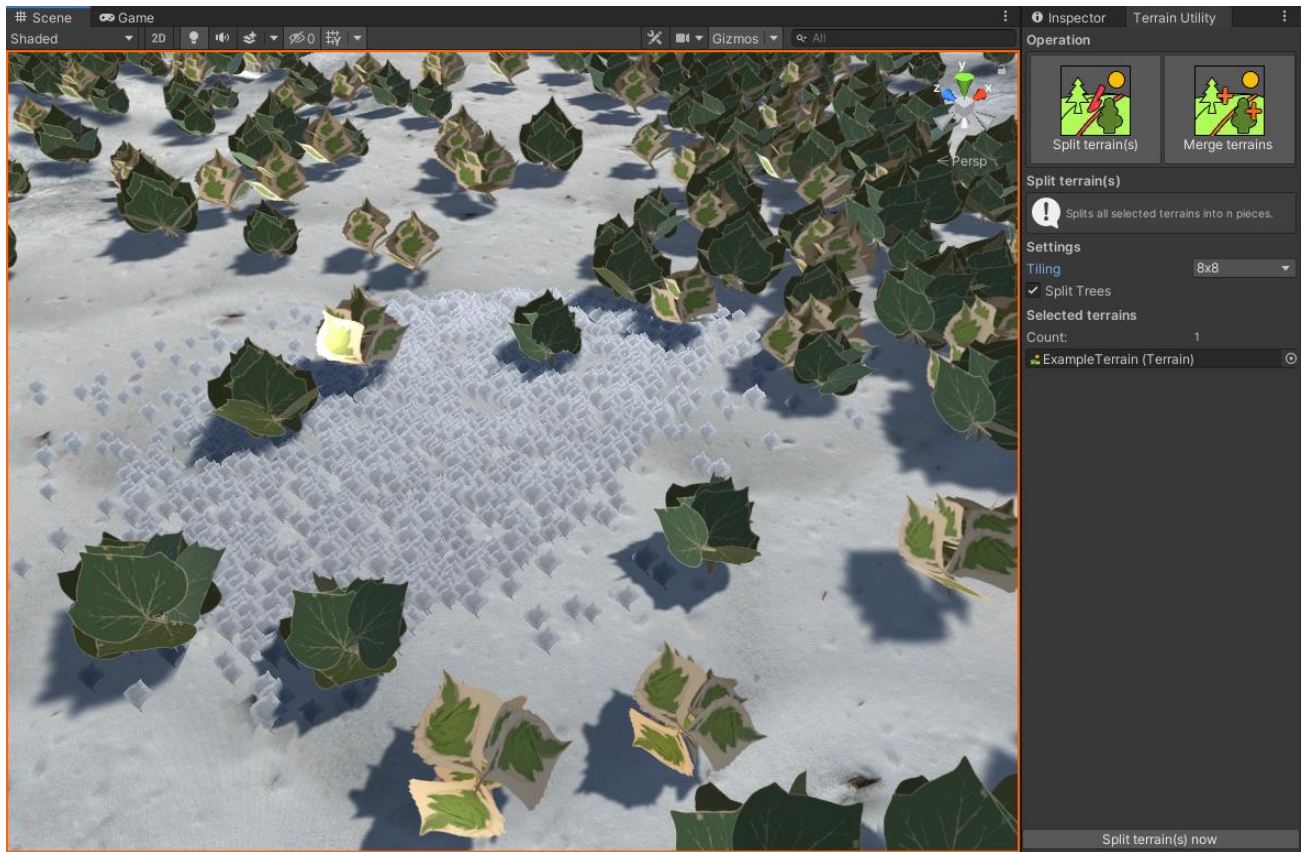


# Terrain Split & Merge Utility



Version 2.2.1

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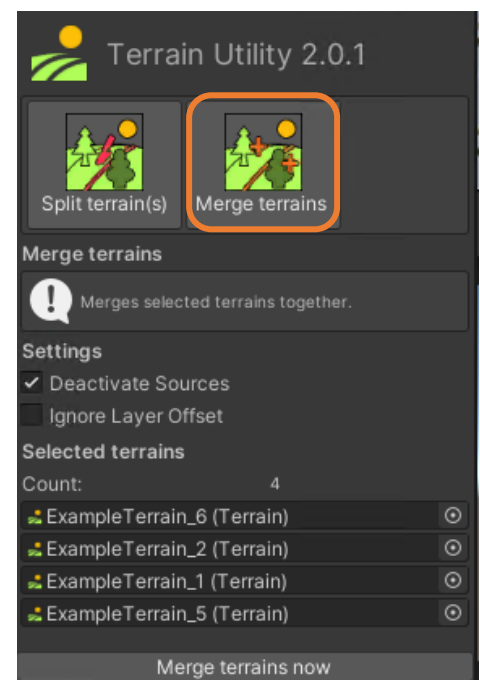
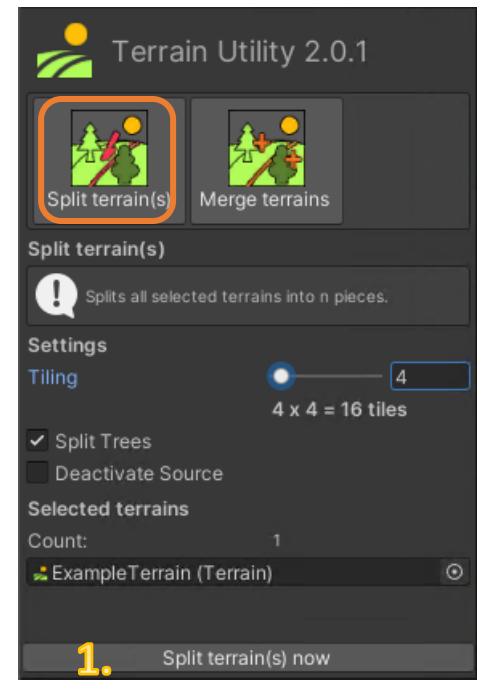
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## Introduction

The Terrain Split & Merge Utility was created to simply split large terrains into pieces including trees and details. Also merging terrain pieces back together is handled. The focus was put on handling edge cases like up- and down sampling heightmaps and splatmaps when they get to small or large during split or merge process. This tool also supports merging terrains with different alpha- and splatmap resolutions. Merging pieces will also try to merge similar terrain layers to reduce the count of used layers.

## Example

- Navigate to *Tools\JustAssets.TerrainTool\Terrain\ Example\Scene* and open *ExampleScene.unity*
- Open the terrain tool *Tools > Terrain > Terrain Utility*
- Select the **EXAMPLETERRAIN** in the scene
- Click on the **SPLIT TERRAIN(S)** button to show the options for the tool
- Click the **SPLIT TERRAIN(S) NOW** to start the process
- Afterwards you may click **MERGE TERRAIN(S)** and then select the just created terrains.
- Click **MERGE TERRAIN(S) NOW** to start the process



## Features

Every feature will show you a short summary of what it will do. To actually execute the operation, you need to confirm it by clicking the button at the end of the dialog.

### Split Terrain(s)

Click the **SPLIT TERRAIN(S)** button to split each selected terrain into  $n^2$  pieces.

#### Tiling

N is 2, 4, 8, 16, 32, 64 or 128, which will result in correspondently 4, 16, 64, 256, 1024, 4096 or 16384 terrain pieces.

#### Split Trees

If set, trees will be copied to the created tiles.

#### Blend Strength at Seams

100% means off, 50% percent will evenly blend the pixel at one side of the border with the one on the other side of the border. Default is 60% keeping the original a bit stronger while blending 40% of the other tile in. (0% would swap the pixels at the border) This is all is required due to a missing implementation of alphamap neighboring inside of the Unity Engine.

### Merge Terains

Click this button to merge  $n^2$  terrain pieces (4, 16, 64, 256, 1024,...). Ensure that the pieces are aligned in a grid. The naming does not matter the location in space will be used to determine how to merge the terrains. If your terrain slices are using high resolution height or alpha maps the resolution will kept as long as it does not result in hitting the terrain engines upper limits. If a limit is hit, the maps are down-sampled in quality.

### Common settings

#### Deactivate Source

It is activated by default and will deactivate the terrain game objects which were merged or split.

## Support

If you experience a bug, please create a ticket [here](#) or write an e-mail with detailed description to [support@justassets.de](mailto:support@justassets.de). Please provide the tools version, a stack-trace in case of an exception and steps to reproduce. Please attach a minimal example if it is required to reproduce the problem.

# Changelog

## Version 2.2.1

- Fixes review dialog showing up too frequently. Sorry for that.

## Version 2.2.0

- Adds support to blend alpha maps on the split seems to have less hard blending issues.

## Version 2.1.2

- Fixes exception when merging terrain slices exceeding the maximum valid height map size of 4097x4097.

## Version 2.1.1

- Fixes incorrect terrain layer offsets when merging slices where no slice has a zero-offset.

## Version 2.1.0

- Fixes exception when merging terrains with missing terrain layers
- Increases minimal Unity version to Unity 2020.3.48f1 (LTS)
- Adds rating dialog

## Version 2.0.1

- Adds support for merging any square amount of terrain slices
- Adds support for cutting terrain into any square amount of slices

## Version 1.5.1

- Fixes some errors when merging terrains with missing layers

## Version 1.5.0

- Support merging terrain layers with different texture offsets to save memory

## Version 1.4.0

- Adds support to merge slices with different terrain heights and y-offsets
- Adds link to customer support page

## Version 1.3.0

- Adds support to decimate terrain layers when merging terrains
- Fixes a bug just overwriting existing assets

## Version 1.2.0

- Fixes crash when splitting in-memory terrain layers

## Version 1.1.0

- Fixes bug when splitting terrains using layer size which are not  $1/(2^x)$
- Fixes bug duplicating some trees

## Version 1.0.0

- Initial release