Terrain and Stamp Packs

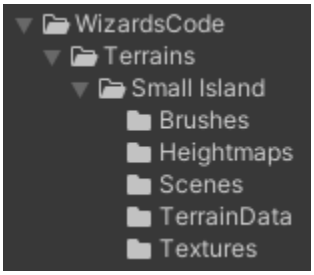
Version 1.0

Contents

Overview

This pack is designed to help you build terrains for your game. It contains 4k heightmap data that is presented in several different formats, along with some sample 4K terrain textures. Using these assets you can get started straight away using our prebuilt Terrains or us can use these terrains a stamps to procedurally generate new terrains with tools such as Gaia, MapMagic, Atlas and Vista. We also provide brushes so that you can manually paint new terrains.

Once imported you will find your new assets in the folder `Wizards Code/Terrains/PACK NAME`. Within that folder you will find the following files and folders:



1. README.md – a quick overview of the asset pack
2. Documentation folder – containing this document and any other relevant documentations
3. Scenes folder – containing two demo scenes for each terrain/heightmap, one textured, one untextured.
4. TerrainData – containing the raw terrain data files (textured and untextured) as well as the texture layers used.
5. Textures – The Diffuse and Normal textures for the sample texture layers
6. Heightmaps – EXR format heightmap textures
7. Brushes – Preconfigured brushes for stamping your terrains with Unity's Terrain Tools

Support

If you have having difficulty using this asset please join our Discord.

Naming Conventions

The Terrain and Stamps Pack uses a consistent naming convention to help you find what you are looking for. The general format is:

`Pack Name_TerrainSize_FormatSpecificMetaData_ID`

Where:

`Pack Name` Is the name of the pack you are using, for example "Small Island".

`TerrainSize` is the size of the terrain in meters, for example "4096 x 4096" is a terrain that is just over 4k square.

`FormatSpecificMetaData` is informational data that varies with the format being used, for example, "textured" indicates that the terrain is textured in that file. See the sections below for more details.

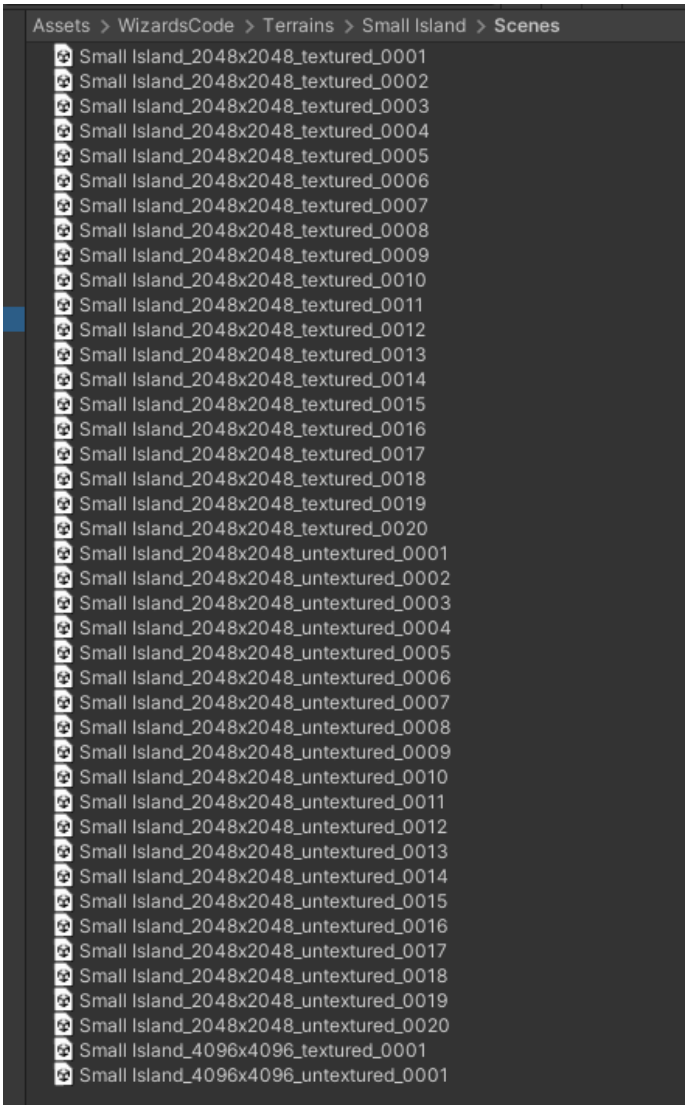
`ID` is a unique ID for the terrain in question and is consistent across all formats. For example, an ID of "0001" will always refer to the same terrain whether you are looking at a demo scene, heightmap, brush or terrain data file.

Using Terrain and Stamp Packs

There are many ways to use these terrains and stamps. This section will detail the most common use cases.

Using the Demo Scene

This is the fastest way to view the terrains/stamps included. The Terrain and Stamps Pack contains two demo scenes for each terrain, one textured and one untextured. The textures provided are intended for demo purposes only, it is expected that you will replace them with textures that suit your game better. But if you like them, all the better.



The naming convention here is to indicate whether the texture within the scene is textured or not with the word "textured" or "untextured" in the name.

Note that these scenes do not have lighting setup as we believe this needs to be configured per game. You can see examples of the terrain with lighting in the asset store product shots. These shots have been taken with the standard lighting provided by Gaia Pro, a wonderful asset for creating terrains (and using these stamps).

Simply open any of the scenes as normal.

Using Terrains

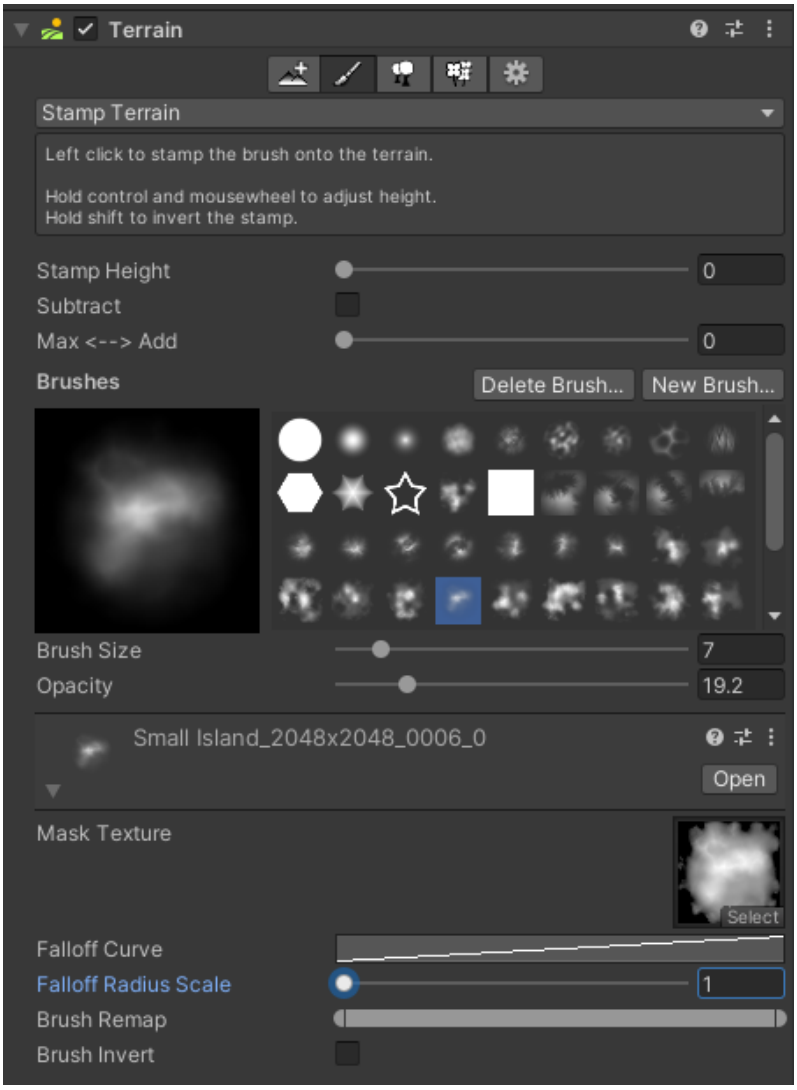
To use the terrains you could simply use copies of the demo scenes. However, we recommend that you copy the Terrain Data and create you own terrains from those copies. This ensures that your terrain remains yours even if a future upgrade of this pack changes a terrain.

You can find Terrain Data in the `TerrainData` folder. Simply copy the data you want into your own project data folder by holding the CTRL key and clicking and dragging the desired data file.

You will notice that this folder also includes the layers you need when using the textured versions of the terrain data. Generally it is expected that you will use the untextured versions and texture for your game, but if you want to reuse these layers and texturing you can do.

Using Terrain Brushes

Using Unity's Terrain Tools you can stamp terrains with special brushes. Stamping allows you to set or change the height of your terrain based on a heightmap. The Terrain and Stamps packs include brushes for all terrains/stamps provided. These will automatically be discovered by Unity.



Select the Stamp Terrain mode in the Terrain inspector and select one of the terrain stamps.

By default these brushes are setup to apply the stamp with a falloff curve that is applied radially from the center of the stamp. This can be adjusted by changing the Falloff Curve - how rapidly the stamp falls off towards the edges, making it blend in to existing terrain. You can also change the Falloff Radius Scale to change the point at which the falloff curve starts to be applied. Larger numbers result in the falloff moving out from the center.

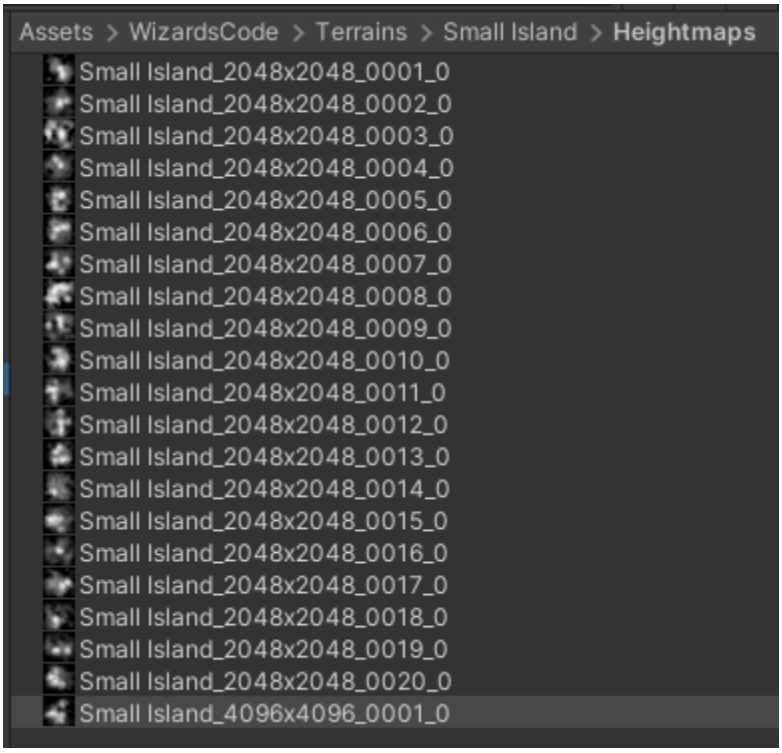
The Brush Remap values enable you to change the intensity of the heightmap. That is, a heightmap is set in a range of 0 to 1. By moving the left part of the Brush Remap slider to the right you are increasing the value that is considered to be 0. That is if you move the slider to the center then values of 0.5 and below will be considered 0. Similarly if you move the right hand part of the slider then you are changing the value that is considered to be 1. So moving the right to ¾ of the way along will result in values of 0.75 or higher being considered 1.

Finally, Brush Invert will make the stamp the reverse of what it was originally configured to be. That is 1 will become 0 and 0 will become 1.

The preview shows you the result of moving these sliders.

Using Heightmaps

Heightmaps are images that encode the heights of the terrains. They are used in stamps for tools such as Gaia, MapMagic, Atlas and Vista as well as for brushes. However, the Terrain and Stamps package includes pre-made brushes so if that's what you are a looking for the next section is for you.



Using these heightmaps varies from tool to tool, we recommend checking the docs for your tool of choice.