MODULE: HAND PAINTING

Overview

This module adds more functionalities to let you fine-tune your biomes as well as paint custom masks using brush.

Note that paint actions are only available in the editor, but paint results can be included in the build and work at runtime.

Version: 2023.1.0

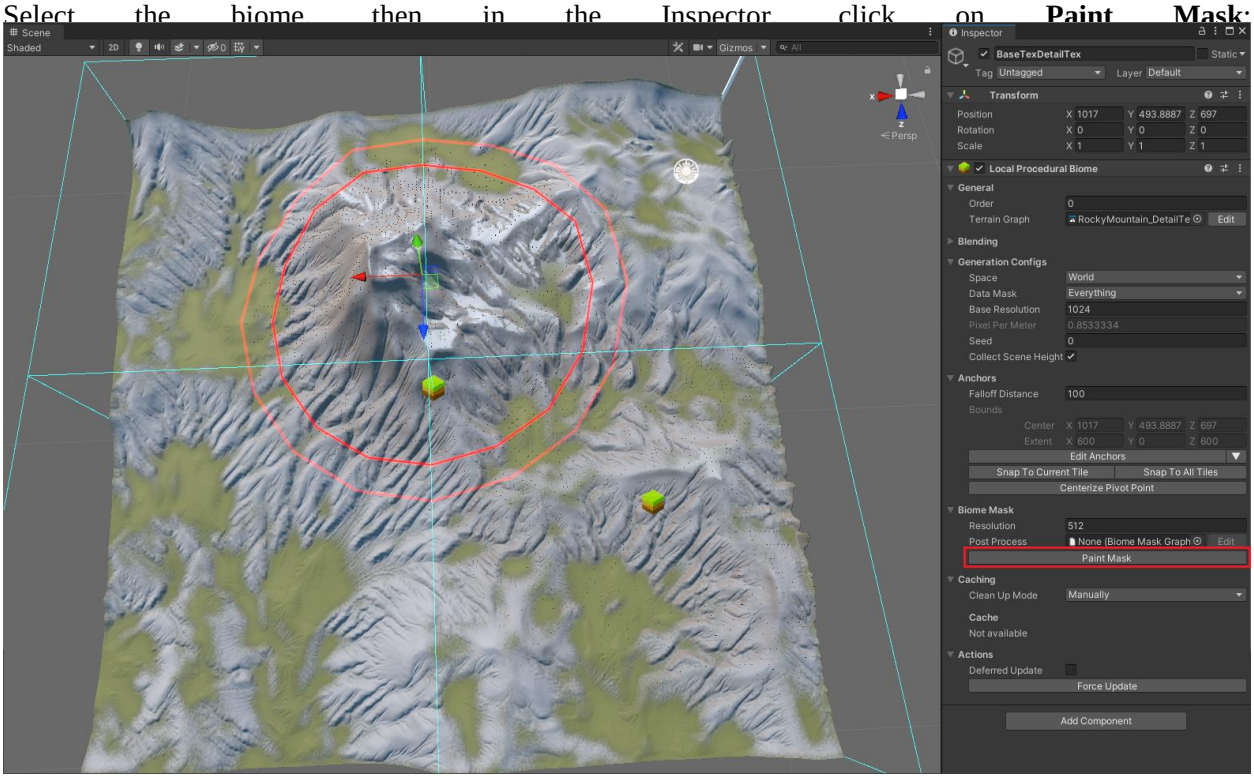
This version introduces breaking changes, please refer to the Update guide section to instruction.

Requirements: Vista 2023.1.0+

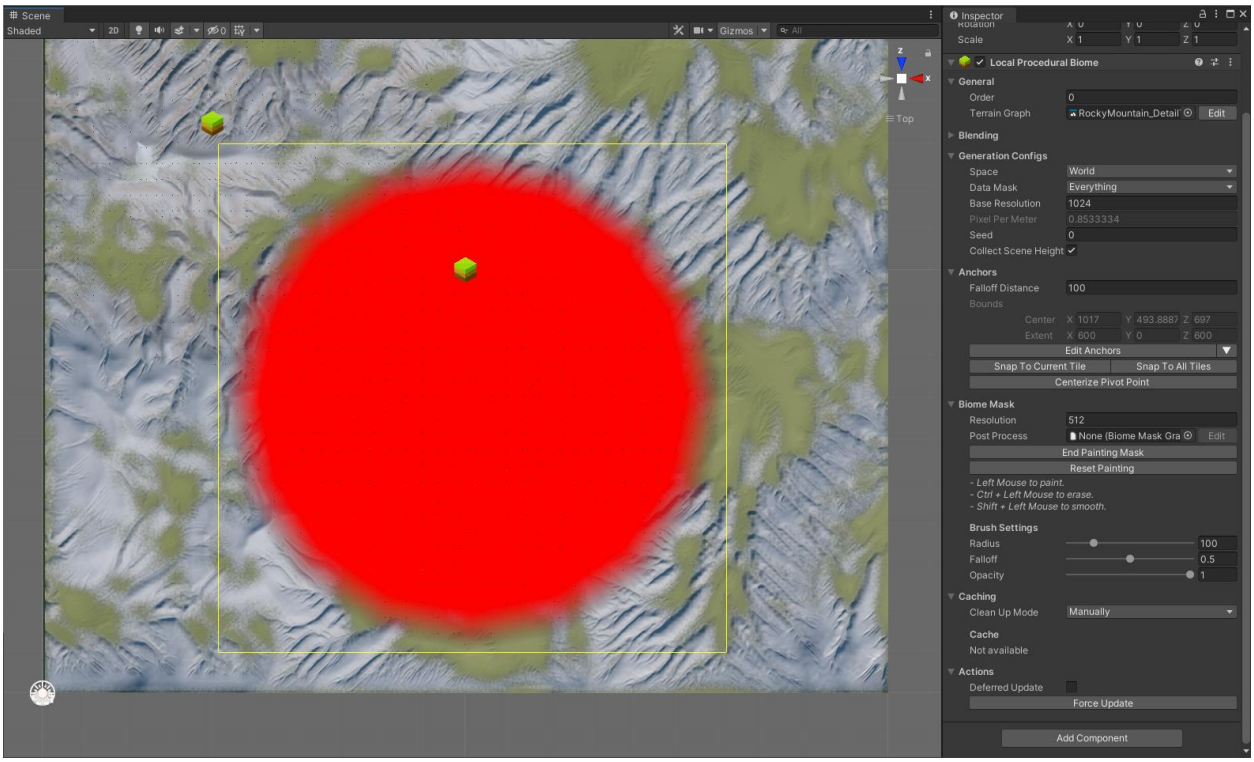
Biome mask painting

The shape of a biome is usually defined by its anchor points. With this module installed, you can add fine details & touches to the biome mask BEFORE processing it with the biome mask graph.

Select the biome then in the Inspector click on **Paint Mask**:



Then you should see the Scene View will switch to the top down view. In the Inspector, there will be some brush settings:



- Radius: Radius of the brush, in meters.
- Falloff: Low value gives “hard” brush, while high value gives “softer” brush.
- Opacity: The opacity/intensity of the brush.

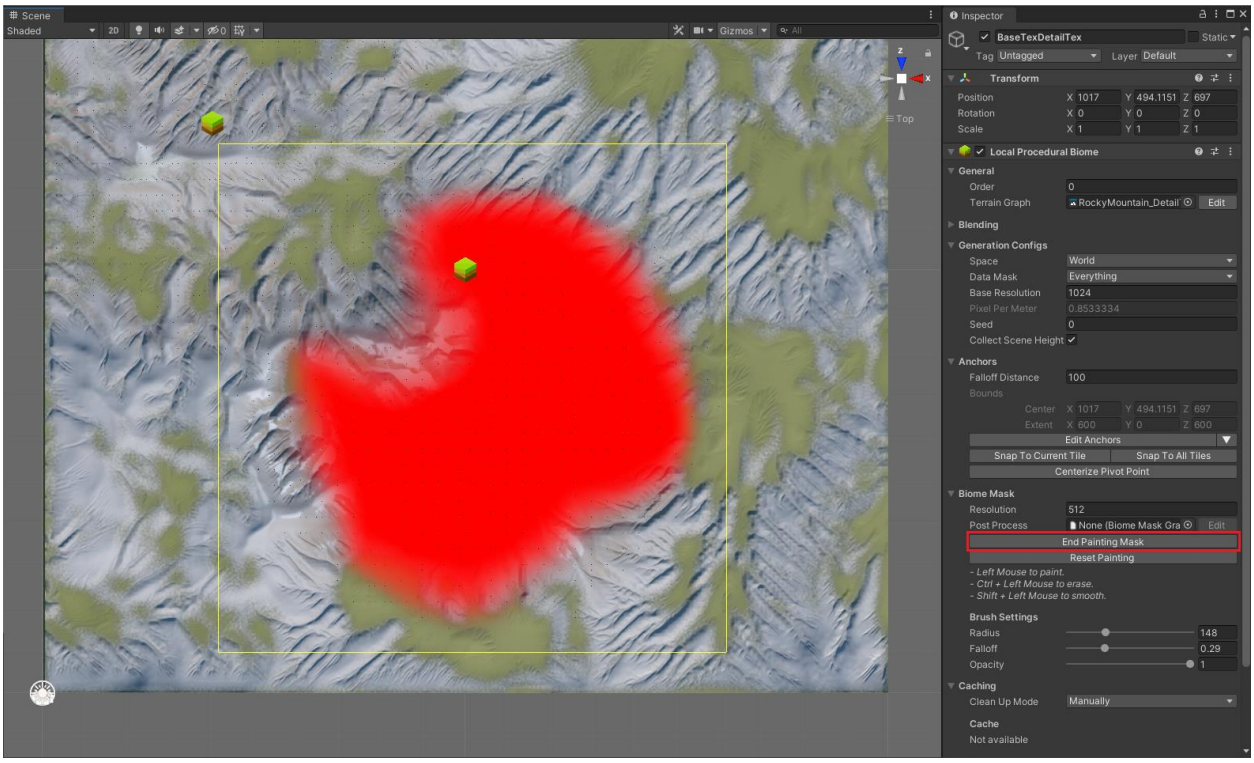
In the scene view, you will see the brush gizmos when your mouse is close to the biome’s boundary (yellow box).

- Use the left mouse to paint.
- Use Ctrl + left mouse to erase.
- Use Shift + left mouse to smooth out.

Then, click on the **End Painting Mask** button in the Inspector to save the mask and re-generate the scene.

Also, you can use the **Reset Painting** to erase all paint data and start over.

Note: Undo is not available at the moment for painting.



Paint Nodes

This module provides some nodes to perform manual painting in the graph editor.

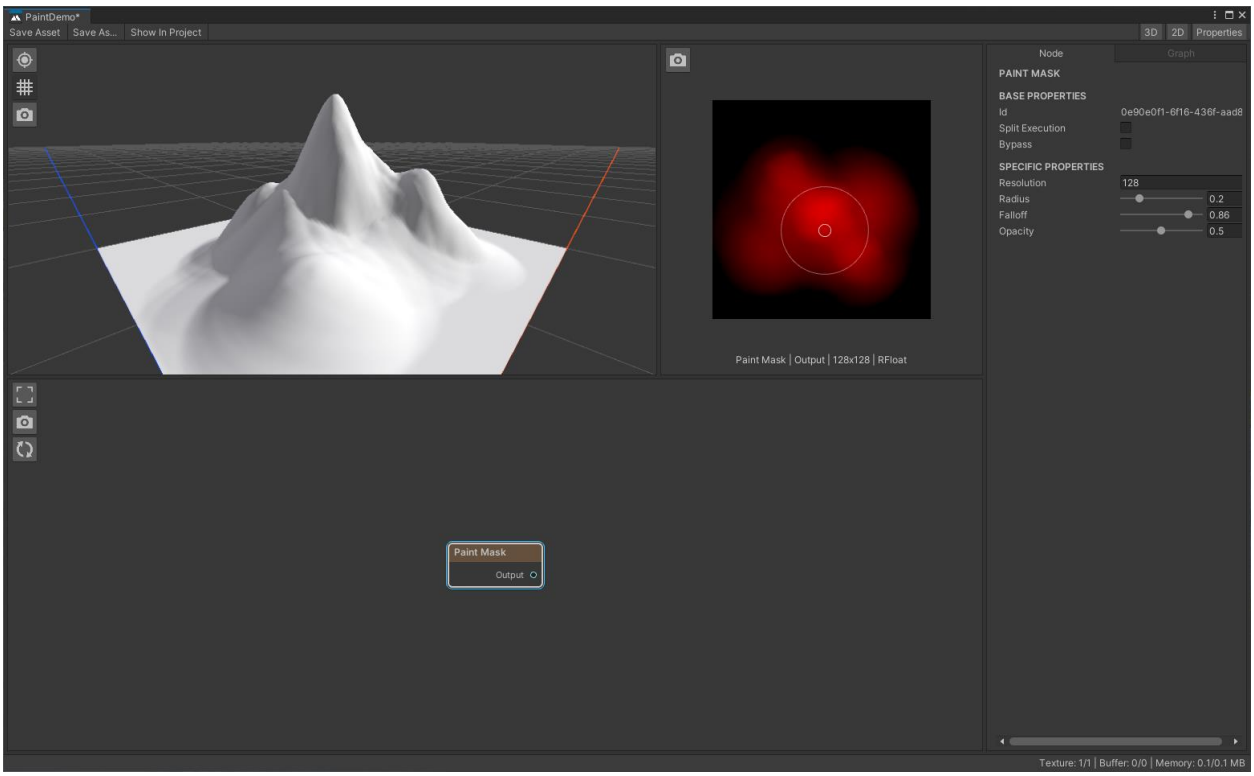
- To paint mask data (RFloat), add a Paint Mask Node.
- To paint color data (RGBA32), add a Paint Color Node.

They have similar properties:

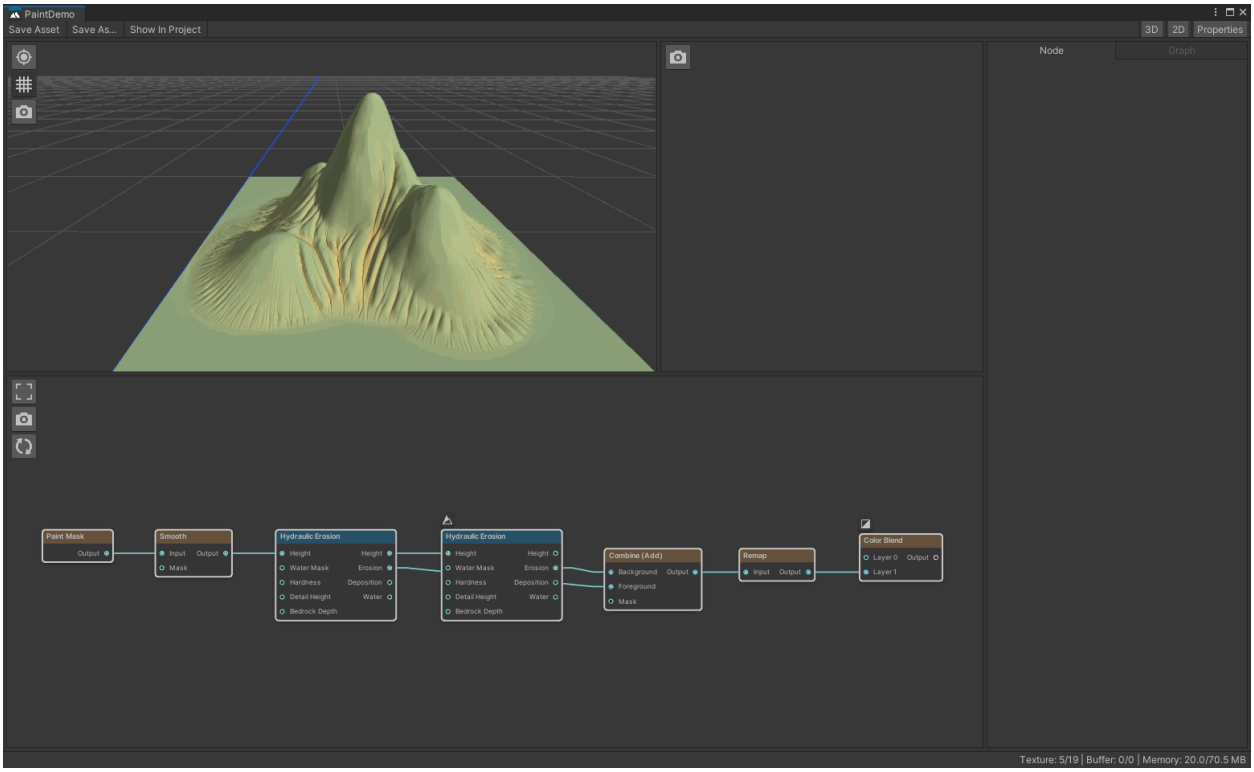
- Resolution: size of the paint canvas in pixels. **Note that the pixel data will be embedded into the graph which may lead to large file size, so choose a smallest number as possible.**
- Radius/Falloff/Opacity/Color: Regular brush settings.

When selecting the node, you can use the 2D Viewport to perform painting:

- Use the left mouse to paint.
- Use Ctrl + left mouse to erase.
- Use Shift + left mouse to smooth out.



The paint nodes are simple, but powerful. Below is an example of how to setup a node chain for painting terrain with erosion and color:


PaintDemo
Save Asset
Save As...
Show In Project
3D
2D
Properties
Node
Graph
Paint Mask
Output
Smooth
Input
Output
Mask
Hydraulic Erosion
Height
Water Mask
Hardness
Detail Height
Bedrock Depth
Erosion
Deposition
Water
Combine (Add)
Background
Foreground
Remap
Color Blend
Layer 0
Layer 1
Texture: 5/19 | Buffer: 0/0 | Memory: 20.0/70.5 MB