MicroSplat

Digger Integration

Overview

The Digger Integration module allows you to use Digger and Digger Pro with MicroSplat's shading system, even allowing you to paint up to 28 textures on your digger meshes, with support for features like wetness, streams, and lava (with appropriate MicroSplat Modules installed).

Requirements

The Digger Integration requires MicroSplat and Digger or Digger Pro to be installed. Because the geometry Digger generates does not have UV coordinates, you will also need the Triplanar Texturing module for MicroSplat. In Unity 2019.3+, Unity's terrain hole system is used- but in versions prior to 2019.3, you will need the MicroSplat Terrain Holes module.

Please consult the Digger documentation for information on how to install and use Digger.

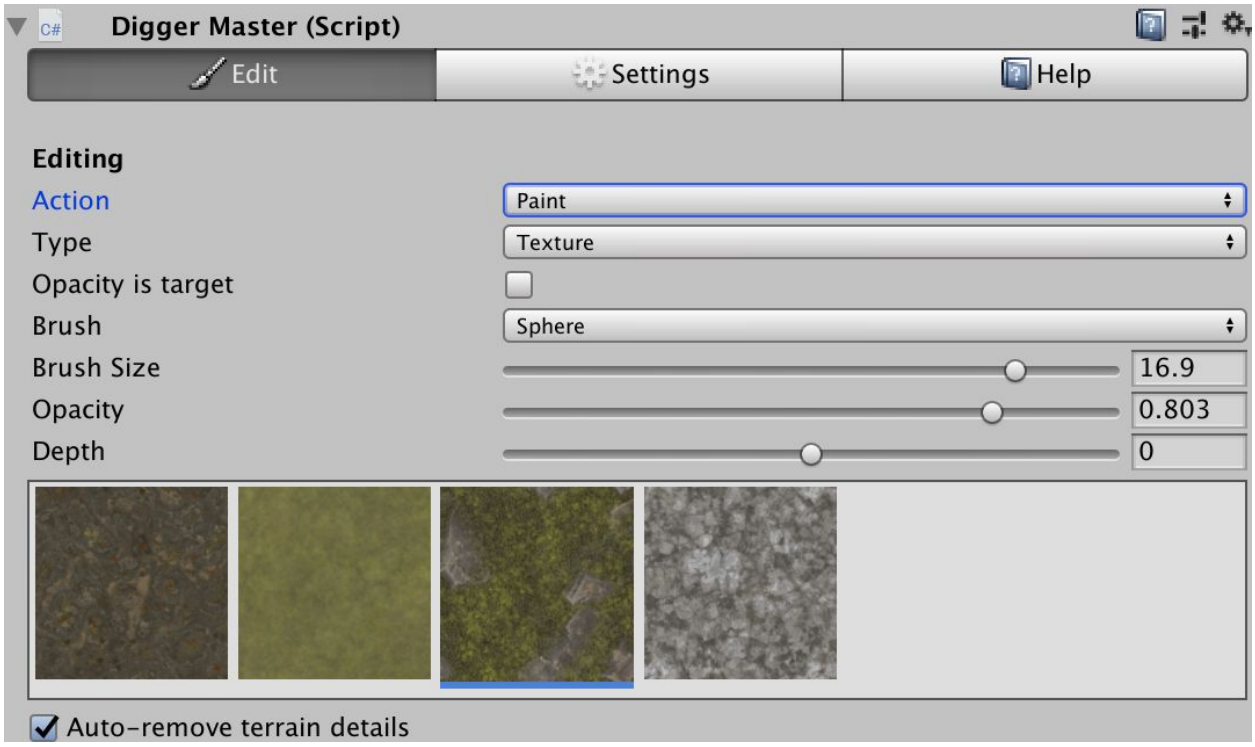
Getting Started

Once everything is installed, to add Digger support to your MicroSplat shader simply turn on the "Export Digger Shader" option in the Shader Feature section of your MicroSplat Material.

MicroSplat will show warnings if other features, such as Triplanar, need to be enabled, with a "Fix Me" button that will enable these features for you.

Once this is done, you can add Digger to your terrain from the Tools/Digger/Setup Terrains menu. Please consult the Digger documentation for more on how digger works.

Digger Painting Interface



Please consult the Digger documentation for information about it's interface. Do note that when in painting mode, a Type property is shown allowing you to select effects like wetness instead of painting textures.

Notes

The Digger integration allows you to paint on Digger meshes, including special effects features like Wetness or Lava. Internally, each voxel stores 2 texture indexes and a weight between them for the texture representation. This means at each vertex only 2 textures can be blended, though more can be blended between the vertices. This data is then unpacked and sent

across the vertex->fragment paths of the shader, which has a limited number of channels. As such, we are only able to pack 28 values into this structure, making the integration only support 28 of MicroSplat's 32 possible textures. When effects like wetness or lava are used, those consume extra channels, making only the first 24 textures accessible.

Also note that to keep the voxel representation small, the values for wetness, puddles, streams and lava are stored as 3 bytes each, giving them 8 possible levels.