# **Snappables Text Documentation**

If you prefer a video tutorial, a link to one is Here.

Questions, Feedback, Issues or anything else? Feel free to contact me by joining my <u>Discord</u> <u>server</u> or emailing me at <u>camobiwon@yahoo.com</u>

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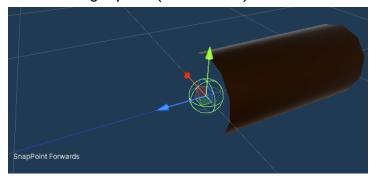
**Common Problems** 

### Installation

- In your project, go to Window > Package Manager
- Set the Packages mode to My Assets
- Search for or find the Snappables package
- (If it is not downloaded, click Download in the bottom right)
- With the downloaded package, click Import in the bottom right
- Ensure all items are checked and click Import
  - If you do not wish to include the example assets, uncheck the Examples folder
- Snappables should now be installed

## Setting Up Your Prefabs

- Find your existing prefabs of modular assets that you have
- · Select one of them and open it
- Create a new empty GameObject as a child of the prefab
- Add the "Snap Point" component to the newly created GameObject
- A blue line will appear indicating the forward direction of the point (Z forward).
   Rotate the GameObject to where the "SnapPoint Forward" line is facing outwards from the target point (Seen below)



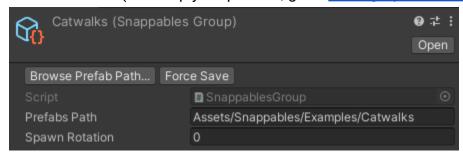
- Additionally, make sure additional Snap Points are setup with the same upwards direction for consistent placement
- If you wish to allow multiple placements on this snap point, enable the Override Link option



- You may duplicate this point GameObject if you have multiple points on your object you would like to set up
- Optional but may be helpful: If you are setting up objects of the same type and can easily align them in editor, you can additionally bring a new object in, duplicate the original object's Snap Point, rotate 180, and drag it over to the new object

### Setting Up The Editor

- Editor settings will mostly be automatically configured or pre-setup, however we need to setup what is called a "Group"
  - A Group is a collection of prefabs of a specific type (Ex: Pipes, Catwalks, Walls, etc...)
- To create a group, at the top of the Unity editor go to Assets > Create > ScriptableObjects > Snappables Group
- In the group, use the Browse Prefab Path button to find the folder of your setup modular assets (To setup your prefabs, go to Setting Up Your Prefabs)

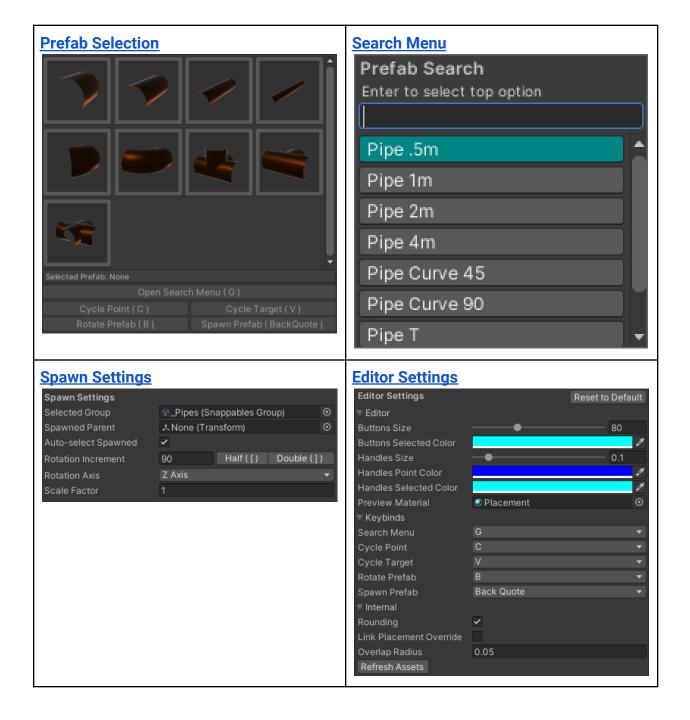


- You can disregard Spawn Rotation for now, unless you have spawning rotation issues later (See: <u>Common Problems</u>)
- The group should now be setup, you can repeat this process for as many groups as you desire

### **Using The Editor**

The Snappables Editor is broken up into 4 main sections. All items are labeled with tooltips by hovering over them if you want to quickly see what they do later.

#### The Snappables editor window can be opened from Tools > Snappables



### **Prefab Selection**

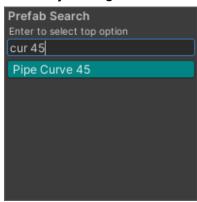
The prefab selection menu is where you will be selecting prefabs to place via image previews, or moving the currently selected prefab preview with the selection buttons.

- The prefab grid list is a full list of all the placeable prefabs from the current group with an image to see which item it is
  - Clicking a button from the grid will select that respective prefab
  - Clicking the same selected button will spawn the selected prefab
- The Selected Prefab text shows which prefab is currently selected from the grid
- The selection buttons manipulate the existing prefab preview, these can be triggered by clicking the button, or respective keybind
  - Cycle Point will switch which point is currently active on the selected GameObject
  - Cycle Target will switch which point on the prefab preview is snapped to the current selected point
  - Rotate Prefab will rotate the prefab preview around the Z axis of the currently selected point
  - Spawn Prefab will spawn the selected prefab at the prefab preview transform

### Search Menu

The search menu is a quick way to search for the exact prefab you want from the current group. It can be opened with a keybind (Default "G") or with the button above the other selection buttons in the Prefab Selection area.

- The search menu uses a simple but effective search algorithm to search for the desired prefab by splitting the search query by spaces with a pre-sorted list.
  - With this algorithm, you can type "cat broke" to get "Catwalk Broken" as a result for example
- The search menu also highlights the top option for selection, which you can select by hitting Enter



## Spawn Settings

The Spawn Settings allow control over how prefabs are spawned, this allows for better control of creation. They are not persistent so they do not save.

- Selected Group is the objects group that will be used to spawn / be selected
- **Spawned Parent** creates all spawned prefabs as a child under this transform, it also can be the starting point for creation of beginning prefabs (As long as the parent is selected / assigned)
- Auto-select Spawned selects the next spawned prefab, this is useful to disable if
  for instance you have the parent selected, and want to continuously place along
  all possible points of child objects
- **Rotation Increment** is the value of how much the prefab preview will be rotated around the current point on the selected Rotation Axis when hitting Rotate Prefab
- Rotation Axis determines the axis of rotation when hitting Rotate Prefab, this is defaulted to Z whenever you change groups
- Scale Factor determines the scale multiplier of the spawned prefab

### **Editor Settings**

The Editor Settings are important settings to the Snappables Editor itself. They are separated into 3 main categories.

All settings are persistent and save (Besides the Internal tab)

### **Editor**

- Buttons Size determines how large each prefab grid button is
- Button Selected Color defines the selected color of the selected prefab in the prefab grid, as well as the selected color in the search menu
- Handles Size is how large the clickable snap point boxes are in the scene view
- Handles Point Color determines the color of the snap point handle boxes in scene view
- Handles Selected Color is the color of the singular selected snap point box in scene view
- Preview Material is the material used for the prefab preview

#### **Keybinds**

- Search Menu determines the bind for opening the search menu. Default: G
- Cycle Point determines the bind for cycling the current point on the currently selected object. Default: C
- Cycle Target determines the bind for cycling the target point on the prefab preview. Default: V
- Rotate Prefab determines the bind for rotating the prefab preview around the Rotation Axis of the currently selected point. Default: B
- **Spawn Prefab** determines the bind for spawning the currently selected prefab at the prefab preview. Default: 1

#### Internal

These settings shouldn't have to be modified under normal conditions, and do not save.

- Rounding enables rounding the placed prefab's position, rotation, and scale to the nearest hundredth decimal place to avoid floating point imprecision
- Link Placement Override allows placement on already placed points
- Overlap Radius determines the Physics. Overlap Sphere radius for linking touching points when spawning

#### Common Problems

- The placement shader is pink
  - You are either on the standard render pipeline or do not have the shader graph installed. I would recommend you create a new material for placement (Ideally a transparent material with bright colors)
- No prefabs are showing up in the grid
  - Ensure the <u>group path is set correctly</u>, as well as prefabs in that group path are <u>properly setup</u>
- My prefabs are always starting upside down or sideways
  - o In the group settings, set the Spawn Rotation to the value it is offset
- When I hit Rotate Prefab it is not rotating in the way I want
  - Change the Rotation Axis in <u>Spawn Settings</u>
- When I load a new scene with the window docked, my icons break
  - The Snappables window was designed to be disposable (Meaning opening it on a per-use basis, not leaving it docked). If I can find a fix for this in the future I will fix it
- I don't like the default controls
  - You can change them in the keybinds tab!

Running into any other issues? Contact me in my server