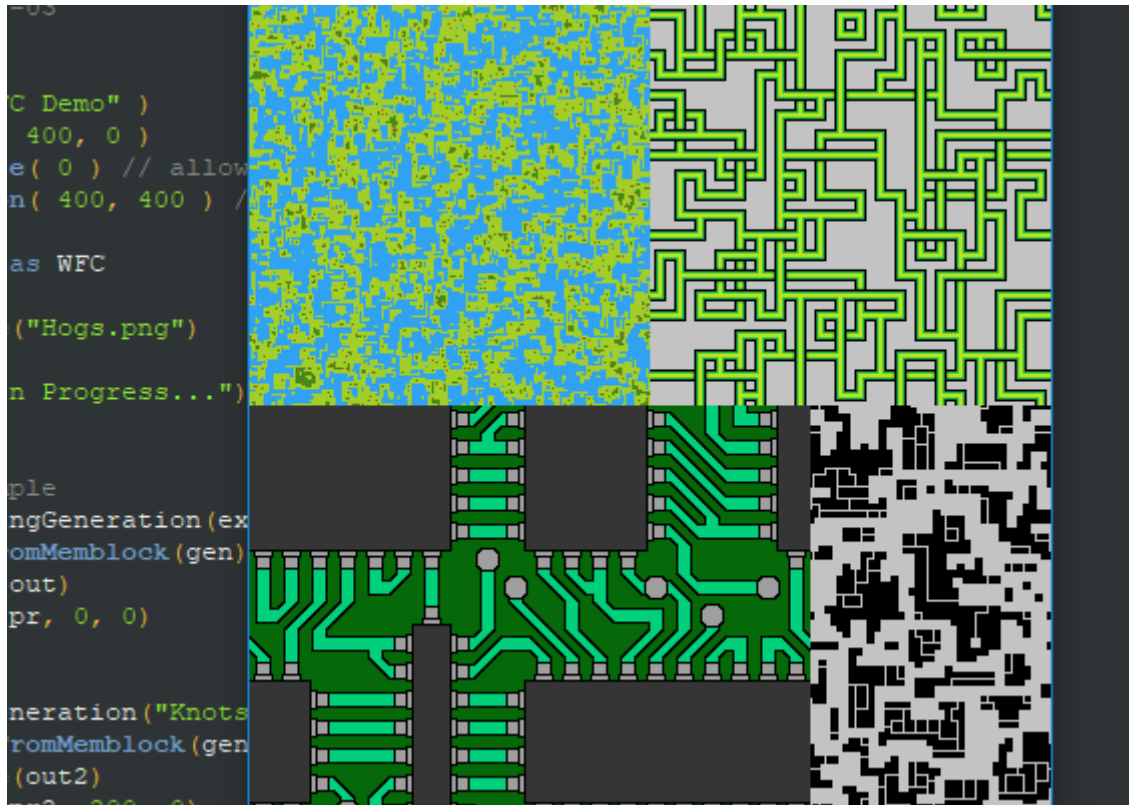


Wave Function Collapse for Tier 1



Wave Function Collapse for Tier 1

INSTALLATION

To install the plugin, copy *WFC* or *WIFC_DEMO* in your *Tier 1\Compiler\Plugins* folder.
And that's it !

OVERLAPPING GENERATION

- Only for the paid version

Overlapping generation is a method in which you give to the function a single image file (png) through the following function :

```
int WFC.OverlappingGeneration(int imageid, int N, int periodic_inputi, int  
periodic_outputi, int height, int width, int symmetry, int ground)
```

Details of the parameters :

N is the NxN block size that will be taken to process the output

periodic_inputi & *periodic_outputi* are booleans that can take the value 0 or 1

height & *width* are the desired height and width of the outputted mem block

symmetry is the number of symmetries (from 0 to 8)

ground is the ground level.

This function returns a memblock with the corresponding output image. You can then process it the way you want.

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TILLING GENERATION

This method is more useful if you need to make a game map. The tileset, however, needs to be stored in a precise way, you can use the included samples to understand how to do it yourself.

```
int WFC.TilingGeneration(string TilesetName, string subsetName, int height, int width, int periodic_output)
```

TilesetName is the name that contains the tileset's *data.xml* and the tiles.

subsetName is the name of the desired subset, it can be left blank if you want to use all of the tiles.

height & *width* desired height and width (in tiles) of the output.

periodic_output bool (0 or 1). Not really used atm.

Let's talk about the tileset now. AGK doesn't come with a prebuilt tileset system nor a way to pass custom types in a plugin so I used an already made tileset system that is well suited for the WFC algorithm. You place each individual tile in a folder in the media folder alongside a *data.xml* file.

In the *data.xml*, you'll need to fill in symmetries, subsets and neighbors informations for each tile. The symmetry comes in the following format, use this image's example to figure out what is the correct type of symmetry :



If your tile has no symmetry, give it the type *P*.

Use the three examples included, experiment and, most importantly, enjoy ! 😊

If you have any question, feel free to contact me on the forums or via mail : mail@kakise.me