Documentation

1.1.0

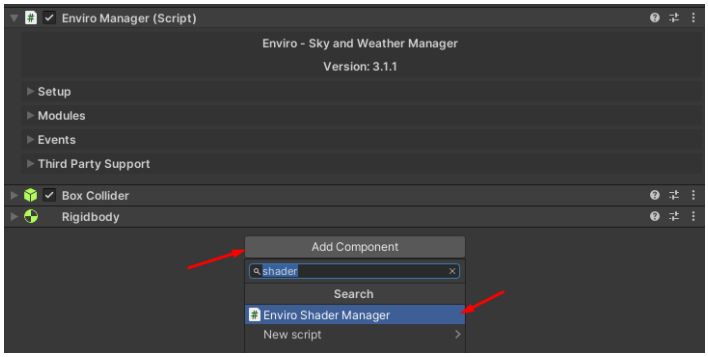
Thank you for buying

Enviro 3 - UBER Shader

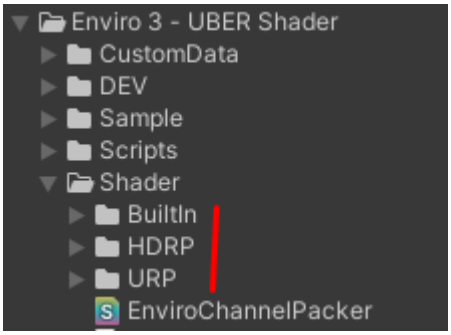
Quick Start *3*
UBER Shader *4*
Base Category *5*
Detail Category *6*
Global Normal Category *6*
Snow Category *7*
Rain Category *8*
Puddles Category *9*
Shader Manager *10*
Channel Packer *10*
Material Converter *11*

Quick Start

1. *Add the "Shader Manager" component to your Enviro Manager object.*

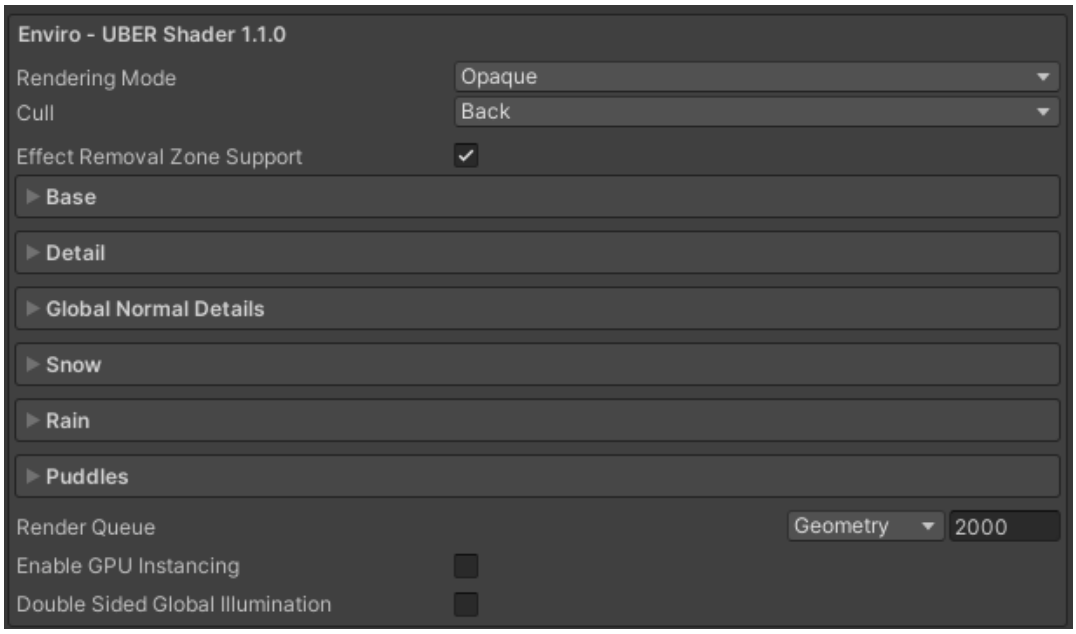


2. *Import the shader package for your render pipeline from the "Enviro 3 – UBER Shader" -> "Shader" folder. Please make sure that you import the matching version for URP/HDRP. For example: URP 14 (Unity 2022.3)*



3. *You can now find the shader under Enviro3 -> UBER in your materials.*

UBER Shader



Rendering Mode: You can set the mode here from Opaque, Cut-Out, Fade (Alpha Blended) or Transparent (Pre-multiplied).

Cull Mode: Set if front, back or no faces should be culled.

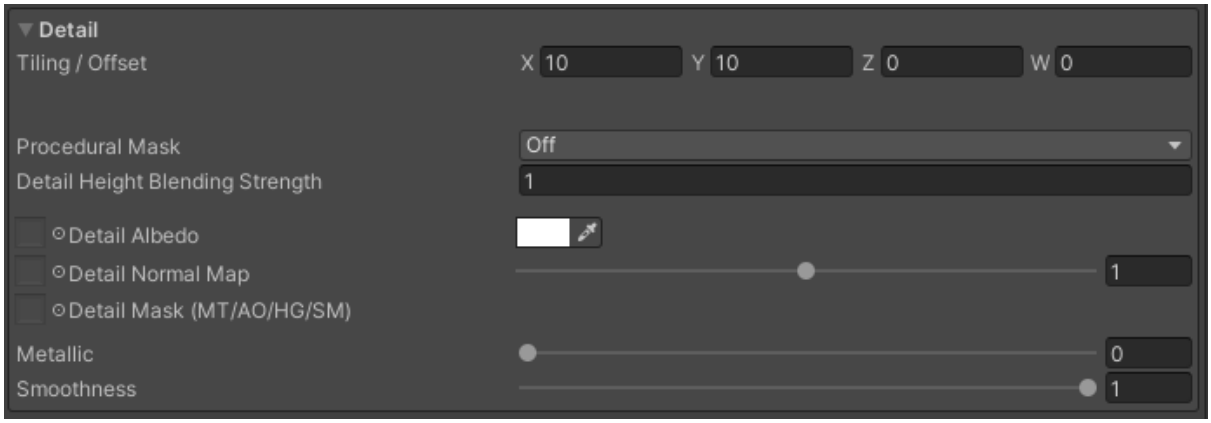
Effect Removal Zone Support: Activate this option to remove snow and rain effects inside an Enviro removal zone.

Base Category

*This is the basic shader setup. You can set the **"tiling/offset"** and assign the textures. The "**Base Mask**" texture is a packed texture that includes metallic, occlusion, height and smoothness.*

*You also can activate "**Tessellation**" here to dynamically increase verticles around the camera and displace your mesh based on the supplied height texture in the base mask. Please note that tessellation displacement only works with smooth vertex normals! Otherwise it might rip your mesh.*

Detail Category

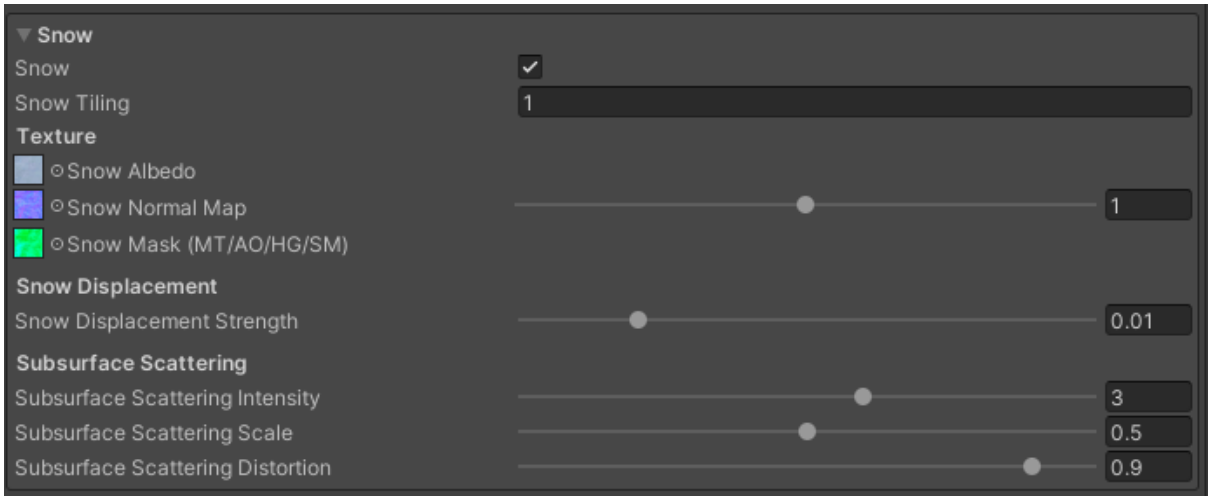


*This is a full second layer you can add to your materials. Set the "**tiling/offset**" and textures. You three different options in how to blend this layer with your base layer. Either use "Mask" and provide a texture, set to "**Procedural Noise**" to generate a simple noise mask or set to "Height" to blend you layer on top. For example for moss or sand on rocks.*

Global Normal Category

*The "**Global Normal**" is a **triplanar** sampled normal texture to add some more fine details to your materials.*

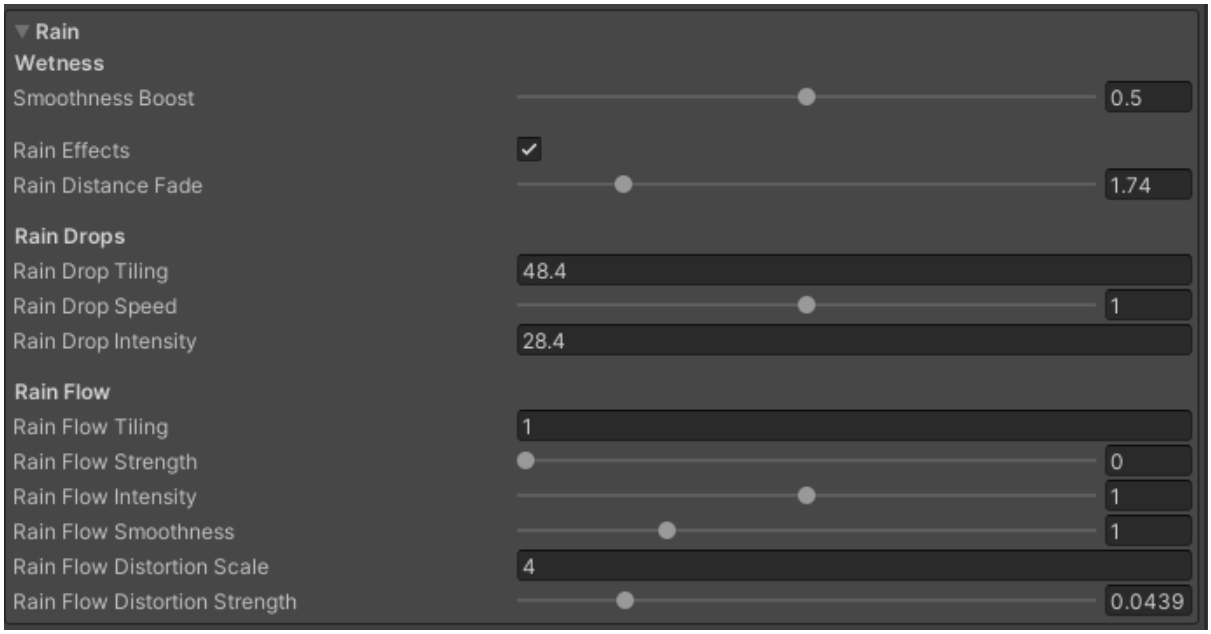
Snow Category



Activate "Snow" to enable dynamic snow on top of your meshes. You can set the "Tiling" and assign your snow textures.
If you activated "Tessellation" in your "Base" settings you also can set the displacement strength of added snow.

Enviro UBER shader also adds some subsurface scattering like light to the snow for more realism.

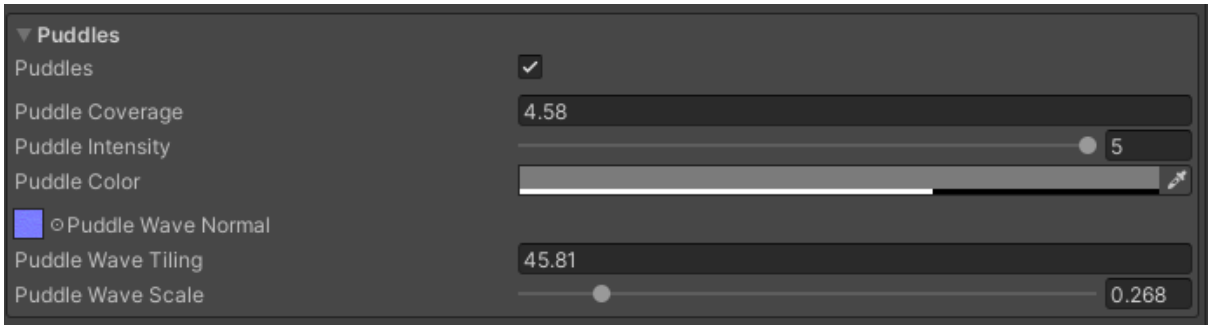
Rain Category



*You can set a "**Smoothness Boost**" here to increase your material smoothness when it gets wet.*
*Activate "**Rain Effects**" for further rain base effects like Rain Drops on the ground and Ripples on the puddles. It also can add some flowing water on your materials.*

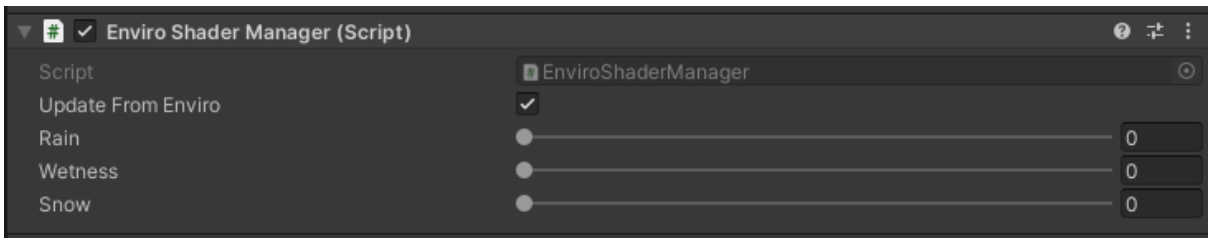
*The "**Rain Flow Strength**" might be interesting to control the flow from a few tiny streaks to a full water flow. Set the "**Distortion Scale**" and "**Distortion Strength**" to distort the flow direction a bit for more realism.*

Puddles Category



*Activate "**Puddles**" to let Enviro – UBER shader create some puddles on your surfaces. You can change the distribution with the "**Puddle Coverage**" setting. The noise generated for the puddle coverage is in world space so it always matches up with neighbor meshes.*
*You also can set a "**Puddle Color**" to make tweak the visuals of your puddles.*
*Puddles also have some small waves you can control with the **Puddle Wave Tiling** and **Scale**.*

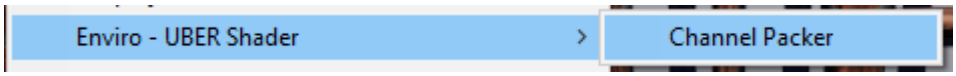
Shader Manager

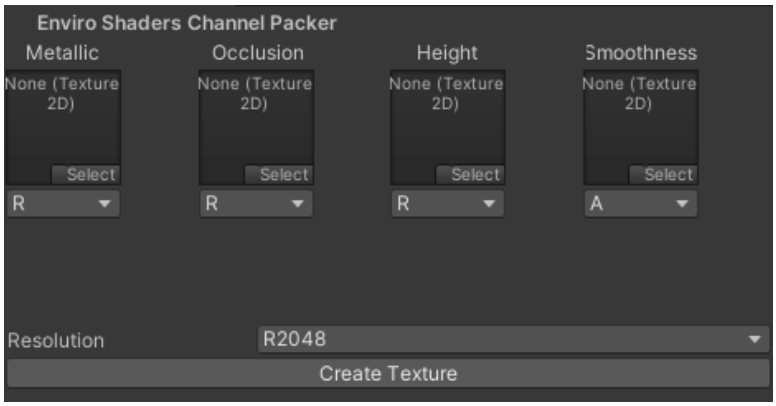


The Shader Manager is needed to control the Rain, Wetness and Snow intensity of your materials. To sync with Enviro you just need to activate the "Update From Enviro" option.

Channel Packer

You can open the "Enviro Channel Packer" through the "Window" > Enviro – "UBER Shader" -> "Channel Packer" option.





*The "**Channel Packer**" is straight forward. Assign your individual textures in each field and select which channel the information should be pulled from. (For example you might have your smoothness included in you metallic or albedo alpha channel.*

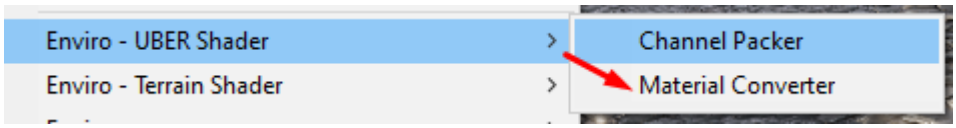
*Select the "**Resolution**" and click on "**Create Texture**".*

The Mask texture for Enviro – UBER Shader has following setup:

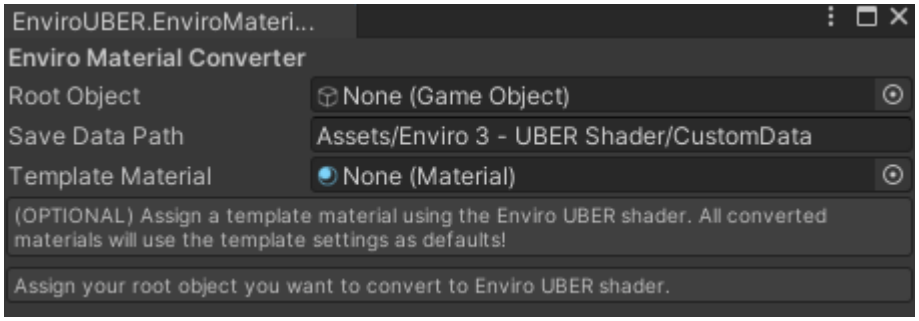
Red -> Metallic
Green -> Occlusion
Blue -> Height
Alpha -> Smoothness

Material Converter

You can open the "Material Converter" through the "Window" > Enviro – "UBER Shader" -> "Material Converter" option.



This tool can fully convert a scene object with unlimited child mesh renderers from Unity standard/lit shader to Enviro UBER shader with only two clicks.



This operation does not modify your own materials or objects! The tool instead will create a copy of your object and create new materials/textures.

USAGE:

1. *Assign the root gameobject of the meshes you want to convert as "Root Object".*
2. ***Optional**: Change the path to save the materials/textures. And/or assign an Enviro UBER shader template material. All newly created materials will use the template materials settings.*
3. *Click on **"Initialize Converter".** The tool will show you a list of all materials that can be converted.*
4. *Click on "**Convert**"! That's all the tool will start converting your materials, deactivate the old root object and add an copy with all the converted Enviro UBER materials.*