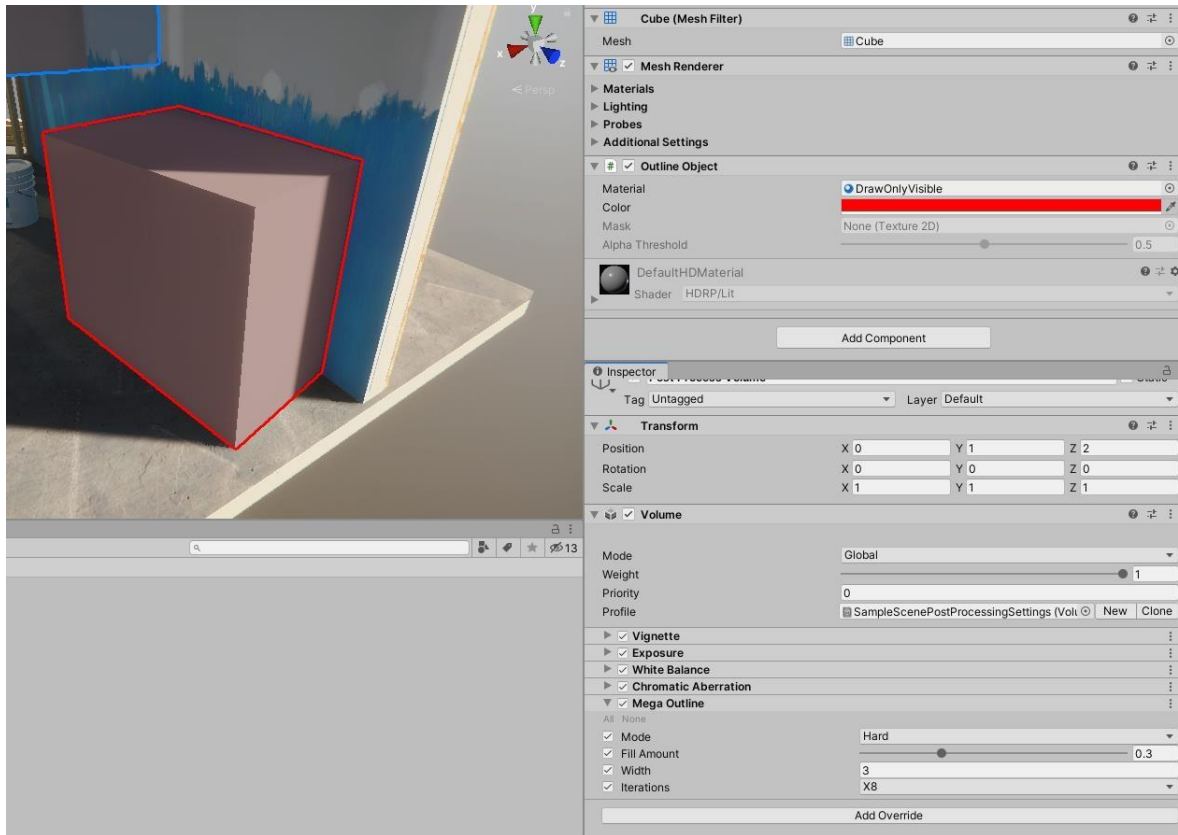


HDRP Outline

1 SETUP GUIDE

1. Add HDRP Outline to HDRP Post Processing Orders List
 - a. Edit -> Project Settings -> HDRP Default Settings
 - b. Scroll down
 - c. Click to "add" icon in After Post Process list
 - d. Select Knife.HDRPOutline.Core.HDRPOutline
2. Add HDRP Outline to HDRP Volume
 - a. Select your Volume
 - b. Click "Add Override"
 - c. Select Knife -> HDRP Outline
3. Create Outline material for our object
 - a. In project window click RMB
 - b. Select Create -> Material
 - c. Change shader of material to Knife/Knife-HDRPOutline_Unlit
4. Add OutlineObject component to object that you need
 - a. Select object with Renderer
 - b. Go to top menu and select Component -> Knife -> Outline Object
 - c. Assign new outline material to "Material" property in Outline Object Inspector You should see outline of that object.



2 DOCUMENTATION

`public class HDRPOutline : CustomPostProcessVolumeComponent, IPostProcessComponent` – outline volume component.

`public OutlineModeParameter mode` – outline render mode. `public`

`FloatParameter width` – width of outline (Hard only).

`public ClampedFloatParameter fillAmount` – fill amount of outline. Fills center of object's outline.

`public TextureParameter patternTexture` – pattern texture of outline.

`public ClampedFloatParameter patternFillAmount` – fill amount of outline pattern. `public`

`Vector2Parameter patternTile` – pattern tile. `public OutlineIterationsParameter`

`iterations` – iterations count of outline (Hard only). `public FloatParameter blurRadius`

– blur radius of outline (Soft only).

`public IntParameter blurIterations` – blur iterations count of outline (Soft only). `public`

`FloatParameter overflow` – outline overflow value after calculation (Soft only). `public`

`BoolParameter softnessEnabled` – apply softness for alpha before outline calculating (Soft only).

`public ClampedFloatParameter softness` – softness of outline after calculation (Soft only).

`public enum OutlineMode` – Outline render modes.

`OutlineMode.Disabled` – disables outline render.

`OutlineMode.Hard` – hard outline.

`OutlineMode.Soft` – soft outline.

`public enum OutlineIterations` – hard outline iterations count.

`OutlineIterations.X4` – 4 iterations.

`OutlineIterations.X8` – 8 iterations.

`OutlineIterations.X16` – 16 iterations.

`OutlineIterations.X32` – 32 iterations.

`public class OutlineObject : MonoBehaviour` – component that register object in outline render pass.

`public Material Material` – outline object material (recommended to use unlit materials).

`public Color Color` – per renderer color of outline object.

`private float fresnelScale` – per renderer scale of fresnel multiplier (material must have Fresnel toggle enabled).

`private float fresnelPower` – per renderer power of fresnel multiplier (material must have Fresnel toggle enabled). `public Texture2D Mask` – per renderer mask of outline object (material must have BaseColor parameter value Alpha or Color). `public float AlphaThreshold` – per renderer mask alpha threshold value (cutout).

`Shader "Knife/Knife-HDRPOutline_Unlit"` – outline render shader `BaseColor`

– defines base color mode.

None – color only

Alpha – get alpha from mask

Color – get color and alpha from mask

`UV Channel` – defines which UV channel shader must use (UV0 – UV4)

`ZTest` – depth comparison function

<https://docs.unity3d.com/ScriptReference/Rendering.CompareFunction.html>

`ZWrite` – enables or disables depth buffer writing.

Any questions and issues: knifeent@gmail.com