

Terrain Neighboring Guide

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Contact me at kgillen@deepspacelabs.net if you have any questions or concerns

A Quick Word...

Previously, Terrain Neighbors were set automatically when slicing your terrain. The effect was temporary, but useful to see how your terrains would look in game. This is no longer possible, due to an internal change in Unity.

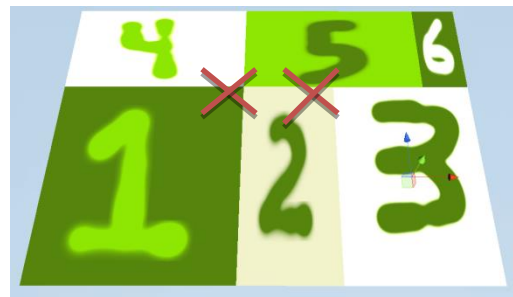
This means when you slice your terrain, you will notice a (possibly whitish) line on the inner edges of your slices. Don't be alarmed by these lines, they will go away once the Terrain Neighbors are set in game. This is done automatically when using the Dynamic Loading Kit. Otherwise, you can use the SetNeighbors script found under Component-> Terrain Slicing Kit -> Set Neighbors.

Before Using

In order for this script to function properly it's required that all the terrains edges line up perfectly, and that each terrain only neighbors one other terrain on each of its sides. The terrains can vary in width and length, however in order for the edges to line up perfectly, all terrains in a single column must have the same width (size along x axis), while all terrains in a single row must have the same length (size along z axis). The terrains must also be touching. In the first picture below, for example, if terrain 1 has a width of 100, length of 150, and is positioned at (x = 0, z = 0), terrain 2 must have a length of 150 and be positioned at (x = 100, z = 0).



Acceptable Layout



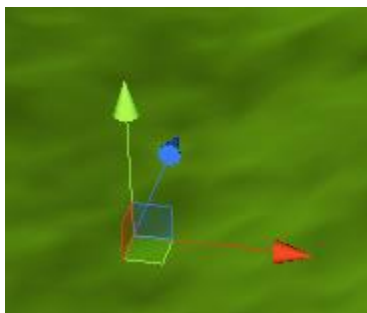
Unacceptable Layout

To Use

To use the SetNeighbors JavaScript, drag and drop it onto the first terrain of the group of terrains you wish to neighbors, or select this terrain and on the top menu bar in Unity select Component -> Terrain Slicing Kit -> Set Neighbors. This group need not be located at position 0, 0, 0.

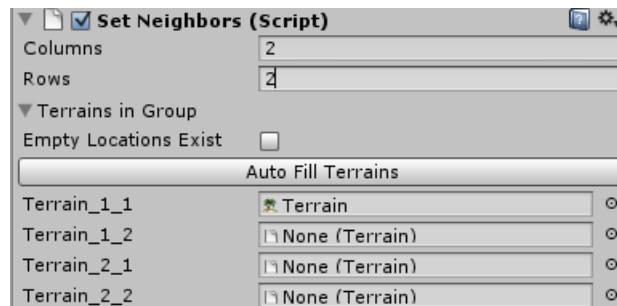
If you have created your terrain group by slicing a big terrain into smaller slices using the SliceTerrain script, determining which terrain is the first terrain is as easy as finding the terrain ending in 1_1.

If you're group was created in some other way, then determine which terrain is the first terrain by first moving your view of the terrain group so that the gizmo looks like it does in the picture below, with the blue arrow pointing away from your view and the red arrow pointing to the right.



The first terrain will be the bottom left terrain from this view. Another way to find it is to find the terrain with the smallest x and z value (among all the terrains of your group) for its position.

Once you've dragged the script onto the first terrain, you'll see the following options appear in the Inspector while you have this terrain selected:



Columns are the number of terrains in a single row that exist along the groups x axis.

Rows are the number of terrains in a single column that exist along the groups z axis.

Set these values to reflect the dimensions of your terrain group. If you used the SliceTerrain JavaScript to create your terrain group, these values are the same as the "Slicing Dimensions" selected in the SliceTerrain Window.

After entering the Rows and Columns values, the area below the "Auto Fill From Scene" button will expand so there are enough terrain fields to accommodate all the terrains in your group. At this point you can drag and drop or select each terrain individually, making sure that the terrains are in the correct order (bottom left first, then the terrain to the right second, starting at the left side for each new row, working left to right and from bottom to top always).

A much simpler way of doing this is available to you, however, so I don't recommend manually selecting each terrain. Simply press the Auto Fill From Scene button, and as long as you entered the correct values for Rows and Columns, and followed the previous directions, the terrains should appear in the correct order.

Empty Locations Exist : If your terrain group contains empty locations (no terrains exist for row 1, column 2 for example), you can still use the auto fill button as long as your terrains follow the naming convention "baseName_row_column," where 'baseName' is a name common to every terrain in your terrain group. If you do have empty locations and your terrains follow this naming convention, check the "Empty Locations Exist" checkbox before using the 'Auto Fill Terrains' button.

Now press play to see the neighboring in action!

Remember, this is not a stitching script. This script assumes you have tiled your terrains perfectly already (not necessary when using the slicing tool). Its only use is to set the neighbors for your terrains.

If any part of this script does not work to your satisfaction, or you have questions, please contact me at kgillen@deepspacelabs.net. Include details of the issue you're facing. If you can provide a link to somewhere I can download your project to test it myself, please feel free to do so.