Stylized Godrays instruction

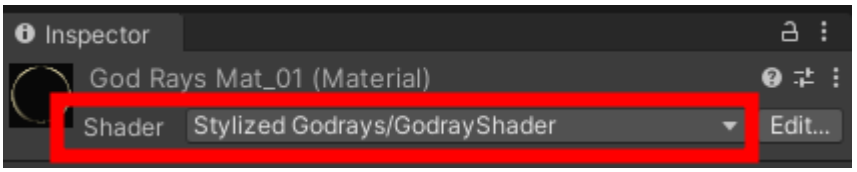
Installation

1. Import package to your project.

2. Open URP or HDRP installer package depends on your pipeline and import it to your project. You can find it in the Assets/TheLazzyKnight/Stylized Godrays folder.

How to build you own ray sheaf prefab

3. Open “Shade&Mat” folder from the package. Choose “GodRaysMat_01” and make sure it has the GodrayShader. If not, click on the “Shader” tab of the material in the inspector and choose “Stylized Godrays - GodrayShader”.



4. To create new sheaf rays prefab go to the “prefabs” folder and move GodRayPlane.prefab to your scene. If the ray on the plane appears too transparent, make “Camera Fade Distance” and “Brightness range” properties in the “GodRaysMat_01” material closer to zero.

5. Choose the ray texture you like from the Texture folder of the Package in the “GodRaysMat_01”.

6. Scale GodRayPlane until you are happy with the result. **NOTE! Leave the X and Z scale values the same or closer to each other. The X value affects the size you will see when you look at the front of the plane and the Z affects the size you will see from the side of the plane. If you want to get the same size, leave these values identical, if you want to get a little difference, make values not the same but closer to each other to get a smooth transition from one size to another.**

7. Duplicate the plane several times, change position and scale to form a sheaf of rays.

8. Adjust the properties of the material as you like. (List of the properties with the explanations at the end of the document).

9. If you want to add a volume duplicate “GodRaysMat_01” and choose the texture like Godray_03 or _04, or GodrayB_02 / _03 / _04. Choose color less brighter than in the first material. Create a new plane, assign new material, make it wider than other planes and put some copies of it in your sheaf.

10. Select all planes in your sheaf then drag and drop it to the prefabs folder. Now you have a rays sheaf prefab that you can use in your scenes.

Shader properties

- **Ray texture** - the texture of the ray.
- **Color** - determines which color will be used for the rays.
- **Brightness Range** - depending on ray position it gets random brightness. 0 - means all rays do not have random brightness. 1 means rays can get brightness up to 0. *
- **Brightness Seed** - changes seed of the “Brightness range” property. *
- **Dynamic Fade Strength** - makes rays fade in time. 0 means no fade. 1 means fade to complete transparency. *
- **Fade Speed** - controls the speed of Dynamic Fading. *
- **Depth Fade** - creates smooth transition to transparency in zones where rays intersect with other objects.
- **Camera Fade Distance** - when the camera gets closer to the rays it fades out to prevent hard clipping. The more value of this parameter the earlier rays begin to fade.
- **Camera Fade Parallel** - this option needs to prevent the flat look of planes and keep the illusion of volume when the camera looks parallel to the rays. The higher this parameter the earlier planes start to fade when the camera gets closer to its parallel direction (0 means no fade). This value is different for HDRP and URP. For the HDRP it's approximately 4 times lower than for URP.
- **Fog Direction** - defines direction of the fog in world space coordinates. Using X, Y and Z vectors.
- **Fog SIze** - defines the size of the fog in world space dimension.
- **Fog Speed** - defines speed of the fog.
- **Fog influence** - defines how strong fog influences the rays.

- **Fog Color** - determines which color will be assigned to the fog.
- **Fog Texture** - determines which texture will be used for the fog.
- **Follow Camera** - determines if the planes will rotate i's face to the camera.
- **Orthographic Camera** - check it if you use the orthographic camera to make depth fade calculate right

  NOTE! You can get access to all parameters of the materials through the code addressing each parameter with "_" in front of the parameter name and each space between words. **Ex. _Fade_Speed**

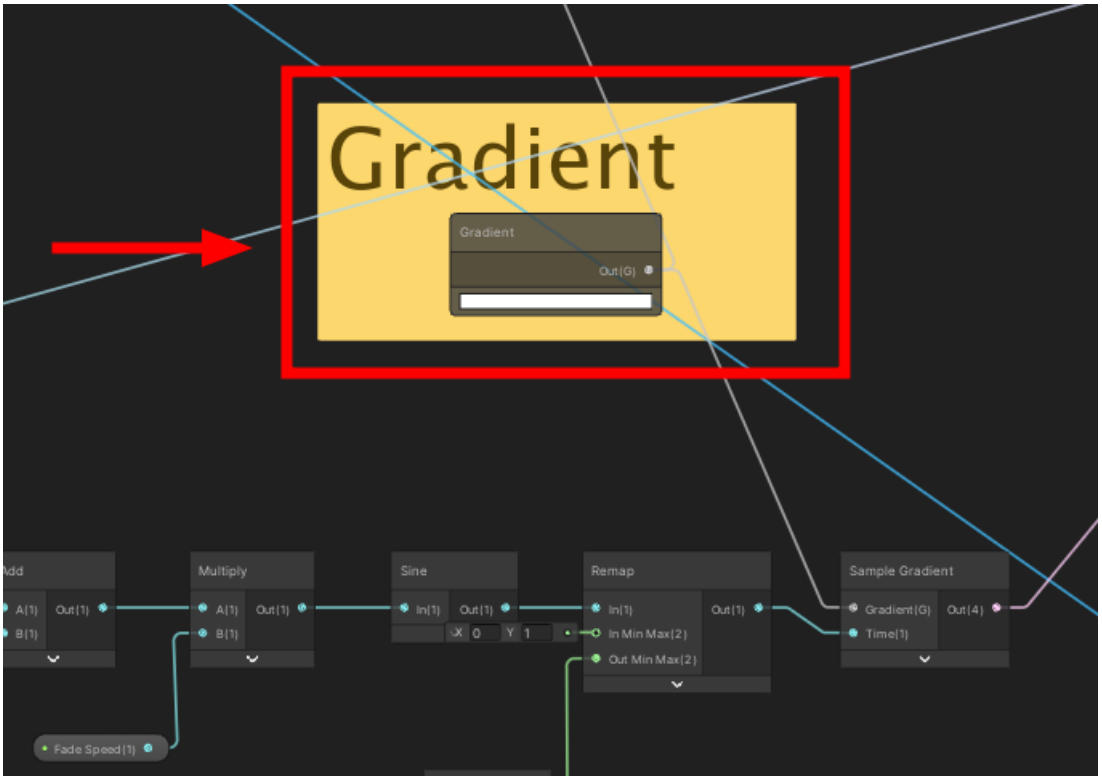
*Properties fix

Sometimes unity can break the properties: Brightness Range, Brightness Seed, Dynamic Fade Strength, Fade Speed.

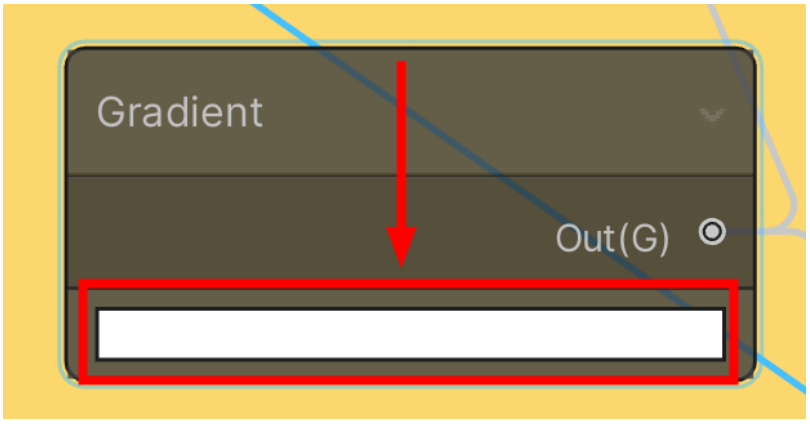
To fix it you have to:

1) Open the GodrayShader.Shader graph from TheLazzyKnight/StylizedGodrays/Shade&Graph folder.

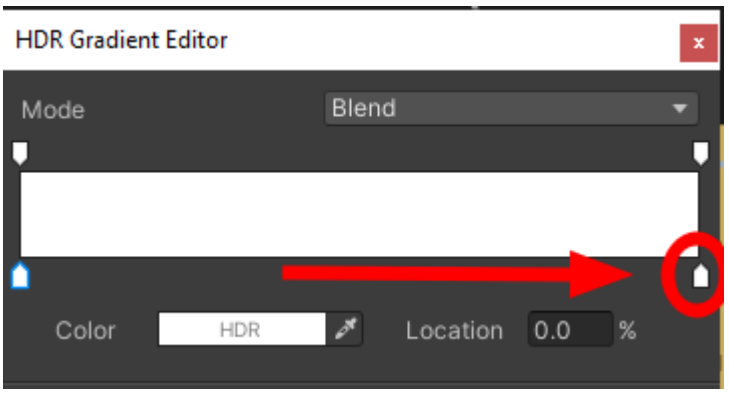
2) Find the Gradient node in the marked with the yellow note



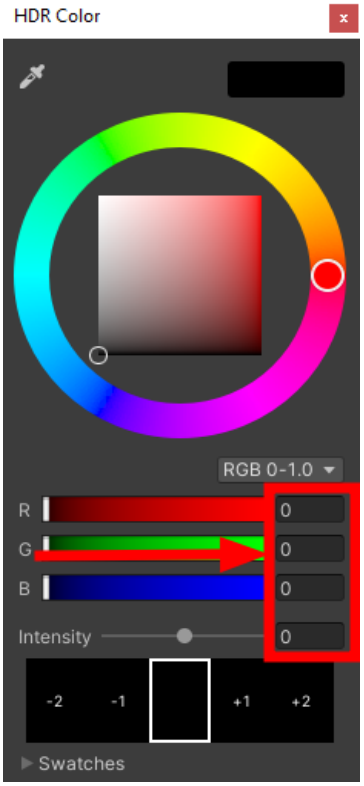
3)Click on the broken gradient



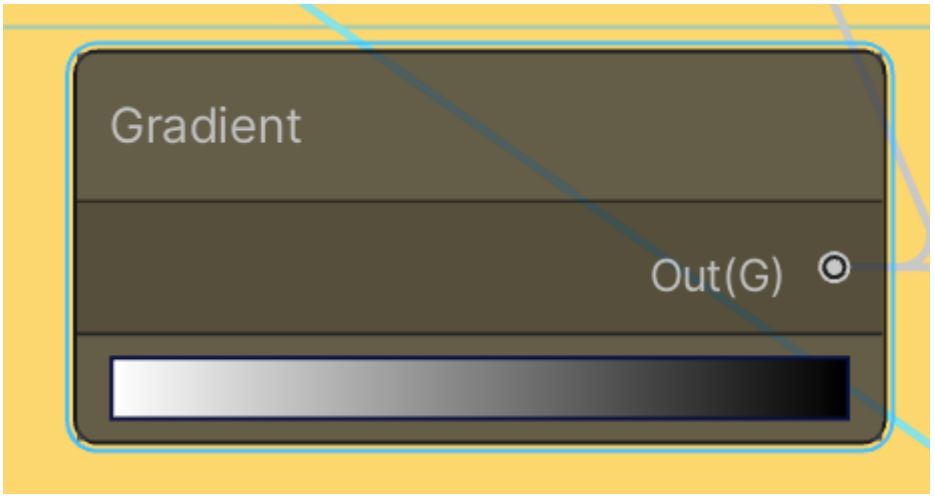
4)Double click on the right bottom arrow



5)Make R, G, B and Intensity properties zero and close the gradient tab.



6) Your final gradient node should looks like this



7) Click “Save Asset” in the upper left corner. Now it should work fine!