include all the information that will be included in the configuration file, will need to be filled out to be part of the file.
 - a. **I3m_npc_uuid** : the UUID for the NPC at this position (Required).
 - b. **I3m_npc_audio_uuid** : the audio UUID for the NPC at this position.
 - c. **I3m_npc_posoff**: position offset for this NPC if any (additional to the position vector of the game object it's attached to).

- d. **I3m_npc_rotoff**: rotation offset for this NPC if any (additional to the rotation vector of the game object it's attached to).
 - e. **I3m_npc_type**: type of this NPC
 - f. **I3m_npc_catid**: Catalog ID for this NPC (Required).
4. **Generate Button** is used to generate a block of JSON string with the information given from the NPC Info Section.
 5. **Read Json Button** is used to read in a block of JSON string generated from previous section, and change the NPC Info Section accordingly. Use this button if you want to duplicate the information at one position to another position to avoid manually entering the same information one more time.

SceneObjectTool.cs

1. SceneObjectTool.cs is similar to NPCSceneTool.cs but with few differences. This script need to be attached to all the position objects in DynamicObject section in order to be included into the generated configuration file.
2. **Scene Object Information**
 - a. **Chosen Index**: This number represents which object is selected and displayed in the scene starting from index 0. Changing this variable will result in a different set up of the same scene template. Ideally, after entering all the information into scene objects list, designer will only need to change this variable for a customized scene.
 - b. **Scene Objects**: This contains a list of scene objects that are available to be displayed at this position, more can be added to the list by clicking the + sign, or if want to remove a object from the list, first select the scene object block, then click the – sign.
 - c. **Scene Object Information**: it contains all the information needed for an object to be deployed into the scene
 - i. **I3m_object_catid**: object catalog id (Required).
 - ii. **I3m_object_uuid**: object UUID (Required).
 - iii. **I3m_object_posoff**: add position offset in addition to the position of the empty game object this script is attached to.
 - iv. **I3m_object_rotoff**: add rotation offset in addition to the rotation of the empty game object this script is attached to.
 - v. **I3m_object_type**: type of this object.
 - vi. **I3m_object_color**: color variable for this object if needed, x represents r, y represents g, z represents b.
 - vii. **I3m_need_lod**: check this if need to add dynamic LOD

Chosen Index: 0

Scene Objects: 2

Index 0

l3m_object_catid	202
l3m_object_uuid	d702869a-5fea-41f4-ad05-049b39ae2ea4
l3m_object_posoff	
X	0
Y	0
Z	0
l3m_object_rotoff	
X	0
Y	0
Z	0
l3m_object_type	Table
l3m_object_color	
l3m_need_lod	<input type="checkbox"/>

Index 1

l3m_object_catid	202
l3m_object_uuid	26d87fd1-0204-403f-ba6f-6c3e3ee0ae51
l3m_object_posoff	
X	0
Y	0
Z	0
l3m_object_rotoff	
X	0
Y	0
Z	0
l3m_object_type	Table
l3m_object_color	
l3m_need_lod	<input type="checkbox"/>

Scene object information section

3. **Gizmos Setting** : this section is for changing the gizmo displayer in the scene

Gizmo Setting

Center offset: X 0 Y 0 Z 0

Type of Object: Table

Table Leg Area: X 0.15 Y 0.15 Z 0.7

Table Surface Area: X 0.5 Y 0.5 Z 0.02

- Center offset**: could be used to adjust the center of the gizmos.
 - Type of Object**: There are four set of gizmos you could use represent the object, such as default cube, default sphere, table, and chair. Change this will provide you with different options to tweak with.
4. **Generate Button**: similar to NPCSceneTool.cs, this button will generate a block of code with information provided in the scene object information section.

5. **Read Json Button:** Also similar to NPCSceneTool.cs, this button will read in a block of code from the input field below and change the information in scene object information section. Use this button if you want to duplicate the information at one position to another position to avoid manually entering the same information one more time.