

# RPG Map Editor Manual

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Tile types.....	2
Tile collision types.....	2
Tile layers.....	3
Smart Brush.....	4
Drawing tiles ( with Smart Brush activated ).....	4
Asset Components.....	6
Creating a Tileset.....	7
Creating an AutoTileMap.....	11
Editing an AutoTileMap.....	11
Editor Keys.....	13

## Tile types

- Opaque tiles with no alpha



- Alpha tiles

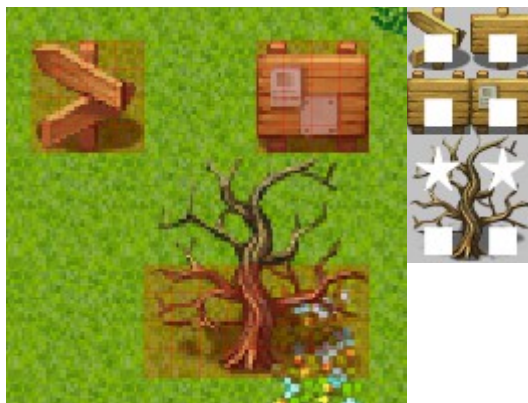


- Overlay tiles: any tile with collision type Overlay (★) in the tileset

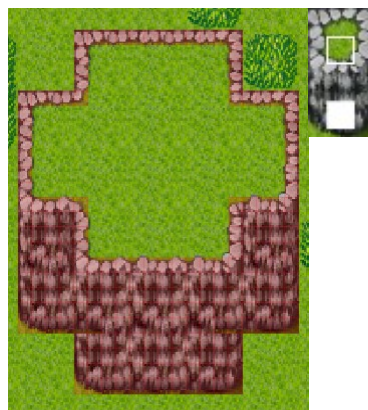


## Tile collision types

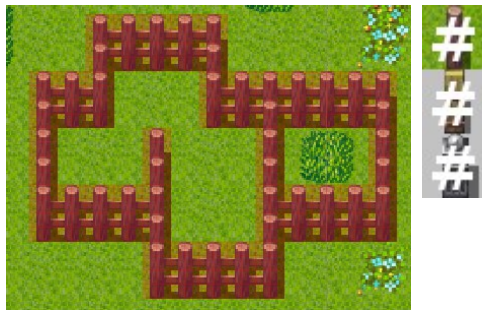
- **Block (■)**: full tile has collision



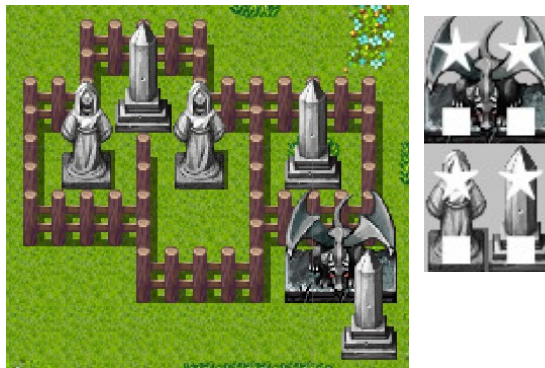
- **Wall (□)**: only edge parts of the tile have collision



- **Fence (#)**: special collision for fence tiles



- **Overlay(★)**: not a collision but a type of tile. This tile will be drawn in Overlay layer.

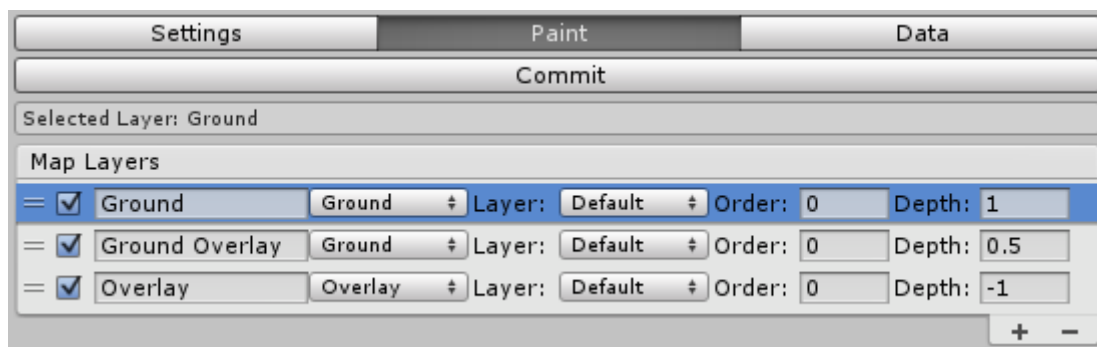


## Tile layers

By default there are 3 different layers where tiles will be placed:

- **Ground**: opaque tiles will be placed here unless Shift/Ctrl key is held while drawing.
- **Ground Overlay**: alpha tiles will be placed here.
- **Overlay**: tiles with collision type Overlay will be placed here.

After v1.2.4, layer can be modified using the Map Layers control in Paint section of the inspector:



Now you can select a specific layer for drawing tiles by clicking on the left icon with 2 horizontal bars (you can also drag layers to different positions, but this won't change the

drawing order).

Enable/Disable a layer, will show/hide the layer and also, copying tiles will skip disabled layers.

Change the name of a layer.

Change the type of layer:

- **Ground:** will have tile collisions
- **Overlay:** with no tile collisions
- **Fog Of War:** this layer will paint fog of war tiles
- **Objects:** for future use ( not implemented yet )

Change the sorting layer, sorting order and Depth ( z position of the 3D world ). This values will change the drawing order of the layers.

Add or remove layers by clicking + or – buttons.

## Smart Brush

After v1.2.4, **Smart Brush** is included to keep old functionalities or auto tile drawing while allowing user to manually draw tiles.

**Smart Brush** can be activated in the Paint section of the inspector.

When **Smart Brush** is activated, tiles are drawn in the same way they were drawn before v1.2.4. See next section “Drawing tiles (with Smart Brush activated)”

If Smart Brush is not activated, selected tile is drawn in the selected layer.

You can still copy a group of tiles and in this case, tiles will be drawn in the right layer where they were copied from.

## Drawing tiles ( with Smart Brush activated )

After v1.2.4, this section is only true when **Smart Brush** is activated.

Also, as now more than 3 layers are allowed, some references in this section have

changed:

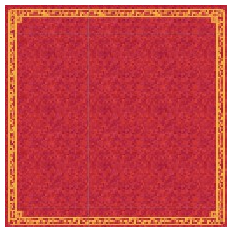
- Ground Layer: is now the current selected layer.
- Ground Overlay: will be the layer over the selected layer.
- Overlay: will be the first Overlay layer found over the selected layer.

- **Left Mouse Button**

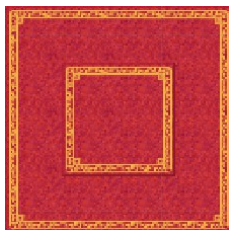
- Select tile from tileset menu.
- Draw tile or copied group of tiles. If the tile is selected from tileset, not copied using right mouse button, and the tile is opaque, it will be drawn in the ground layer without overwriting any other tile in the other layers. Useful to change terrain type without erasing ground overlay tiles.

- **Left Mouse Button + Ctrl/Shift key**

- Force drawing opaque tiles in the ground overlay layer



Tiles drawn pressing left mouse button only



Center tiles have been drawn in ground overlay by pressing left mouse button + Ctrl/Shift key.

NOTE: in Unity editor, use shift for special action.

- **Right Mouse Button**

- Copy tile under the cursor or press and drag to copy a group of tiles. It's working

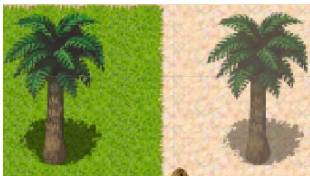
both, in the map and tileset.

- **Right Mouse Button + Ctrl/Shift key**

- Copy only alpha tiles if any, otherwise copy opaque tile. Use this to copy, for example, a tree without copy the ground tiles under it.



Left palm copied using right mouse button only



Left palm copied using right mouse button + Ctrl/Shift key



You can also use the tool bar buttons for painting, erase, undo, redo and display the drawing help box

## Asset Components

- **Tileset**

The tileset contains the graphics for all tiles and the collision data for all of them.

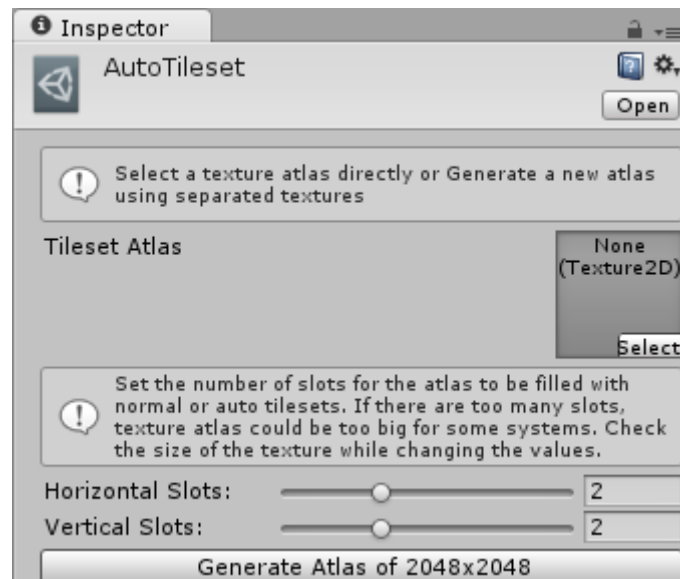
A tileset is composed of an atlas, automatically created after selecting the separated tileset png files.

- **Tilemap**

A tilemap contains the information to compose the map and a reference to the tileset used to draw the map and tileset collision data.

## Creating a Tileset

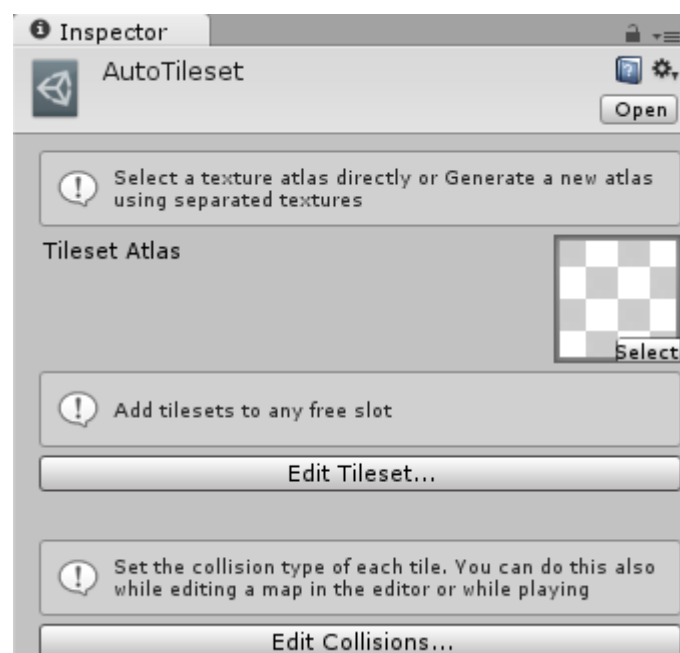
In order to create a tileset, you have to select **Assets/Create/RpgMapEditor/Tileset**.



Before using the tileset, you need to generate the tileset atlas by choosing an atlas image or generating one.

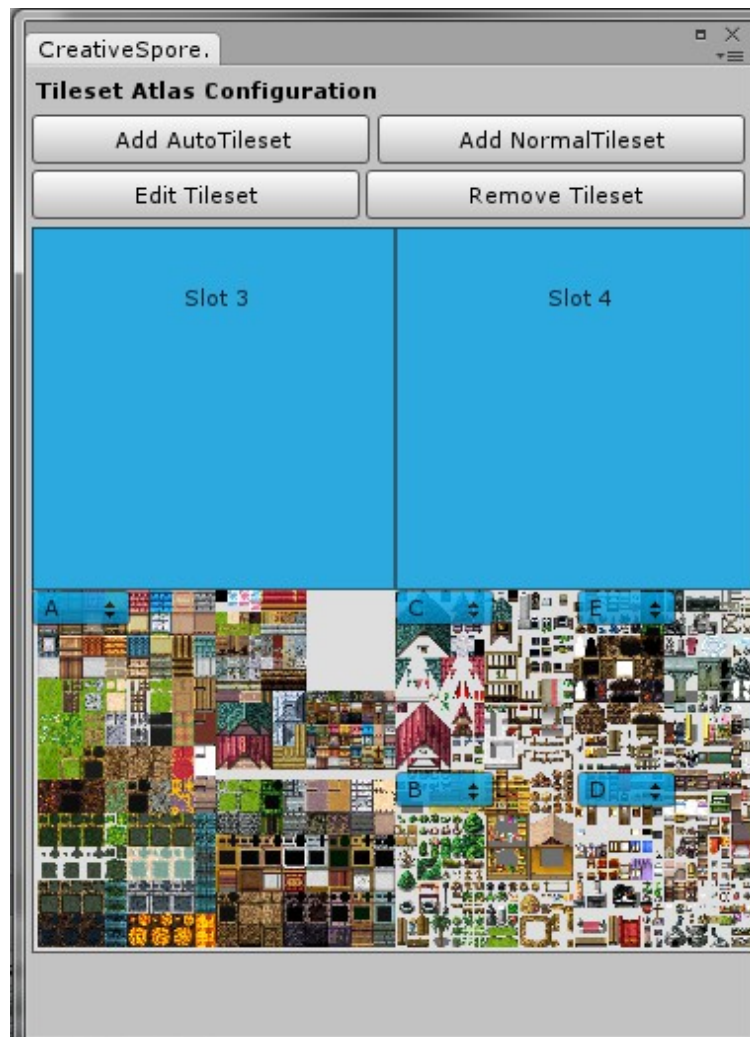
Select the number of vertical and horizontal slots and press the "Generate Atlas" button. You can see how texture size changes according to the number of slots.

Each slot will contain 256 tiles if it's an autotile tileset or 1024 if it's a normal tileset.



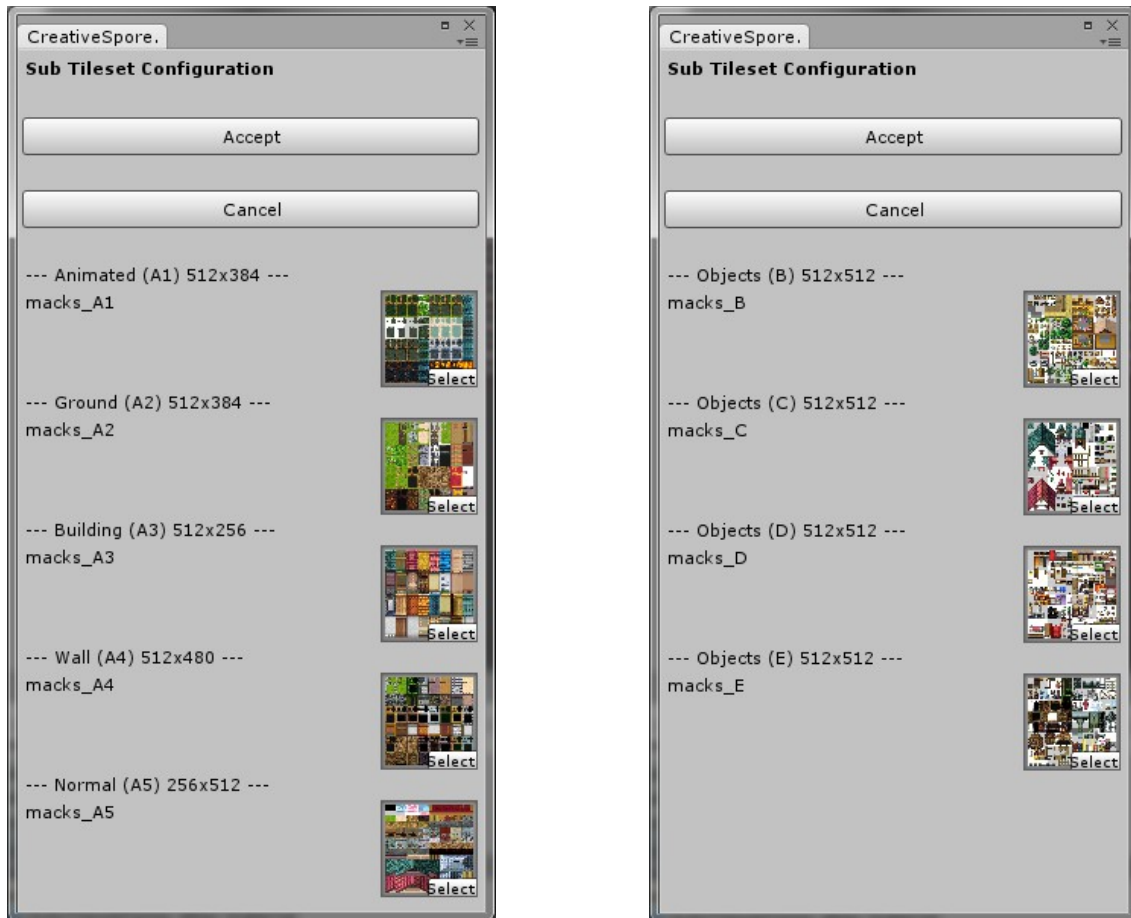


Now you can start editing your tileset adding subtilesets and edit collisions. Let's start editing the tileset.



This window shows the atlas with added tilesets and free slots. Each slot can contain either an auto-tileset or a normal tileset. You can add any of them by pressing the right button, then selecting a free slot. You can also remove a tileset or edit the textures composing the tileset by editing it.





Each tileset is composed of several png files with a name ended with a suffix: a letter and a number. You can experiment by yourself but I recommend you to select the right texture in order to make the tileset working.

You can skip some of the textures, in fact, some of the tilesets are not completed and have only some of them.

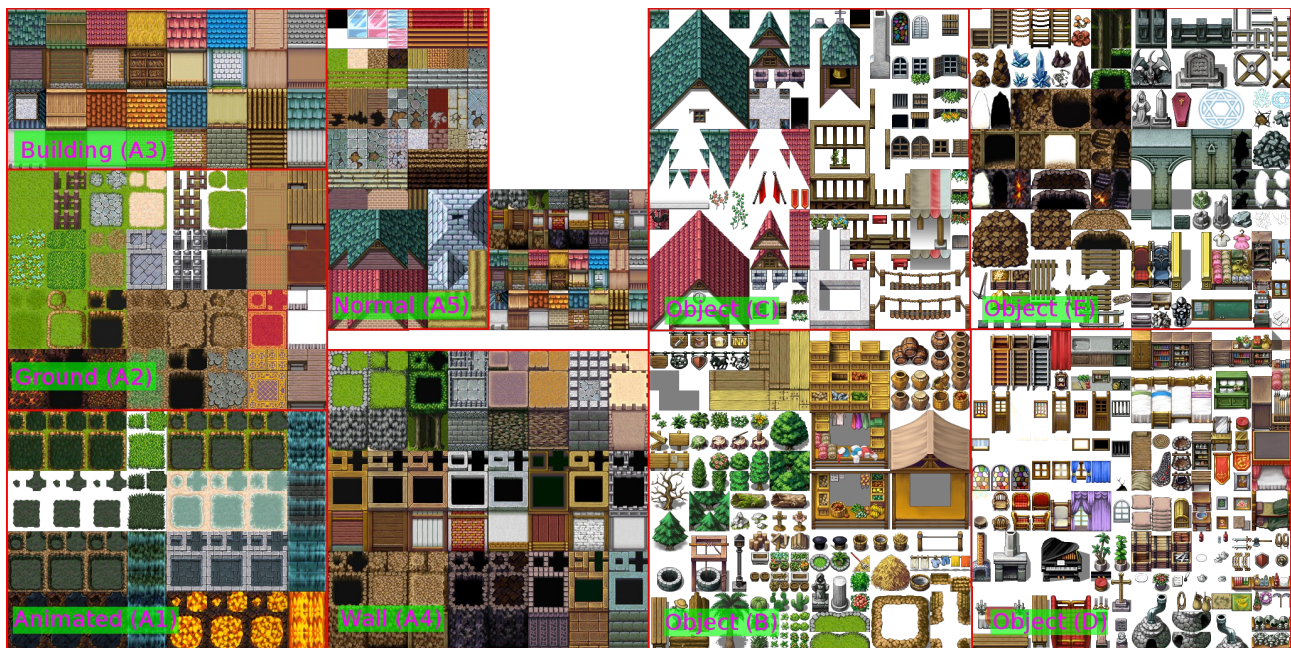
If a texture is not selected, when generating the tileset atlas, the tiles of that texture will be transparent.

Press the Accept button once you have selected all textures.

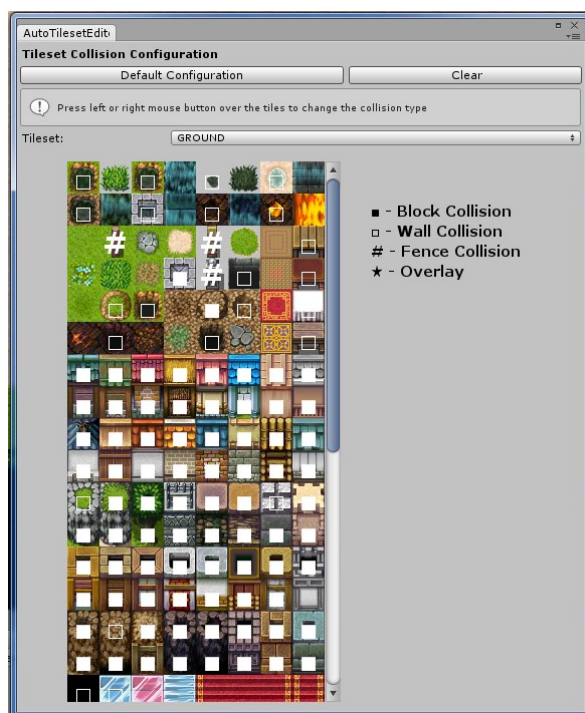
I have added the macks tileset to the project so you have one already to use. You can use it in your own projects as long as you credit him as the tileset creator, even for commercial purposes. More info here <http://creativecommons.org/licenses/by-sa/3.0/>.

You can use any tileset compatible with RPG Maker Vx. Some of them are free and can

be found here: <https://vxresource.wordpress.com/category/resources/tilesets/>



This is the png atlas that will be created. Animated(A1), Ground(A2), Building(A3) and Wall (A4) are special tilesets. But Normal (A5) and Object B, C, D and E are normal tilesets of 32x32 tiles you can use for custom tilesets. You can also modify the atlas directly and changes will be shown in the Editor.



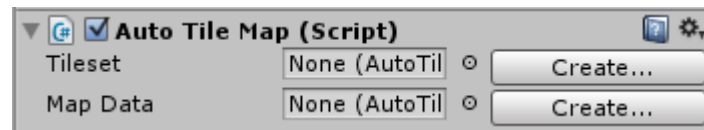
This is the tileset collision configuration window. Here you can see all tileset groups pressing the tileset popup.

You can also edit the tile collision type by pressing left or right mouse button. Or you can clear all collision information pressing "Clear" button, or set default configuration by pressing "Default Configuration" button.

You also will be able to configure the collision later through the autotilemap.

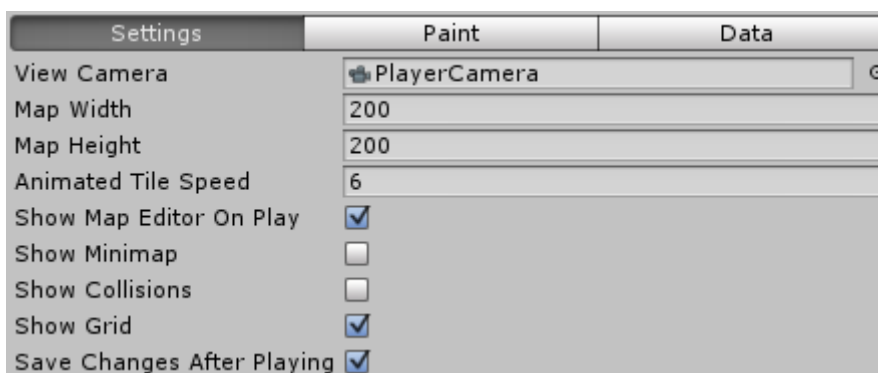
## Creating an AutoTileMap

In order to create an AutoTileMap, you have to select “GameObject/RpgMapEditor/AutoTileMap”.



Before start editing the AutoTileMap you will have to select an auto tile map data asset or create one by pressing "Create" button, and do the same for a tileset.

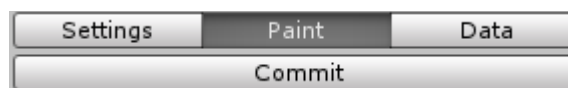
## Editing an AutoTileMap



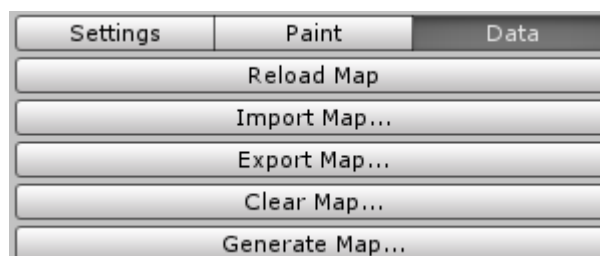
There are some attributes you can change when editing an AutoTileMap:

- **View Camera:** the camera used by TileMap Editor Gui. I recommend to use the camera prefab in **Samples/Prefabs/PlayerCamera.prefab** because it's prepared to be pixel perfect when drawing the tiles when you set an integer zoom value or multiple of two if value is less than 1.
- **Map width and height:** modify these values to change the map size. You have to press "Apply Changes" in order to set them.
- **Animated tile speed:** the speed or frames per second for animated tiles.

- **Show Map Editor On Play:** if activated, the in game map editor will be drawn while playing so you can modify the AutoTileMap.
- **Show Minimap:** if activated, the AutoTileMap tiles won't be drawn neither created, but instead, a texture will be shown with a colored square for each tile.
- **Show Collisions:** if activated, the collisions will be displayed in red color.
- **Show Grid:** show the tile grid.
- **Save Changes After Playing:** if activated, all modifications made while playing will be saved after exiting playing mode.



- **Edit/Commit:** open the edit menu to modify the map and collisions of the tileset. In order to save changes properly you should press this button called "Commit" while in edit mode.



- **Reload Map:** Reload the map from asset data
- **Import Map:** Load a map from an xml file previously saved with Export Map.
- **Export Map:** Save the map into an xml file.
- **Generate Map:** create a random procedural map. This is working only for macks tileset. In order to make it work with other tileset or configure it, you have to change the code by script. Have a look, it's not difficult to modify and you can even improve it!

## Editor Keys

- **Ctrl/Shift + Z:** undo drawing operation
- **Ctrl/Shift + Y:** redo drawing operation
- **Mouse Scroll Up/Down:** zoom in/out
- **M:** show/hide minimap ( in game editor only )
- **C:** show/hide collisions ( in game editor only )