RPG MAKER AUTO TILE SET IMPOTER
By IGL TECH

First of all thanks for buying and download this little editor extension.
My name is Alessio, and I really thank you :)
This is the Documentation for the version 2 of my RPG Maker Impoter for Unity3D.
From the 2.0 version I decided to switch to unity 2018.4.

OVERVIEW
The meaning of this tool is to implement import functionality for the user who want to work with tile set file compatible with the various version of the RPG Maker Software.
I always loved old rpg style video game, like the old Final Fantasy or Pokemon ^_^

This extension will create the subfolders for the impoted and managed image. It will create the *Tile* that you can import in you palette, and then you can use that tiles to draw on a standard *Tile Map*.
This tool will setup the assets based on the new tile map system integrate in ***Unity 2018.4 +***.
So you can (theoretically) use all the add-on and extension designed for the integrated tile map, like custom brushes.

Supported Auto Tile Layout
The tool now supports the following layout of auto tile:
1. A1 Auto Tile File: this file contains ***animated Water*** and **WaterFall/Water** *Twist* and some ***not animated floating element***
2. A2 Auto Tile File: this file contains not animated ***terrains*** or ***water***
3. A3 Auto Tile File: this file contains not animated ***wall*** and ***roof***
4. A4 Auto Tile File: this file contains not animated ***wall*** and ***ceiling/roof***
5. A5 Tile File: this file not contains auto tile. In the RPG Maker software that file contains the plain tile. You have to adjust it in the map based on your need.
6. Water tile from RPG Maker XP (they are different from the one in ACE and MV)
7. Terrain tile from RPG Maker XP (they are different form the one in ACE or MV)

The other tile file usually included in the RPG Maker tile set package (named Tile_B, Tile_C, Tile_D, Tile_E) are not auto tile file, and they will not be included (at the moment) in the workflow of this tool.
I have tested it with the Tile set file from RPG Maker VX Ace, and it works fine. I have made a test with a tile set image from the last Rpgmaker MV, and it seems to works fine with that. But I need to investigate ;)

You can write me at this e-mail
info@indiegearlab.com
or send a message to this facebook page
https://www.facebook.com/Indiegearlab/
And go to this link too
http://www.indiegearlab.com/unity3d-stuff/unity3d-rpg-maker-tile-importer

You can watch the new video that show the process to import the tile at this link
https://www.youtube.com/watch?v=YcV9vsLQRPU

The package will include the source code util I will be able to create a functional dll with all the file. You can study or improve the funcionality. It's a little bit tricky, but if you have in mind to study the code I think you can handle it. :)

READ THIS: Now it should works on Mac too. I have add an underscore (_) before the name of the folder and file generated by the tool. I don't know why but Mac OS has a strange behaviour with the string path. But it should be fixed now.
PLEASE: do not resell or repost the code as your own code.

All the assets file you'll see in this documentation are NOT included in the package.
In the package you'll find only some tiles that I draw myself to test the bae functinality of the code.
You have to buy/download/draw your own asset and import them into your project.

Relase note
2.01

- Incapsulates all the code in a namespace `IGL_Tech.RPGM.Auto_Tile_Importer;` For future update and for other future tool to have better reference and isolation of the code used.

2.0

- New UI system
  - Single Editor Window where you can select the type of auto tile you want to import
  - Added the possibility to give custom name to tile and associated sprite sheet
  - Added custom Editor Window to edit the common setting of the tool (standard destination folder for generated sprite sheet and asset)
  - Added the possibility to specify a custom destination folder before generating/saving assets
- Now the tool will produce only sprite sheet image and not single tile variant per file
- Change the code behind for foture tool implementation and addition.
- Change the bit mask handle
- Sprite sheet and auto tile are not subdivided in sub folder, but they are saved in the specified destination folders

1.4

- Animated preview while selecting the tile to import (only for A1 tiles).
- Add *Select All/Selec None* button in the tool UI.
- Tile Preview in the asset manager (so you can Now see what tiles you are selecting before putting them into the palette).
- Add the possibility to import a single tile and not the full layout file.

1.3

- Full support for the A1, A2, A3, A4 layout files.
- Sopport for terrain and water tileset from Wolf RPG Editor

SETUP

All you need to do to setup the tool is to import it into your project.
As I said before you need Unity 2018,4+ to make it works.
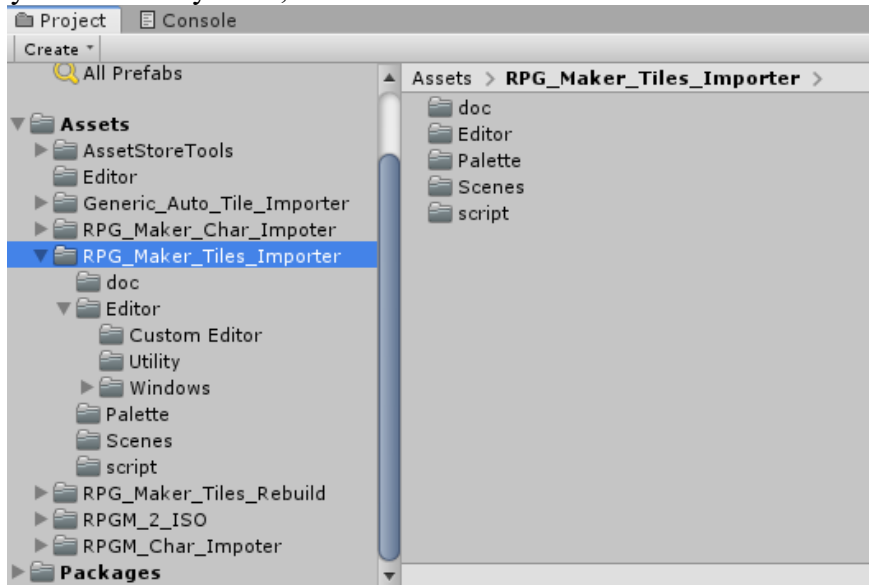
This is the folder structure of the tool

- **RPG_Maker_Tiles_Importer**: the root folder of the tool
  - *doc*: contains this pdf file and other/future/usefull items
  - *Editor:* contains the script for the import of the tile set
  - *Example Scene:* contains an examlpe scene that I created for you :)
  - *Palette:* contains an example of the palette that I created for you
  - *_rtp_auto_tiles: this folder will be there in case you'll use the standard default value for the destination folder. It contains the auto tiles created by the tool*. The auto tile will be futher subdived based on the source file name.
  - *_rtp_import: this folder will be there in case you'll use the standard default value for the destination folder. It contains the auto tiles created by the* tool. It contains all the image sliced and recreated from the tileset
  - *Script:* contains the core files for the auto tile system. **DO NOT** touch them until you hare prepared to a good study session.

HOW TO USE

Lets start from an empty scene, with just the minum folder and files needed to make the tool work.
Ignore the AssetStoreTools folder. I'll use that to upload the tool to the asset store.Ignore the other folder too. They are from my other tool and package.
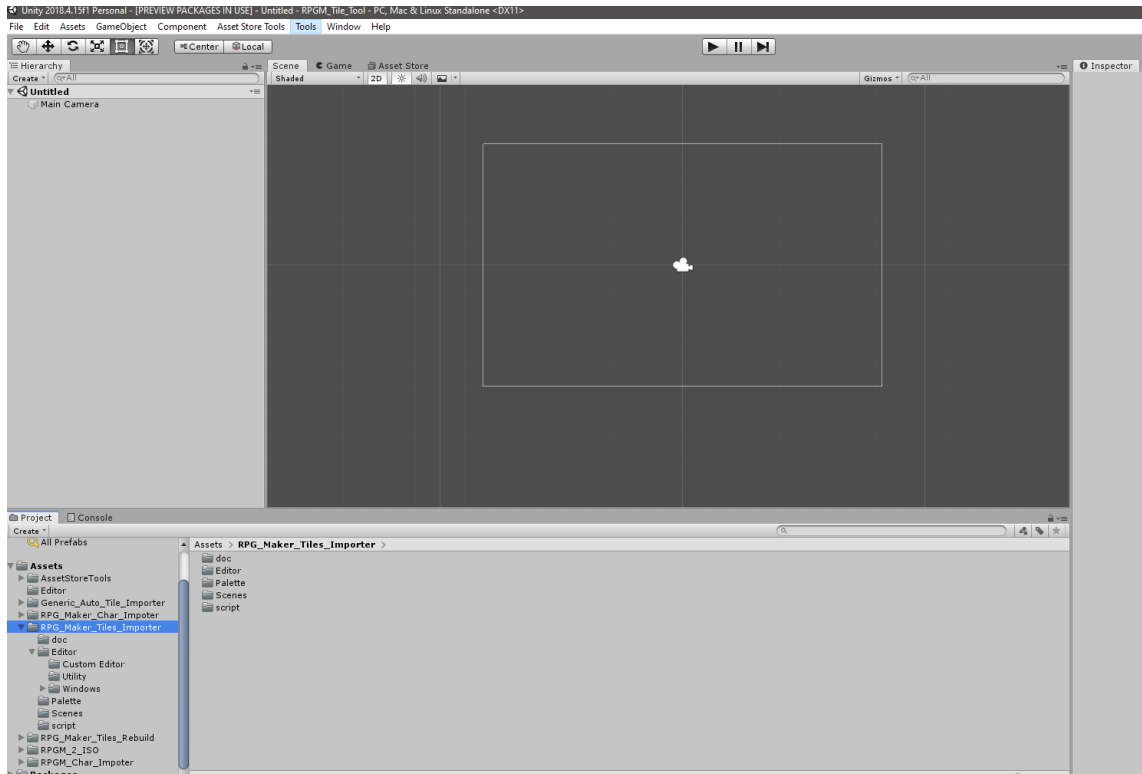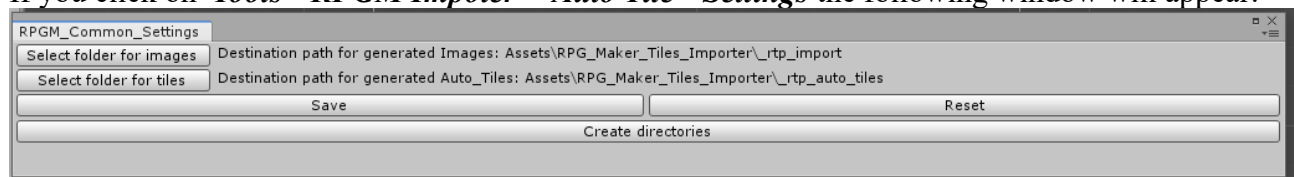

Go to the *Main Menu* and go to **Tools->RPGM Impoter**.
In case you have my char importer tool (you can see and in case buy it at this link https://assetstore.unity.com/packages/slug/154785) you'll have the option "Char".
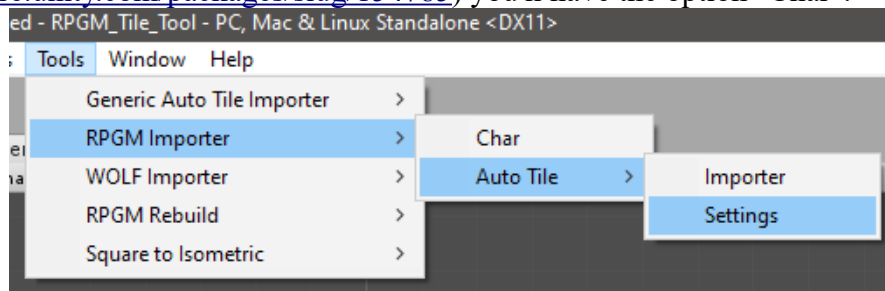
The part of interestig for this guide is the "Auto Tile" menù.
If you click on **Tools->RPGM Impoter-> Auto Tile->Settings** the following window will appear:

This window will allow you to see, set and reset the value for the default destination folder witch are used to store the generated sprite sheet and the auto tiles files.
You can even create the folder using the "Create directories".

Now let's clink on the other menù item.
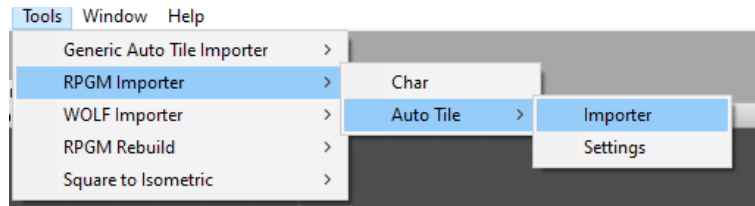
And the following window will appear
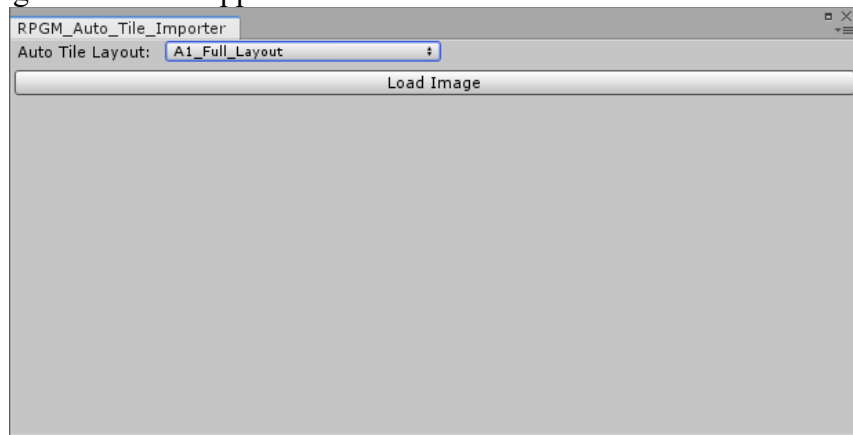
As you can see there are only 2 elements in this window (for now). The first one is a popup menù.
In this popup menù you can select the type of auto tile layout you want to slice and import.
The second is the "Load Image" button.
If you change the selected layout after you loaded an image the image will be resliced based on the new selected value.
The supported layout value are the following:
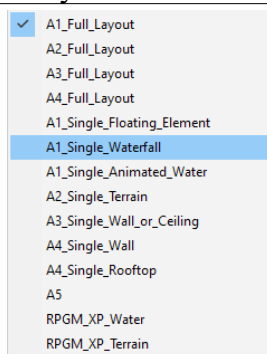
	Keep in mind that slicing an image with the wrong layout will lead to a bad result. You have to know what kind of image you are goind to slice and the layout you are going to use. There is no way to have a prior controll at the moment.

I'll try to give you some hints about the structure of the rpgmaker auto tile file.

A1 layout	The zone in yellow are called floating decorative element. And they are handled like terrain element. The green zones are use for waterfall or water twister. There are animated (3 frame animation). The red zones are for animated waters. The animation is composed by 3 frame. You can import a full layout or import a single element (single floating element, single waterfall or single water animation) selecting the correct layout from the menù.

A2 layout	Every block of this image is a terrain. Terrains don't have animation.
	You can slice and import a full file with all this element or a single terrain element selecting the from the popup menù.

A3 layout	This layout is for wall and rooftop.
	The first and second from the top are the rooftop, while the other are wall. But they are handled in the same way. You can import a full file or a single wall or rooftop.

A4 layout	This file is for ceiling or rooftop and for walls
	The first, second and third from the top are for the ceiling. The other for walls. The walls in this file are handled link the elements in the A3 format, while the ceilings are handled like terrain. You can import a full layout or a single element selecting the appropriate voice from the menù.

| RPGMAKER XP Water and Terrain	
You can import the rpg maker xp water and terrain auto tile set. I can't show you image of that because I haven't find a cc0 licensed file to used. In case you need info about that just write me.	

You can import the rpg maker xp water and terrain auto tile set.
I can't show you image of that because I haven't find a cc0 licensed file to used.
In case you need info about that just write me.

So now you have the basic to work with rpgmaker files.
Let's try something. I'll try to importo an A1 full layout file

This is a full layout for the A1 tile set. I have them from an old humble bundle pack :)
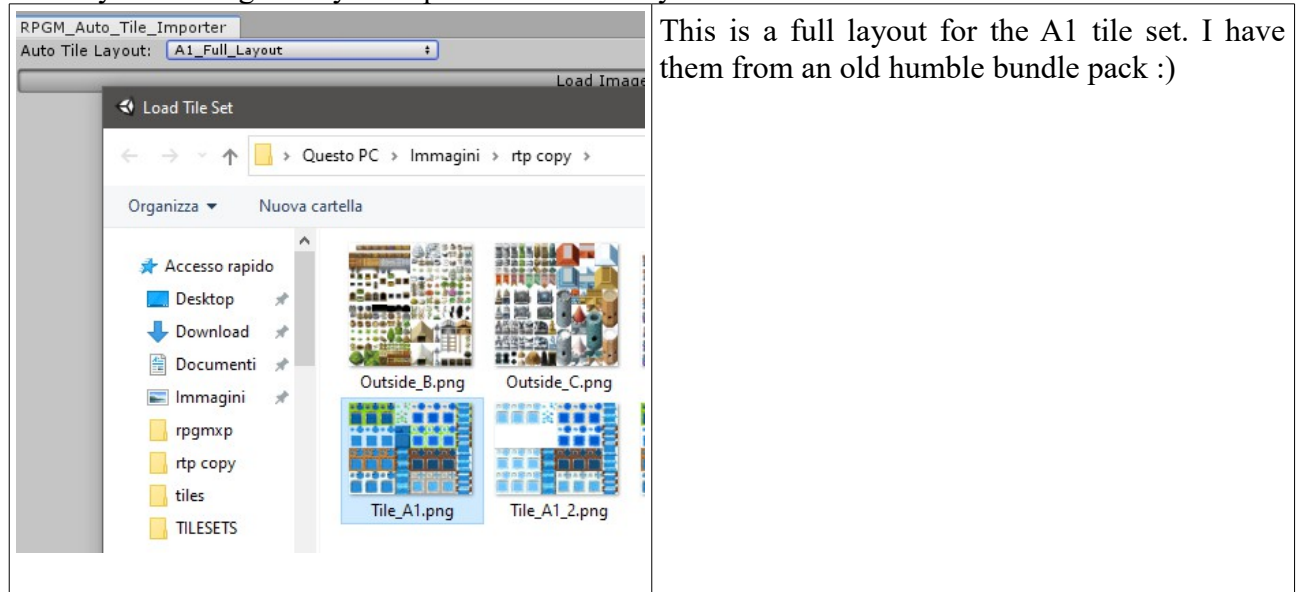
Once you open the file you'll have something like this
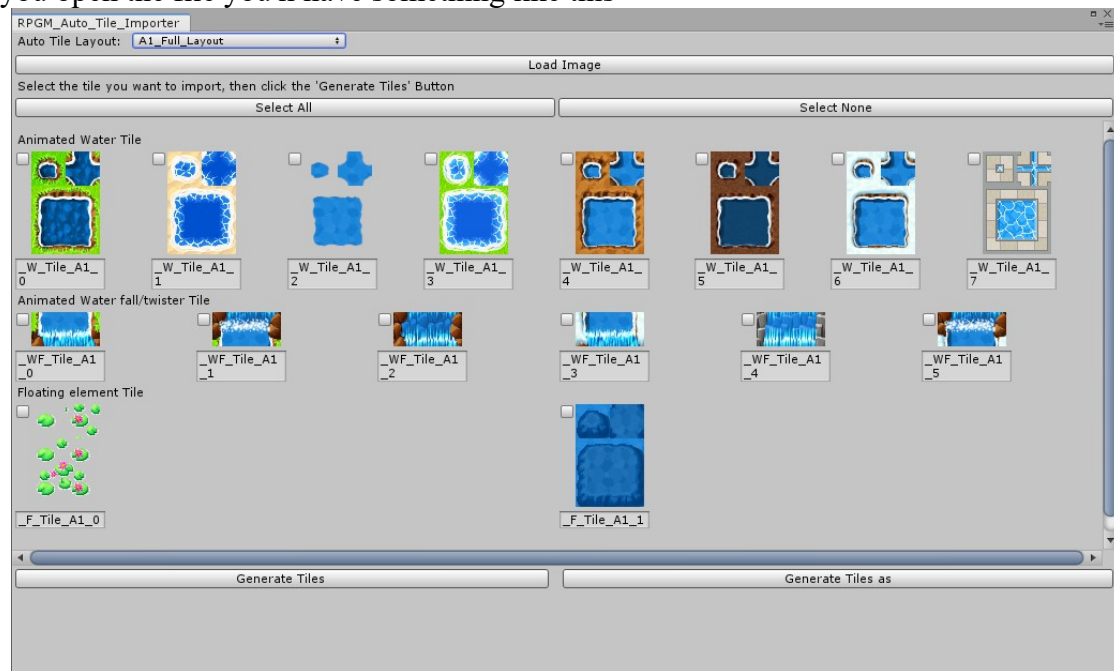
The water and the waterfalls are animated, so in the window you'll see them in motion :)
Just click on the image you want to import and if you want give them a proper name.
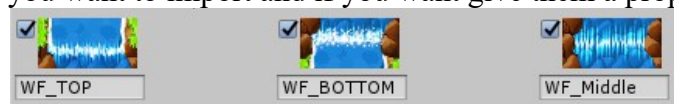
And then click on "Generate Tiles" and (if you haven't change the defaul values) you'll have something like this
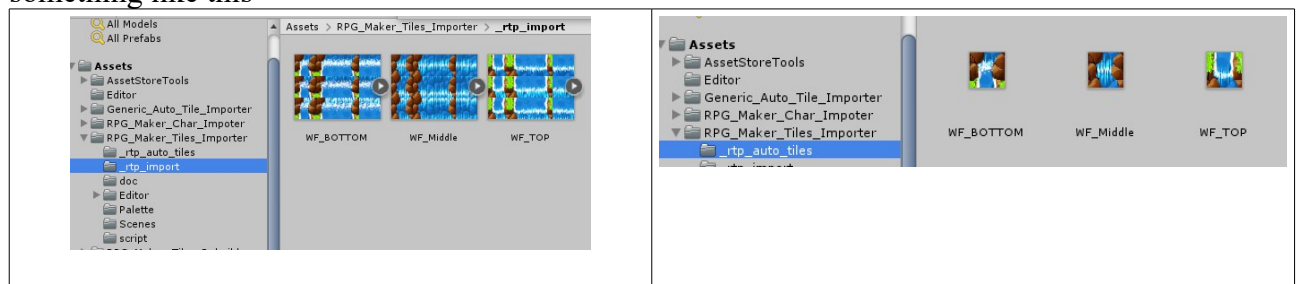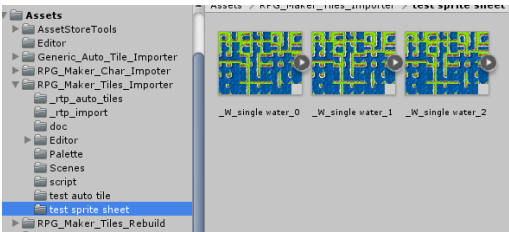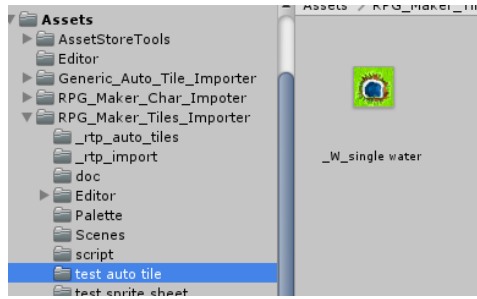
As you can see the specified name is the same the for the auto tile and for the sprite sheet, soo it

will be easier to find the reference file and elements.

Try another way!

I choose to import a single animated water. It's the same in the previus file but saved as separated file.


single water.png

If I select it and than click on "Generate Tiles as" the tool will ask me the folder where to save the sprite sheet and the folder for the auto tile. I'll create 2 test folder. After the process you have this

The sprite sheet will be stored in "test sprite sheet" and the correspective auto tile in "test auto tile".
We can go on and import other layout!

I have import some A3 and A4 stuff and I have this auto tile and the other one in the other folder.
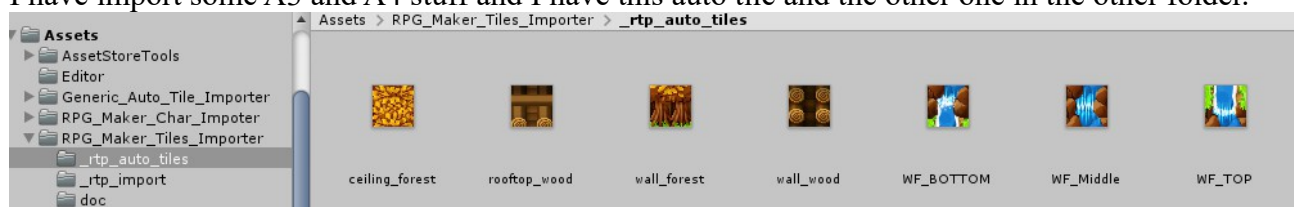
Now I'm goind to put them in a palette to use to draw my tile level map.
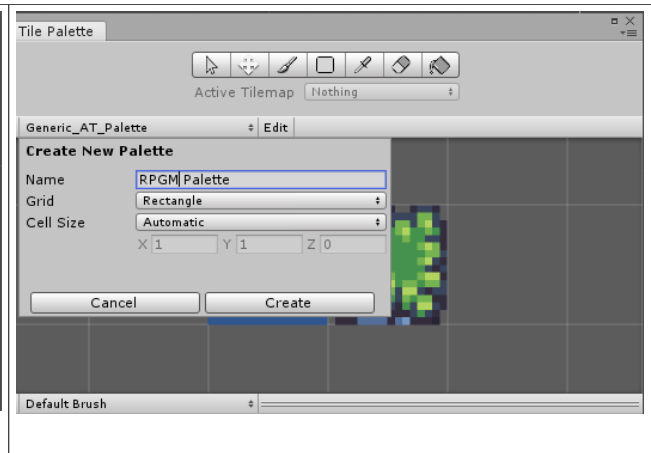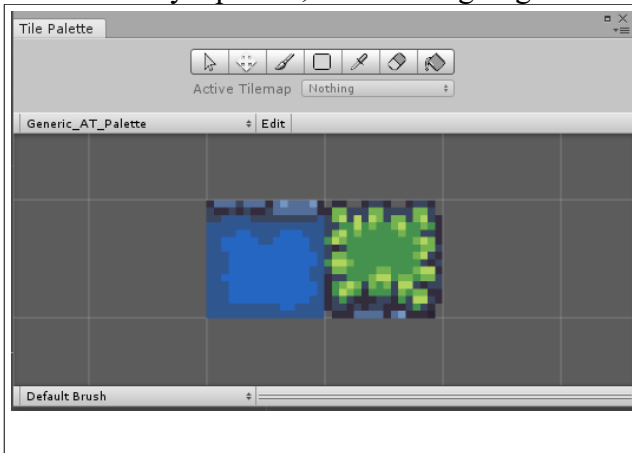
Open the palette window anche create a new palette.

The following window will appear
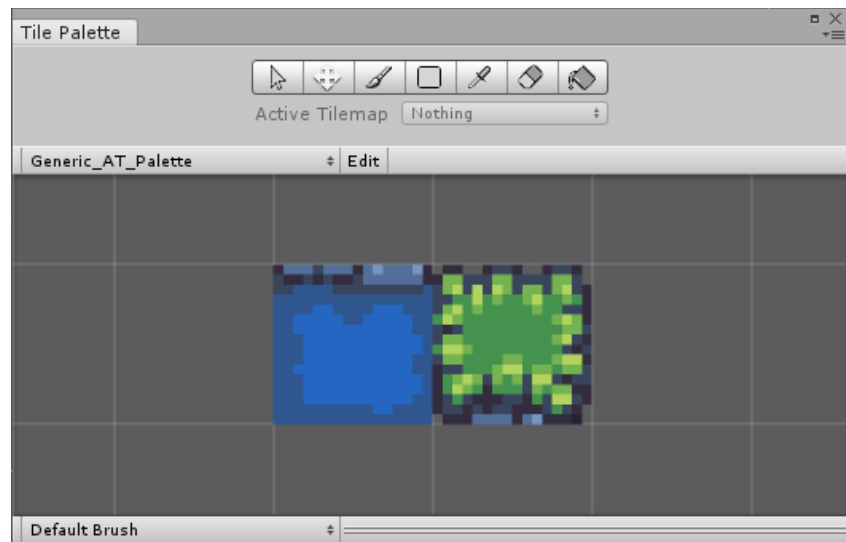
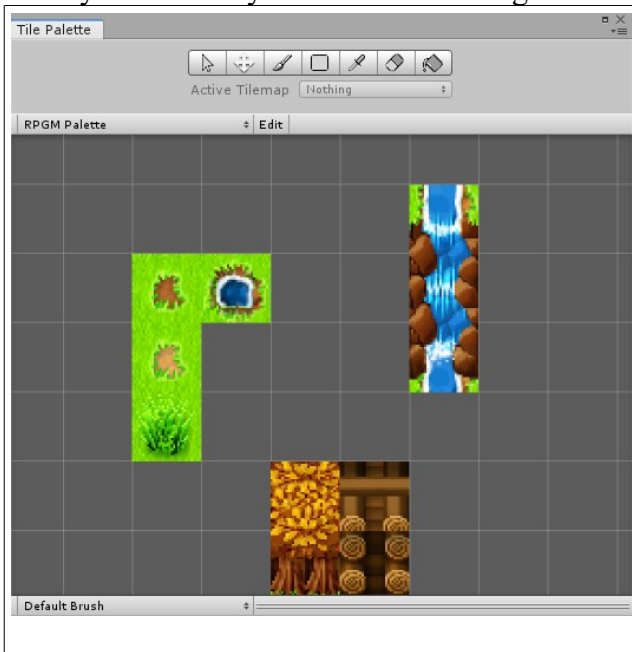I have already a palette, but we are going to create another one now!

And create it in the folder you like. I put in the Palette folder.

Now go in the folder where you have your auto tile and drag and drop them into the created palette.

If you prefer you can lock the palette folder like any other unity editor window.
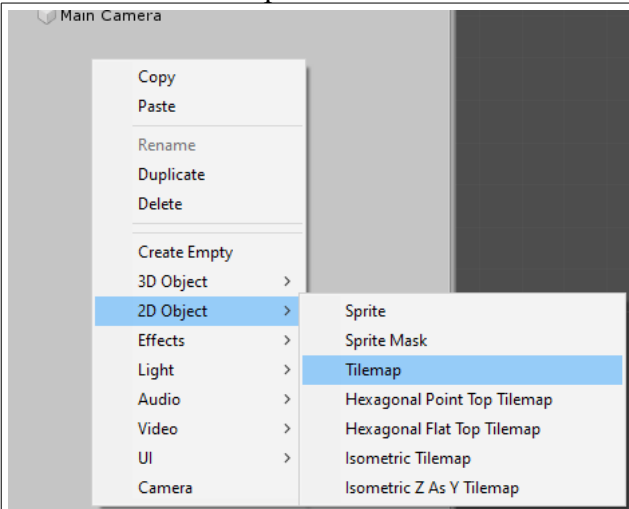
Once you finished you'll have something like that

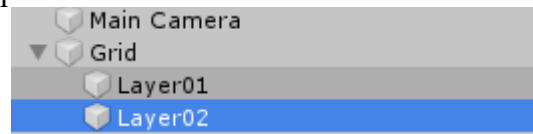I have imported some grass tile.
And I have arranged the tile in good graphical way, so I can see them very well.
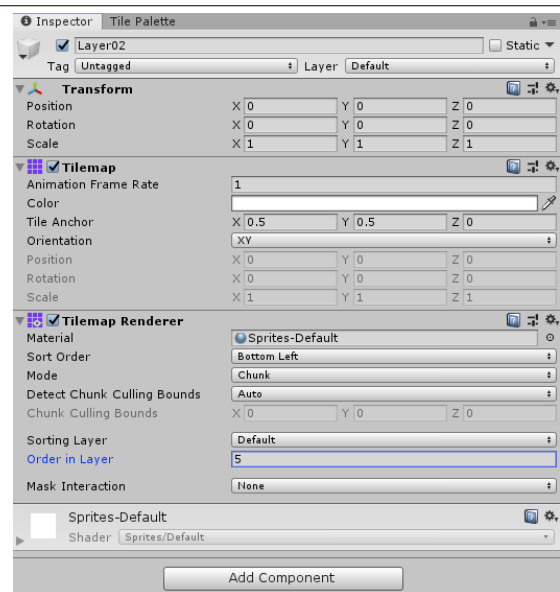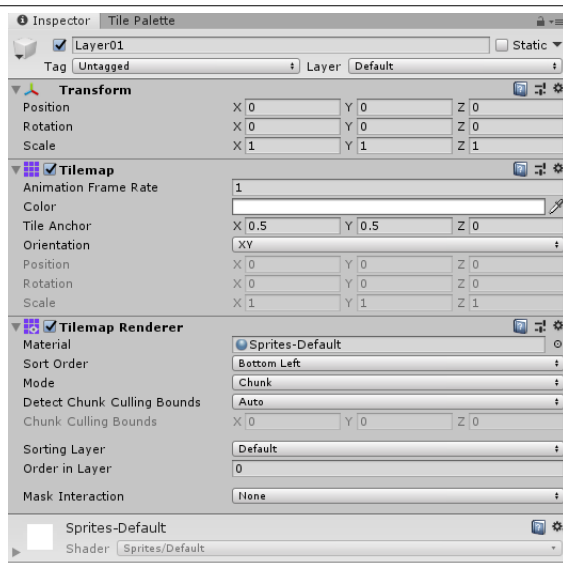So now I'm going to draw some stuff in a map!

Let's create a tile map where we can draw!

With this operation you'll create a one Layer tile map. But let' create another one.

And set them on 2 differente "Order in layer" using the inspector.

In this way I can draw the tile map in 2 different layer and a good looking effect.

The auto tile will adapt only base on the tile on the same tile map, so the auto tile in the Layer01 will work with the tile in the Layer01 but not with the Layer02.

Before starting draw make sure that in the Palette window you had set the correct "Active Tilemap" to draw in.
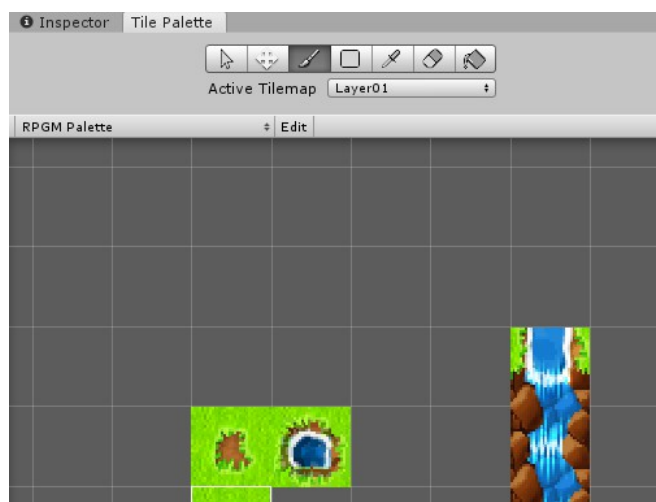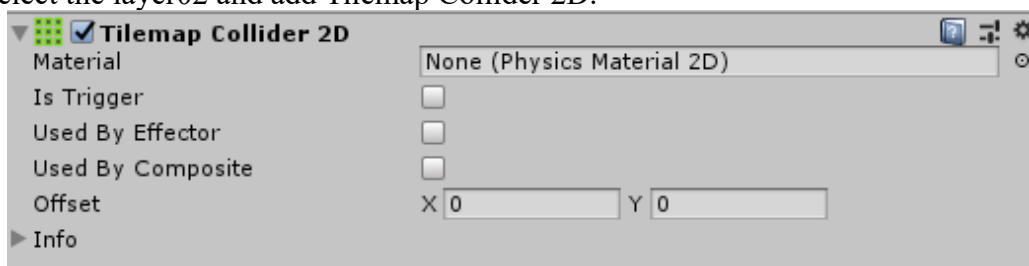
I have draw this on the Layer01

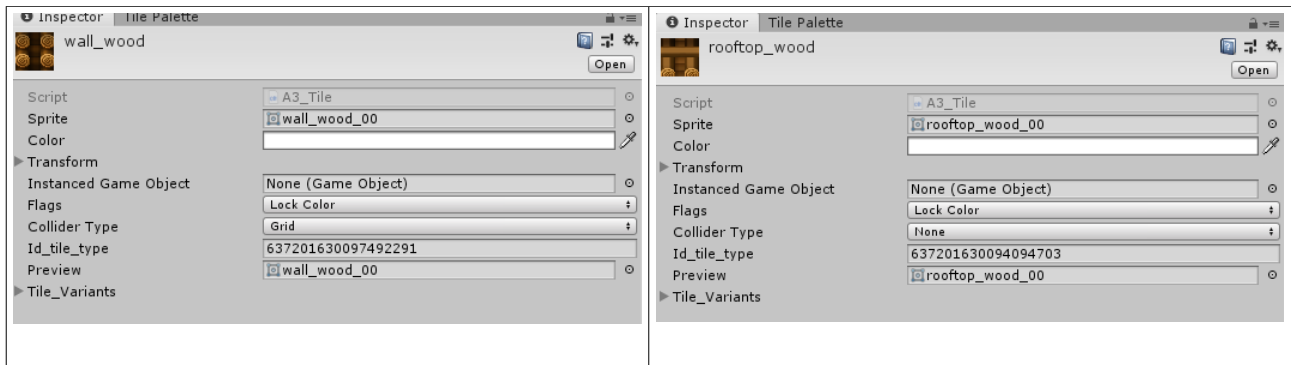Now I'm going to draw a Little house in the Layer02.

As you can see the auto tile in the layer02 will not update the auto tile in the Layer01.

You can set the collider type of the auto tile.
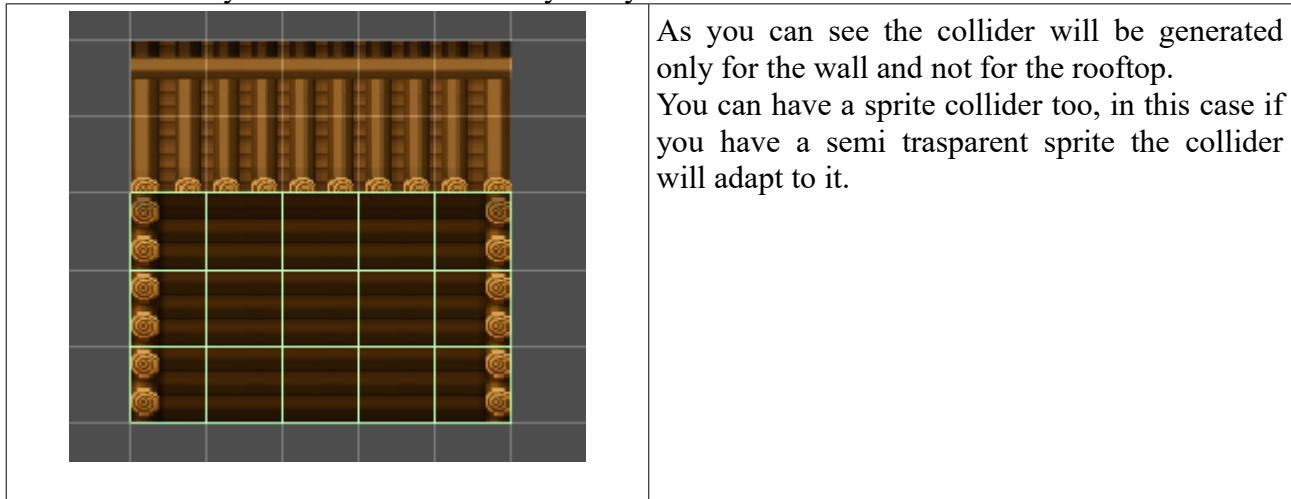Ok let's select the layer02 and add Tilemap Collider 2D.

Then select the wall wood and wood roof top tile and change the collider type.

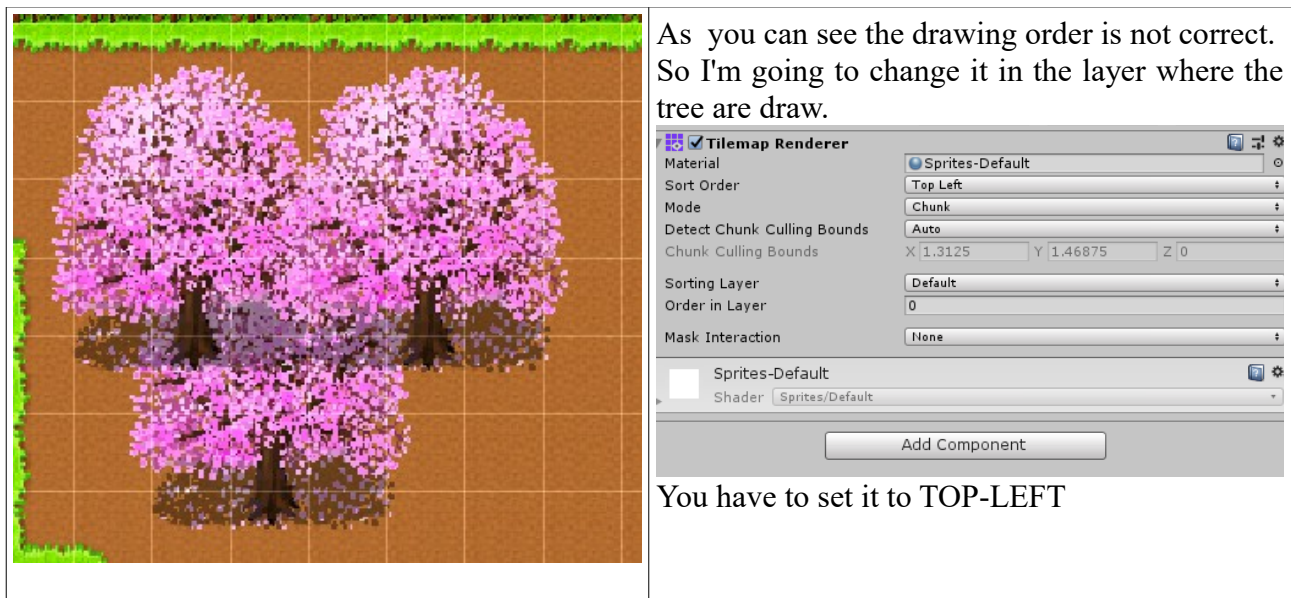I set grid collider for the wall and none for the rooftop.

If I disable the layer01 as and select the layer02 you can see this

As you can see the collider will be generated only for the wall and not for the rooftop.

You can have a sprite collider too, in this case if you have a semi trasparent sprite the collider will adapt to it.

I'll add some other tile manually for the sake of a more complex example to show you other result.

Note: the other element's i'll insert int the map can be inserted as standard tile with manual configuration. **They are not auto tile**.

I have this now

As you can see the drawing order is not correct. So I'm going to change it in the layer where the tree are draw.

You have to set it to TOP-LEFT

The result will be this, that is the result we want for our tree.

The order layer is now correct.

PAY ATTENTION HERE:
even if the tree is rendered in a 5x5 square area it is "stored", drawed from one single tile.

That's a trik to draw bigger sprite in with a single cell! :)
With some work (but really fast... maybe 60 seconds) I have now this

Really nice!
But how can I setup the collider for this tree? Like before adding a collider to my tile map.
And as you can see the collider because the collider of the tree is set to Sprite the result will be this

So the collider will be adapted to the sprite.

This is the final scene

That will be included in the asset package as example.
What do you think about that?

Animation Speed
If you want to change the speed of an animated auto tile (waterfall, water or RPGM XP water) you can do that selecting the relative auto tile and change tha "Animation speed" parameter

The best effect is usually obtained setting the speed for waterfall at higher value. The standard values are 1 for the animated water and 4 for the waterfall.
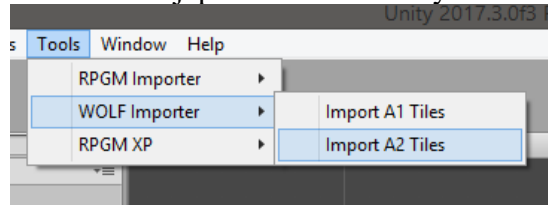
SUPPORT FOR OTHER AUTO TILE SET

Wolf Rpg Editor
The tool support the Wolf Rpg Editor Auto Tile.
Like for the RPGM XP there are only 2 kind of auto tile, terrain and Water (with 3 frame animation), and it has it's own menù.
The Wolf RPG Editor is software used in japan to make old style RPG game.

Thanks for reading.
If you have any question please write me down a message. In the first page there are my contacts.

Thanks again to have bought this package. I'm an indie developer. And I hope this will be my full time job in the future.
If you want to make a donation to support me you can use the paypal module in this page.
http://www.indiegearlab.com/wanna-spare-a-coffe

Thanks again
bye
Alessio