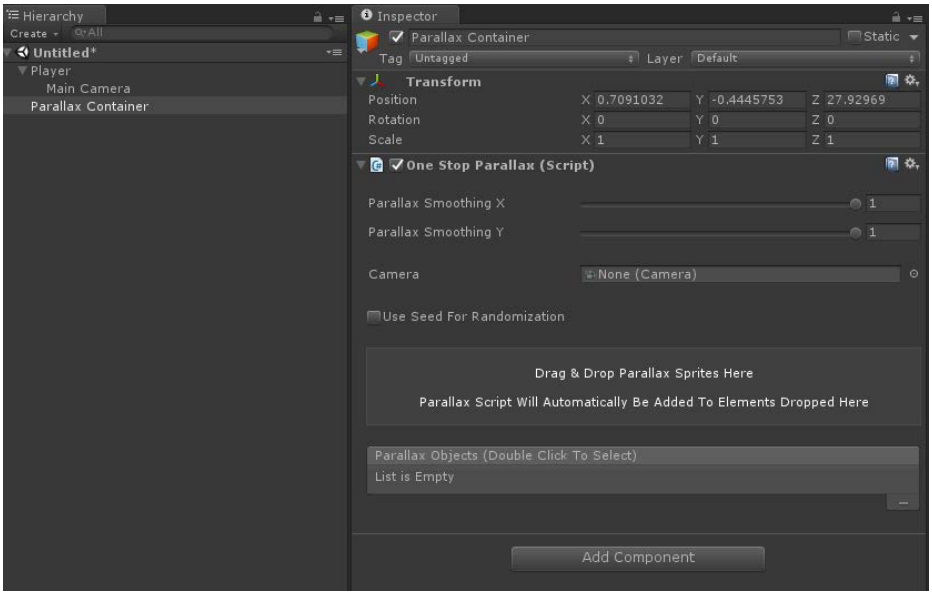
FEATURES

- Easy to set up 2D parallax scrolling with drag & drop
- Simply change the Z-index of your layers to change the parallax speed
- Tooltips for every field in the custom inspectors
- Both global and per-layer parallax smoothing allowing you to tweak each layer to perfection
- Ability to set a seed for your random placement so elements are consistently placed between play sessions
- X and Y parallaxing with the ability to turn either one off per layer
- Infinitely tile vertically, horizontally, or both at the same time
- Ability to set a static distance between tiles or randomize the distance between two values
- Set random Y offset for horizontal tiling and set random X offset for vertical tiling for a natural, organic feel to random object placement
- Set horizontal and vertical speed per layer to move layers across the screen
- Random object history along with the ability to set the number of positions remembered or even turn off the feature entirely to save memory
- Edit multiple layers at the same time
- Fully commented source code
- Example scenes

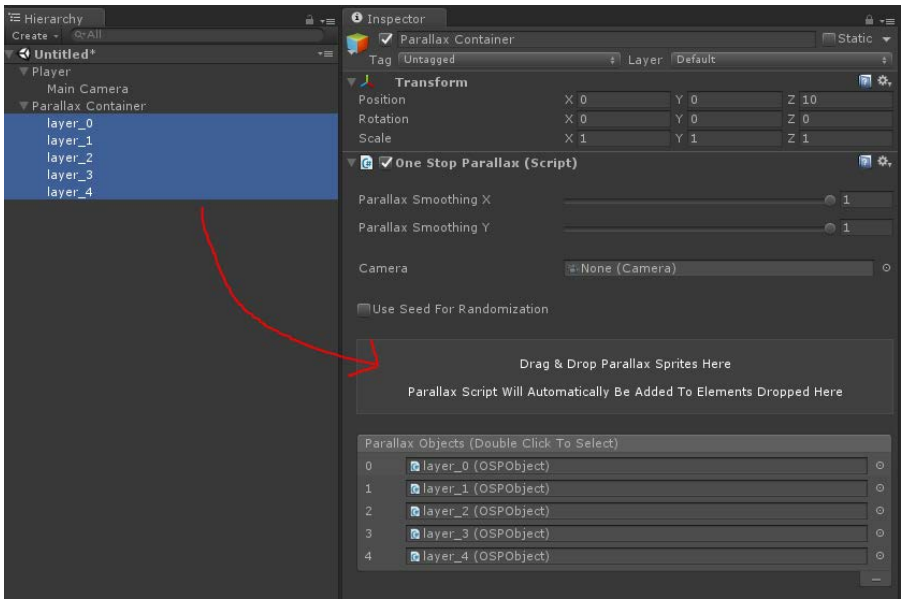
QUICK SETUP

- Create a new GameObject in your scene, click the Add Component button, and add the *One Stop Parallax* script to it.

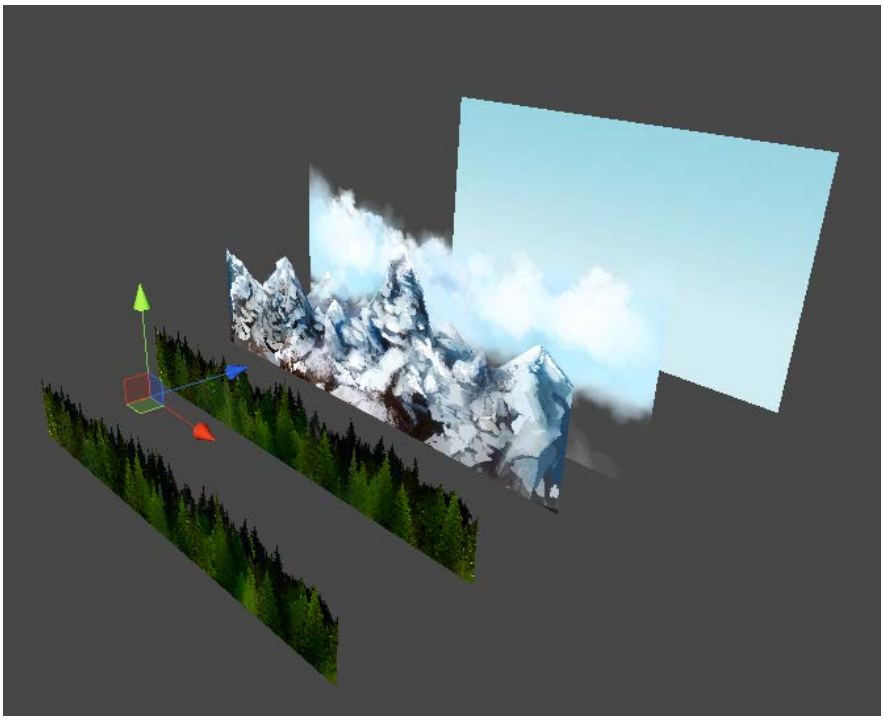


- Drag your camera into the *Camera* field.
- Drag your sprite layers into the parallax container, and then drag them from the scene hierarchy into the Drag & Drop area on your *One Stop Parallax* object.

- The *OSPObject* script will automatically be added to your Sprite GameObjects.



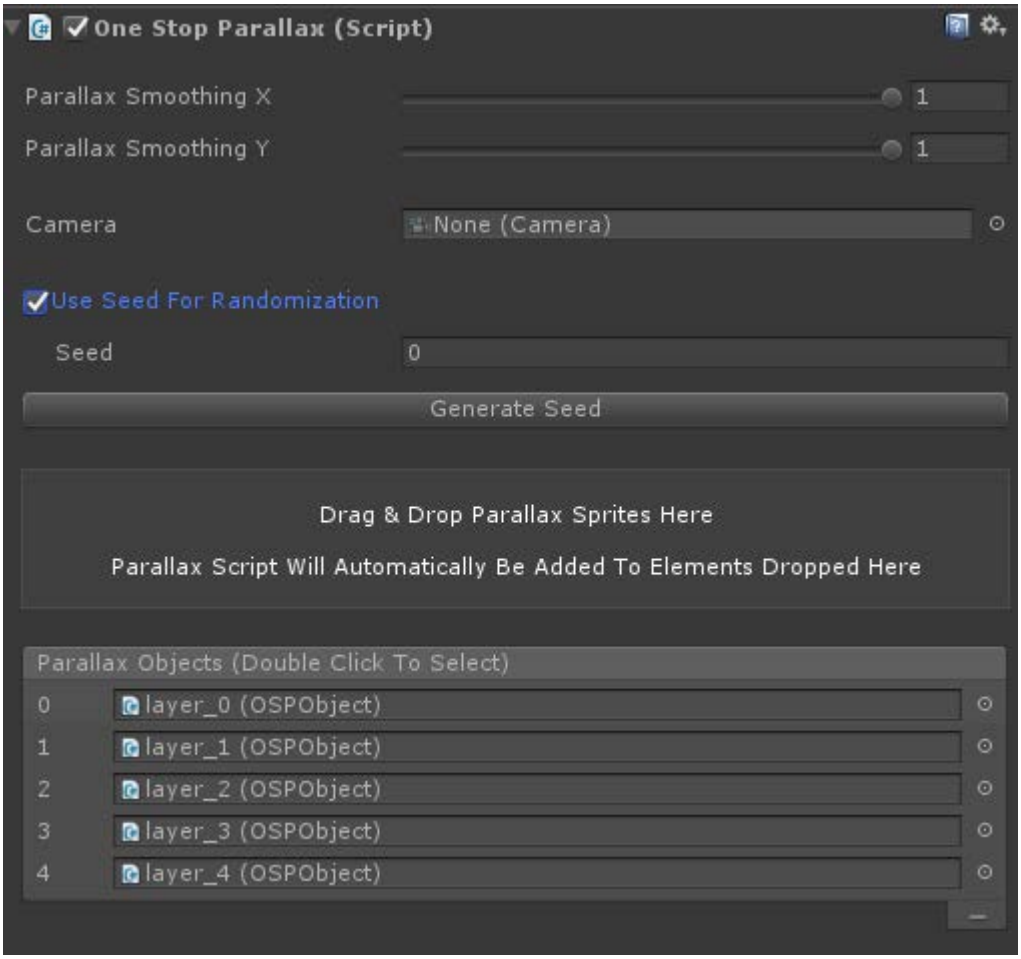
- Now move your sprite layers along the Z axis to the desires distances and hit play!



- Parallax on the X axis is already enabled by default. If you'd like to automatically tile your layers or customize them, check out the detailed explanation of each feature below!

DETAILED FEATURE LIST

One Stop Parallax Container Script



- *Parallax Smoothing X*
    - The global amount of smoothing for parallax movement on the X axis. This needs to be between or equal to 0 and 1. At zero, all layers will no longer have parallax movement on the X axis.
- *Parallax Smoothing Y*
    - The global amount of smoothing for parallax movement on the Y axis. This needs to be between or equal to 0 and 1. At zero, all layers will no longer have parallax movement on the Y axis.
- *Camera*
    - This is a reference to the main camera for the game.

- *Use Seed For Randomization*
    - There is no true randomness for random number generation in programming. A Seed is a number used to initialize a random number sequence. Normally, it will use something like the game's delta time as a seed. Using the same number to seed a sequence will result in the same exact sequence every time. For example, a seed of 121 might produce the sequence 1, 5, 8, 3, 10 for numbers between 1 and 10. If we start the game over again, it will produce the exact same sequence of numbers if we use the same seed. This allows us to have random numbers, but keep the same sequence of them for things like generating random tree placements. Using a seed, you'll get random positions for your trees, but the trees will all be in the same places for everyone who plays your game.
- *Seed*
    - This is the integer number used to seed a random number sequence.
- *Generate Seed*
    - This button will generate a random seed for you.
- *Drag & Drop Area*
    - Drag any sprite GameObjects here that you want to use parallax for. Any GameObjects dragged here will have a *Sprite Renderer* and an *OSP Object* script added if they don't already have one.
- *List of layers*
    - This shows all objects in your parallax layer list. You can double click an element to jump to the GameObject. You can remove an element by selecting the index number on the left and then clicking the minus button on the bottom right.

One Stop Parallax Layer Object Script

- *Use X Parallax*
    - This will enable or disable parallax movement on the X axis for this layer.

- *Parallax Smoothing X*
    - The amount of smoothing for parallax movement on the X axis for this layer. This needs to be between or equal to 0 and 1. At zero, this layer will no longer have parallax movement on the X axis.
- *Use Y Parallax*
    - This will enable or disable parallax movement on the Y axis for this layer.
- *Parallax Smoothing Y*
    - The amount of smoothing for parallax movement on the Y axis for this layer. This needs to be between or equal to 0 and 1. At zero, this layer will no longer have parallax movement on the Y axis.
- *Auto Tile Horizontally*
    - Checking this will infinitely tile this sprite horizontally.
- *Horizontal Spacing*
    - This will set the amount of horizontal space between tiled sprites.
- *Randomize Distance Between Tiles*
    - If checked, the amount of horizontal space between tiled sprites will be random between two provided numbers. The *Horizontal Spacing* value will have no effect on the spacing if this is checked.
- *Minimum X Distance*
    - The minimum random horizontal space between tiled sprites. This value must be less than the *Maximum X Distance* and can't be less than zero.
- *Maximum X Distance*
    - The maximum random horizontal space between tiled sprites. This value must be greater than the *Minimum X Distance* and can't be less than zero.

- *Offset Y Value*
    - If checked, the Y position of the horizontally tiled sprites will be offset between two random numbers. In other words, this will allow you to vary the vertical placement of your tiles so they can randomly be higher or lower.
- *Minimum Y Offset*
    - This is the minimum amount of Y offset for your tiled sprites. This value must be less than the *Maximum Y Offset* and CAN be less than zero. A negative value means that the Y position will be lowered.
- *Maximum Y Offset*
    - This is the maximum amount of Y offset for your tiled sprites. This value must be greater than the *Minimum Y Offset* and CAN be less than zero. A negative value means that the Y position will be lowered.
- *Auto Tile Vertically*
    - Checking this will infinitely tile this sprite vertically.
- *Vertical Spacing*
    - This will set the amount of vertical space between tiled sprites.
- *Randomize Distance Between Tiles*
    - If checked, the amount of vertical space between tiled sprites will be random between two provided numbers. The *Vertical Spacing* value will have no effect on the spacing if this is checked.
- *Minimum Y Distance*
    - The minimum random vertical space between tiled sprites. This value must be less than the Maximum Y Distance and can't be less than zero.

- *Maximum Y Distance*
    - The maximum random vertical space between tiled sprites. This value must be greater than the *Minimum Y Distance* and can't be less than zero.
- *Offset X Value*
    - If checked, the X position of the vertically tiled sprites will be offset between two random numbers. In other words, this will allow you to vary the horizontal placement of your tiles so they can randomly be more to the left or right.
- *Minimum X Offset*
    - This is the minimum amount of X offset for your tiled sprites. This value must be less than the *Maximum X Offset* and CAN be less than zero. A negative value means that the X position will be more to the left.
- *Maximum X Offset*
    - This is the maximum amount of X offset for your tiled sprites. This value must be greater than the *Minimum X Offset* and CAN be less than zero. A negative value means that the X position will be more to the left.
- *Has Horizontal Speed*
    - Checking this will cause your sprite to automatically move horizontally even when the camera/player is still. This is great for things like clouds, trains, etc. that need to move on their own.

- *Horizontal Speed*
    - The speed that your sprite moves at. A negative value will move the sprite left, and a positive value will move the sprite right.
- *Has Vertical Speed*
    - Checking this will cause your sprite to automatically move vertically even when the camera/player is still. This is great for things like bubbles, balloons, etc. that need to move on their own.
- *Use Random History*
    - This is checked by default. Checking this will store your random positions for your sprites so that your random objects will always appear in the same place as the player moves back and forth through your level. This is good for tree and vegetation placement where you want your trees to consistently show up in the same places.
    - Unchecking this will randomly place all newly added tiles so that they are in different positions each time. This is good for things like clouds where you don't care if they always show up in the same spots.
- *Max Random History Elements*
    - This is the number of elements to remember in your random history. You can tweak this for the size of your level to save memory if you only need a handful of random positions remembered.