

**Current version: 1.0.0** 

# Components

GeneratorManager.cs	Main generator file. Used to setup your generator type and map data,has button to generate/clean your map
BSPGenerator.cs	Main file for Binari Space Partition algorithm. Can be used alone on tilemap gameobject (how to use - the comments in code)
CellularGenerator.cs	Main file for Cellular automata algorithm. Can be used alone on tilemap gameobject
MazeGenerator.cs	Main file for mazes. Can be used alone on tilemap gameobject
Tunneling.cs	Main file for tunneling. Can be used alone on tilemap gameobject

## **Editor properties**

#### Common:

Generator type	Select a type of generator to use for your map
Map width	Width of map to generate
Map height	Height of map to generate
Chance of decorate	If you want to use a decoration (like rocks, bush and other stuff) set it greater than 0
Tilemap for floor/walls/decoration	Place here tilemaps you want to use for floor/walls and decorations

Decorations	List of decorations to use. Set the count of decorations you want to use, and place tilebase of decorations to the cells
Tile for floor/walls	Place here a tilebase for floor and walls (highly recommend to use RuleTile!)

## Tunneling

Max tunnels count	Max number of "tunnels" on map, including a rooms if you want to generate it.
Min/ Max tunnel length	Min and max length of each tunnel (each tunnel generate with length from "min" to "max" length)
Tunnel width	Width of tunnels. <u>If it set to "0" tunnel width</u> will be equal one cell
Min/Max rectangle room	Min and max size of rectangle room. (Generator can generate rect and circle rooms if you check relevant checkboxes)
Min/max circle room radius	Min and max <u>radius</u> of circle room.
Build rectangle rooms/Build circle rooms	Check it if you want to generate rect and circle room
Randomize tunnel width	Check it if you want to randomize tunnel width. Tunnel width will be random for each tunnel in range from "0" to this value.

## Cellular automata

Neighbour cells count to star dead/alive	Neighbour cells count of each cell to stay "alive" during map generation. Recommended value for "dead" is "4" and for "alive" is "5". Change it and look at results!
Number of building steps	Number of passes through the map. Higher value can make you map cleaner, but take more time to generate.Recommended value is "3".

Cell chance to start alive	Chance of cell to start as "wall" on first pass of generating a map. Change it and look at results!
	Todato.

## Binary space partition

Max/min room area	It's not a actual size of rooms! It's a size of min/max reserved area for room in partitioning. Room can be less than this value. Do not recommend to set min value less than "4"
Halls width	Width of halls to generate. Can be random if you check a "Randomize hall width" checkbox. If it set to "0" tunnel width will be equal a one cell
Randomize hall width	Check it if you want to randomize each hall width. Randomization range from "0" to this value.

#### Maze

Chance of empty space	Regulate amount of empty space in maze. The less this value, then more "dense" maze will generate.
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## **Common tips**

If you want to use script without prefab - see the demo scene and read a comments in code!