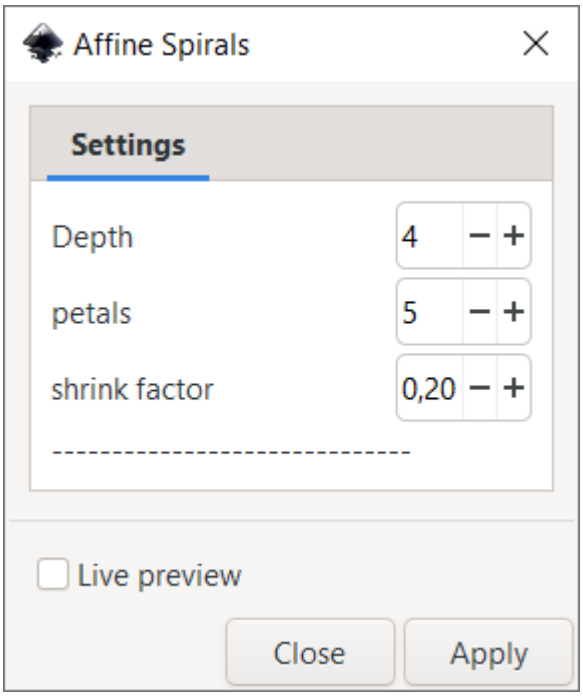
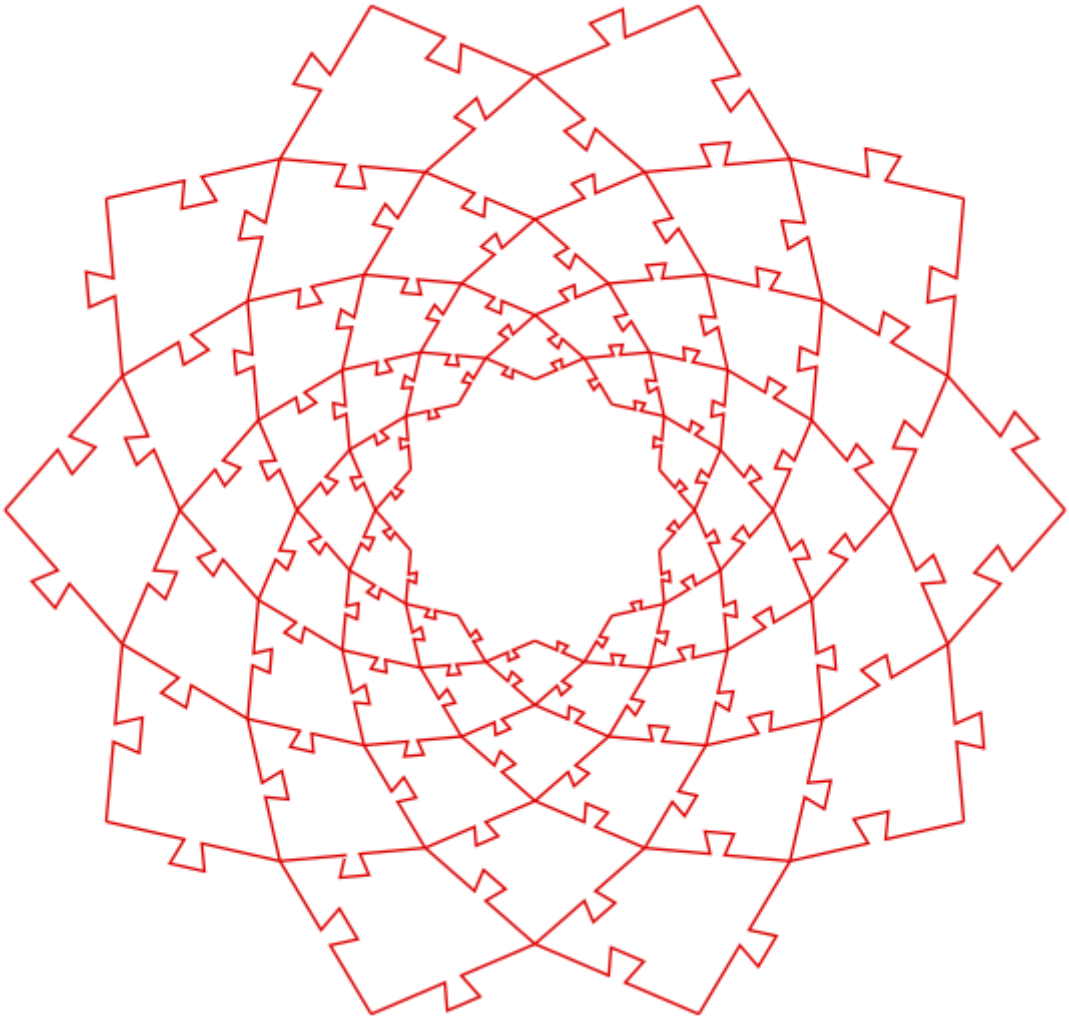
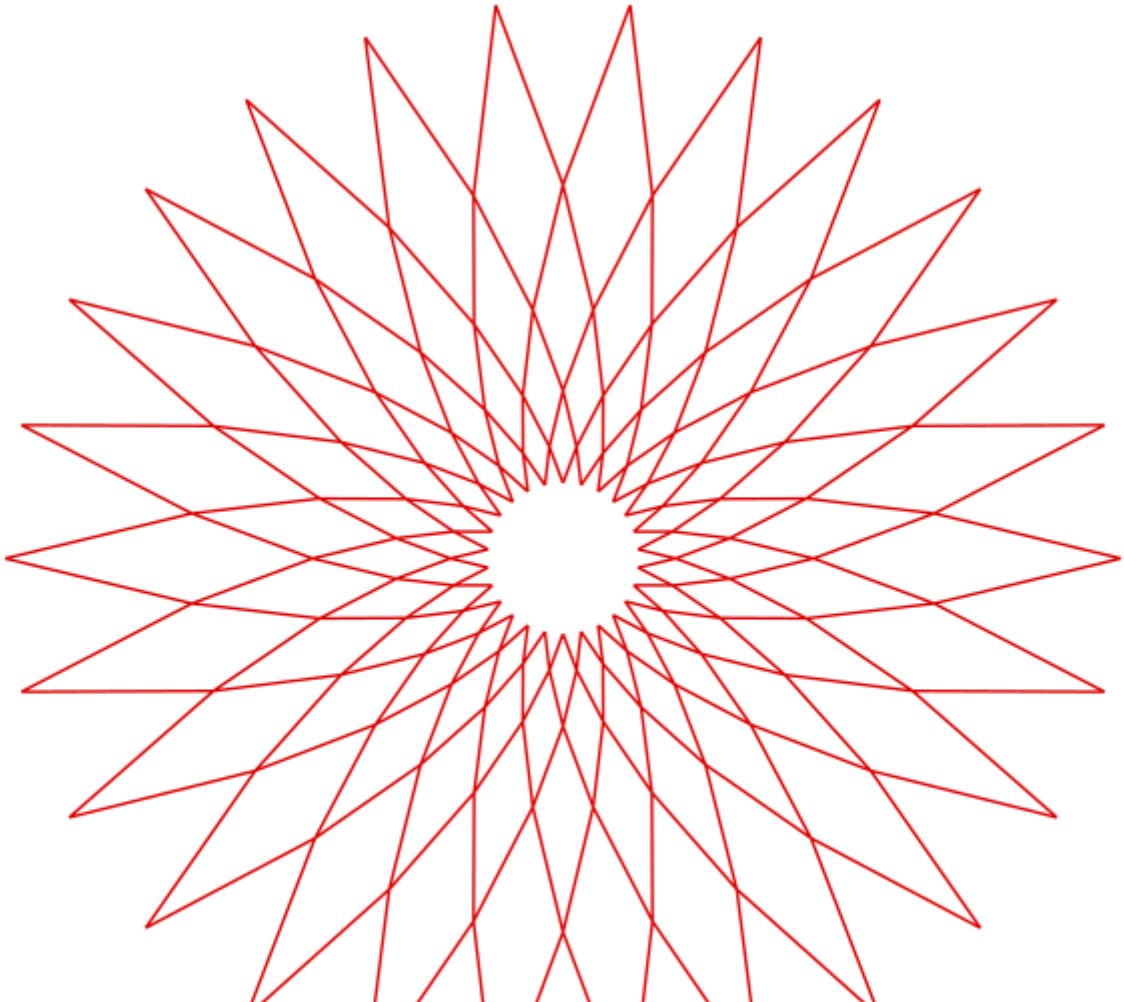
Puzzles/Mazes/Nests

- Affine Spirals
- Apollonian Gasket
- Bouwkamp Code
- Eggmazing
- Lasercut Jigsaw
- Maze
- Sudoku

Affine Spirals

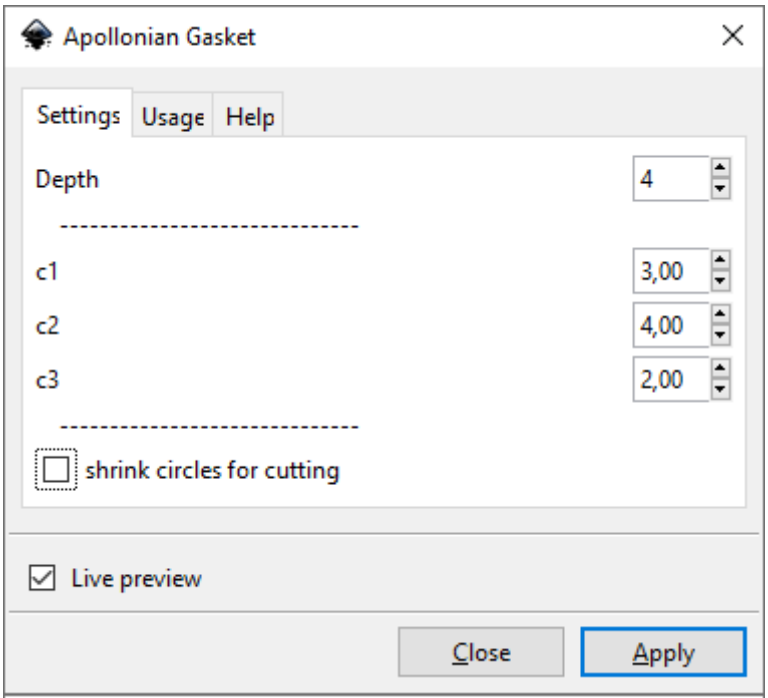


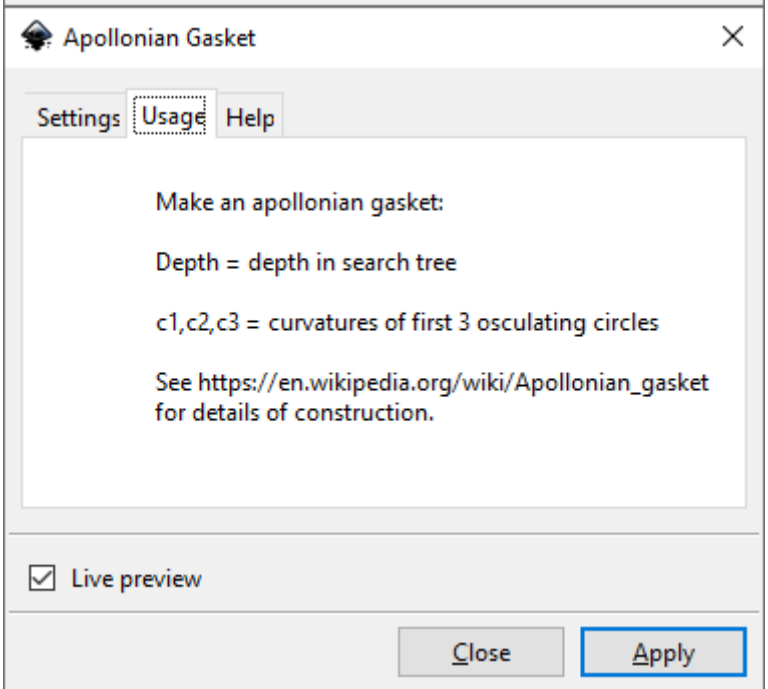


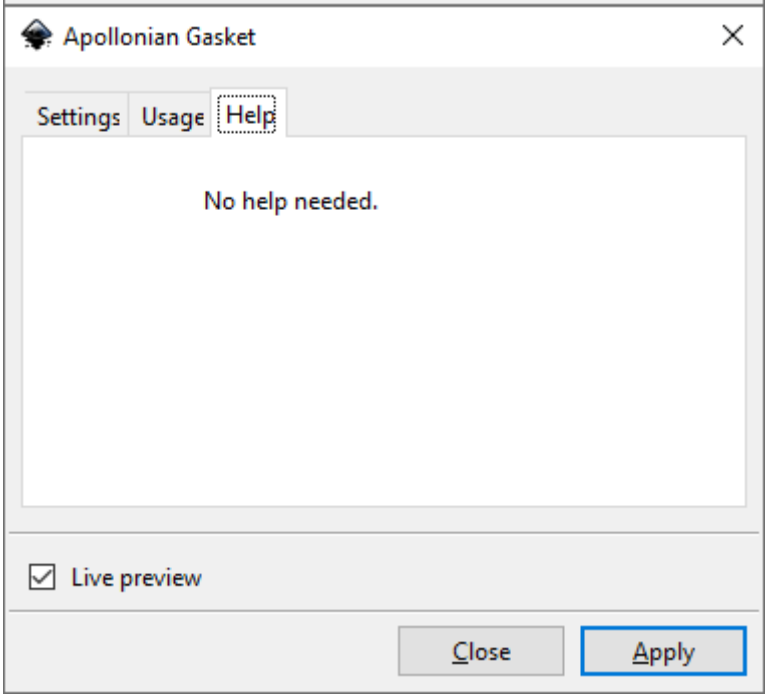


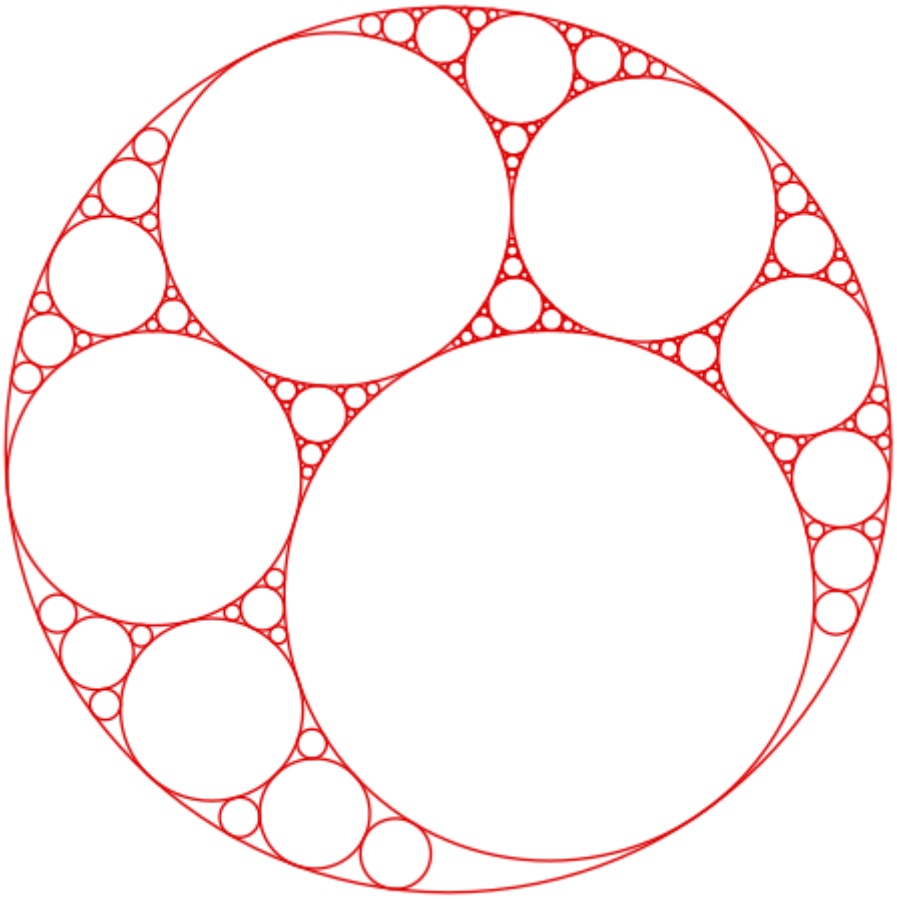
Apollonian Gasket

Source of the extension: https://github.com/macbuse/Apollonian


Apollonian Gasket
Settings
Usage
Help
Depth
4
c1
3,00
c2
4,00
c3
2,00
shrink circles for cutting
Live preview
Close
Apply


Apollonian Gasket
Settings
Usage
Help
Make an apollonian gasket:
Depth = depth in search tree
c1,c2,c3 = curvatures of first 3 osculating circles
See https://en.wikipedia.org/wiki/Apollonian_gasket
for details of construction.
Live preview
Close
Apply

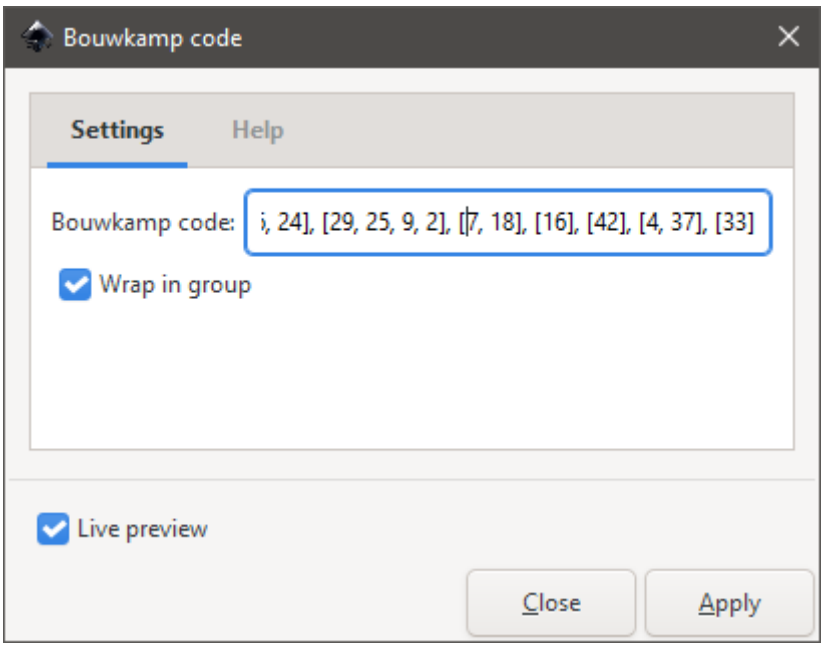

Apollonian Gasket
Settings
Usage
Help
No help needed.
Live preview
Close
Apply

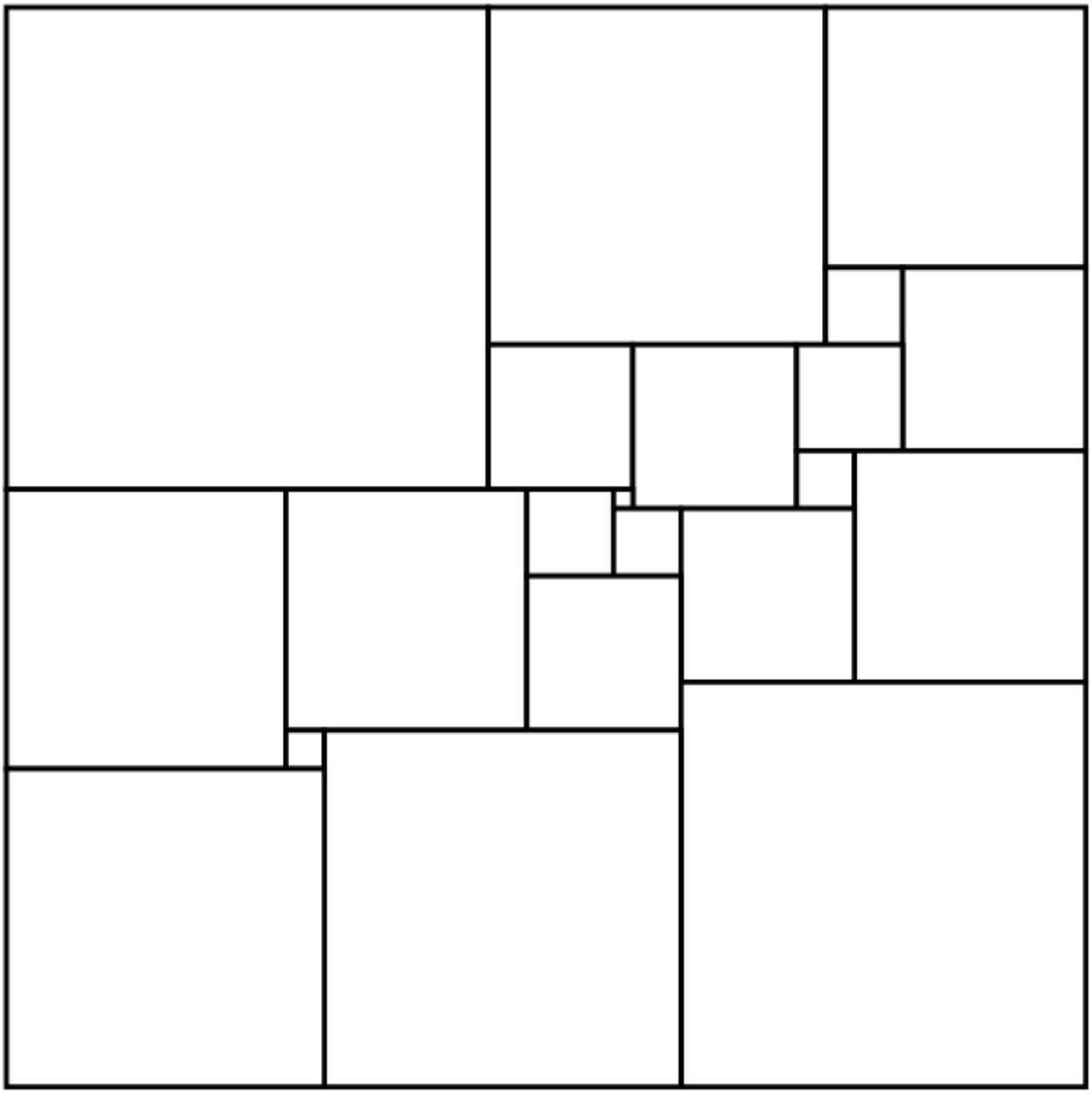


Bouwkamp Code

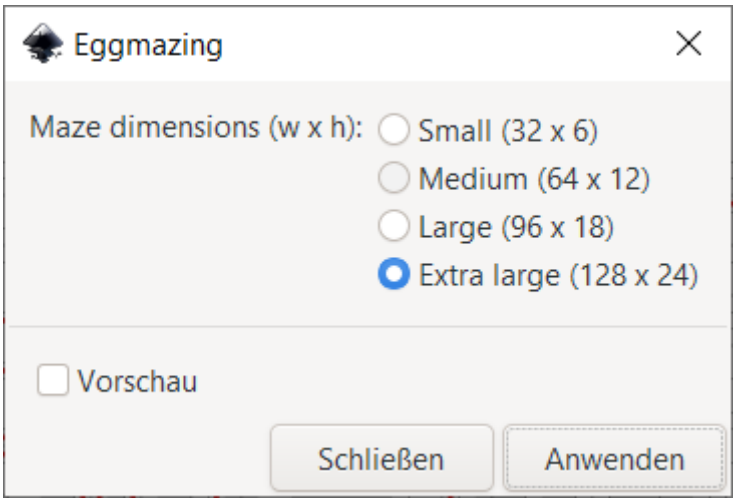
Source: https://github.com/Wandmalfarbe/bouwkamp-code-generator

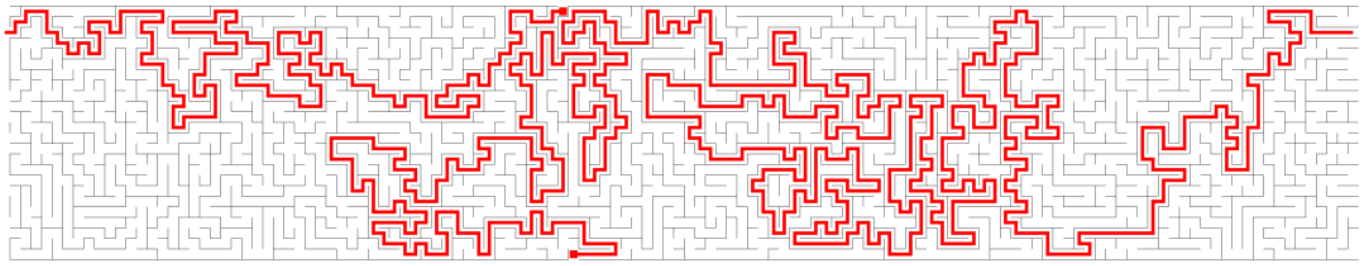
This Inkscape extension allows you to generate squared squares and squared rectangles from Bouwkamp codes and table codes. You can paste Bouwkamp codes with or without various formatting characters (like brackets) and convert them to the corresponding squares. The following three simple perfect squared squares (SPSS) that were generated from Bouwkamp codes.





Eggmazing


Eggmazing
Maze dimensions (w x h):
Small (32 x 6)
Medium (64 x 12)
Large (96 x 18)
Extra large (128 x 24)
Vorschau
Schließen
Anwenden



Lasercut Jigsaw

An extension for Inkscape that creates jigsaw shaped pieces. Options for back, and single cut pieces. Creates a jigsaw puzzle for laser cutting.

- set dimensions in various units,
- number of pieces in X,Y,
- randomness and size of tabs,
- rounded corners, and a backing as an option.
- packed neatly for minimal cutting.
- uses minimal lines to optimise for laser cutting (e.g. when using packed backboard).

May one day be extended to do boolean cuts and create separate pieces. (Will require DBUS or some other way to call boolean ops from a plugin.) Currently there is an experimental checkbox which will create pieces suitable for laborious manual boolean operations. Useful if you want separate jigsaw pieces.

Source:

- https://inkscape.org/de/~Neon22/%E2%98%85lasercut-jigsaw
- https://github.com/Neon22/inkscape-jigsaw

option is enabled.

Border color

Jigsaw lines color

Live preview

Close Apply

Lasercut Jigsaw

Style **Dimensions** Notches Usage

Define the Jigsaw size and grid size.

Width 350,00

Height 350,00

Corner radius 0,00

Units mm

Outer Border

Border width 20,00

Border radius 5,00

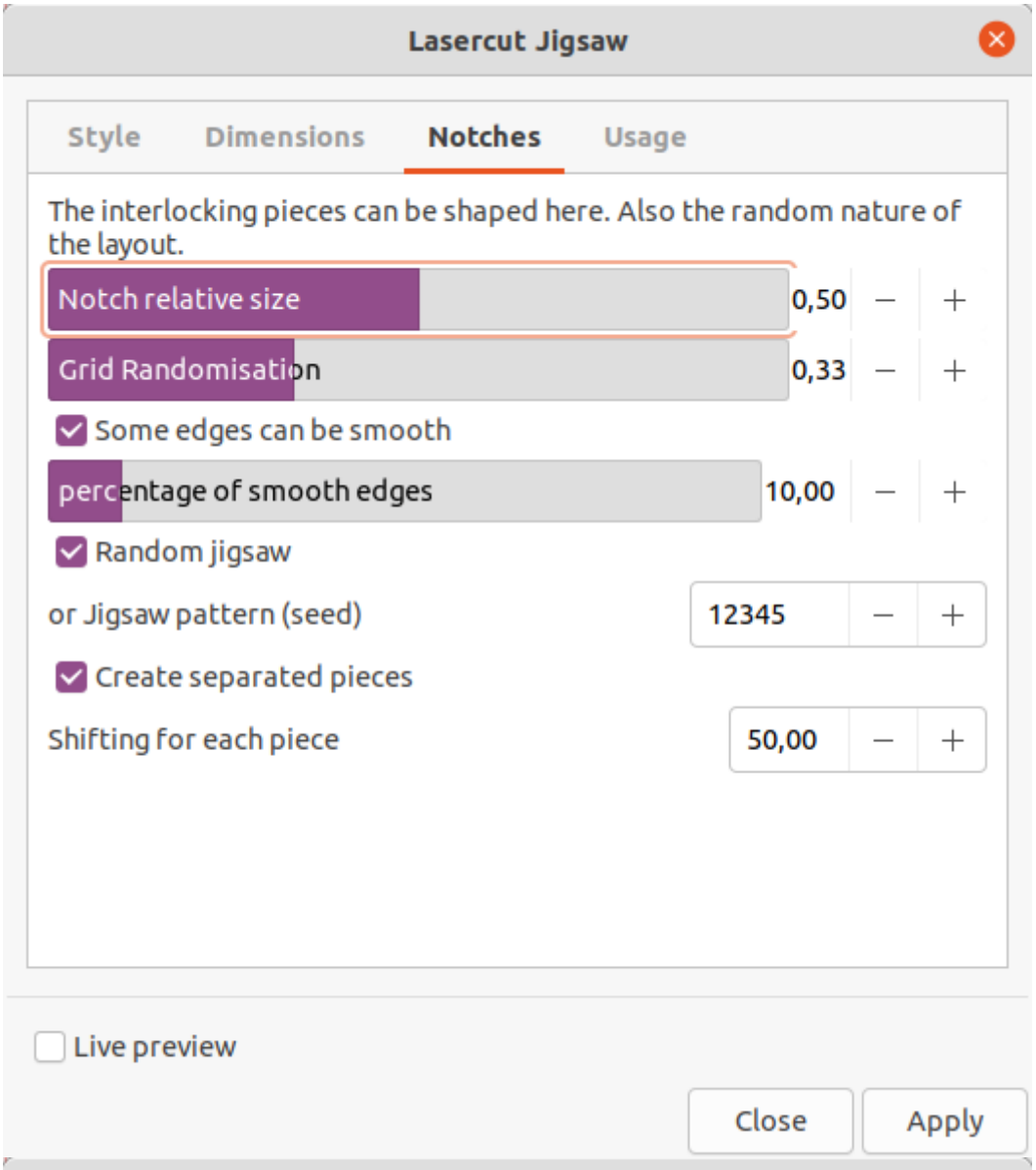
Pack Location Below

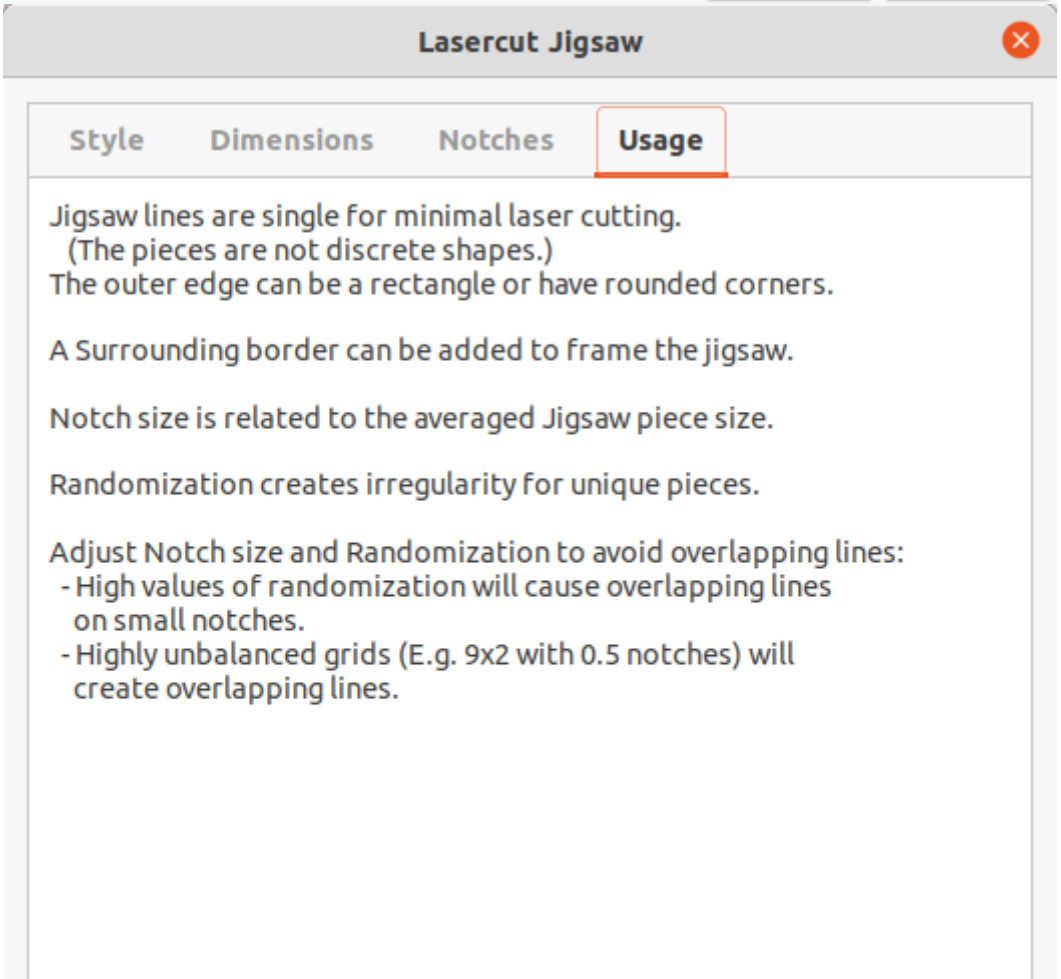
How many pieces across 10

How many pieces down 10

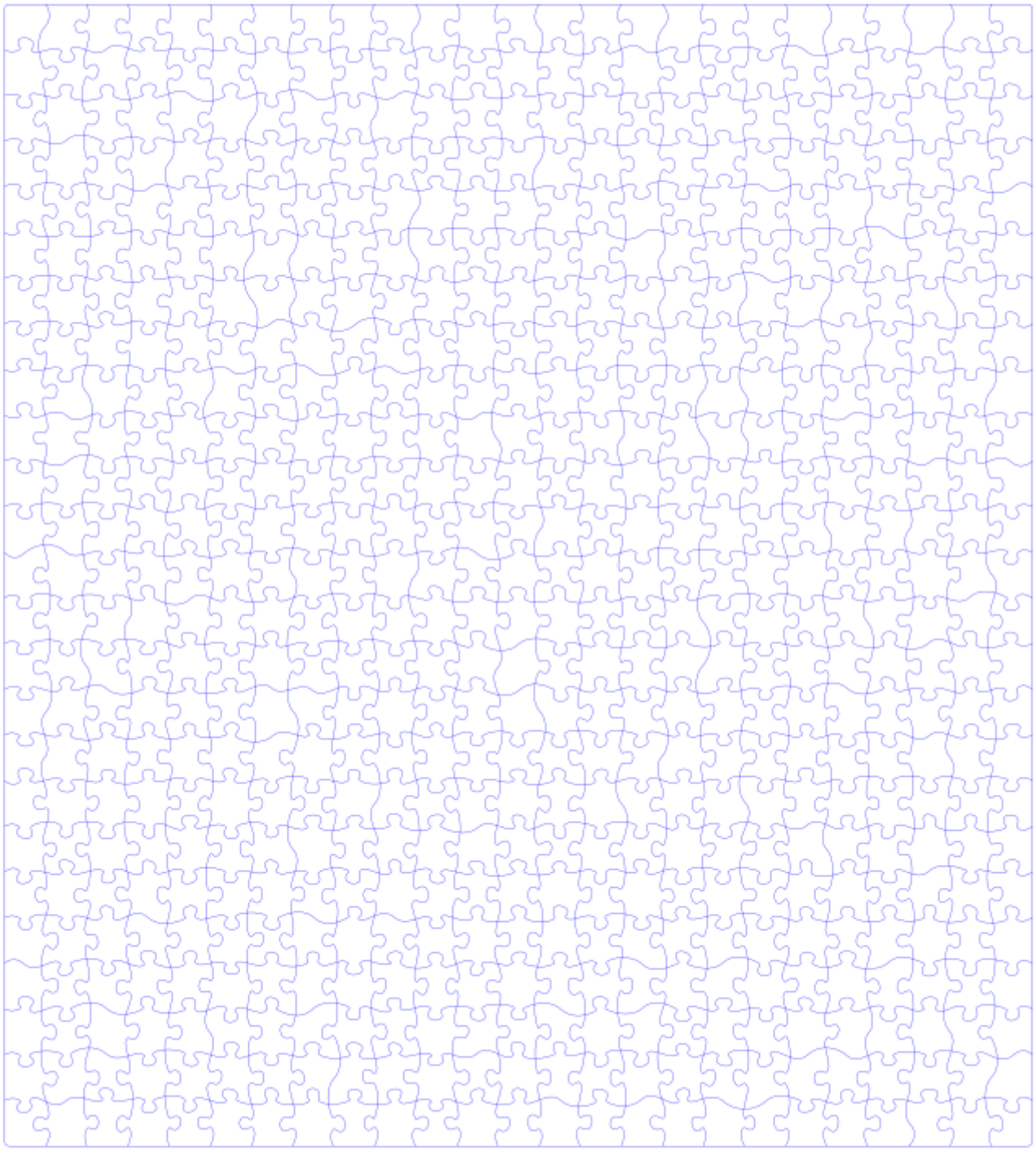
Live preview

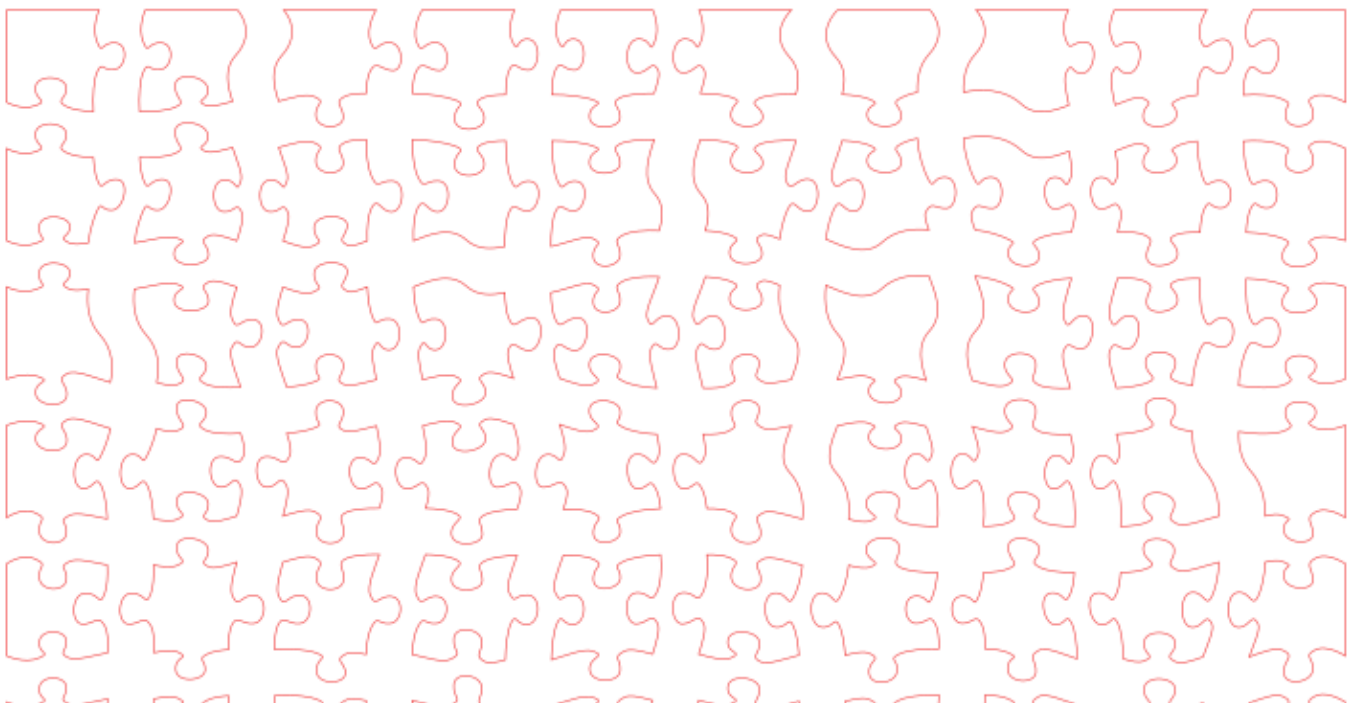
Close Apply


Lasercut Jigsaw
Style
Dimensions
Notches
Usage
The interlocking pieces can be shaped here. Also the random nature of the layout.
Notch relative size
0,50
Grid Randomisation
0,33
Some edges can be smooth
percentage of smooth edges
10,00
Random jigsaw
or Jigsaw pattern (seed)
12345
Create separated pieces
Shifting for each piece
50,00
Live preview
Close
Apply


Lasercut Jigsaw
Style
Dimensions
Notches
Usage
Jigsaw lines are single for minimal laser cutting.
(The pieces are not discrete shapes.)
The outer edge can be a rectangle or have rounded corners.
A Surrounding border can be added to frame the jigsaw.
Notch size is related to the averaged Jigsaw piece size.
Randomization creates irregularity for unique pieces.
Adjust Notch size and Randomization to avoid overlapping lines:
- High values of randomization will cause overlapping lines on small notches.
- Highly unbalanced grids (E.g. 9x2 with 0.5 notches) will create overlapping lines.

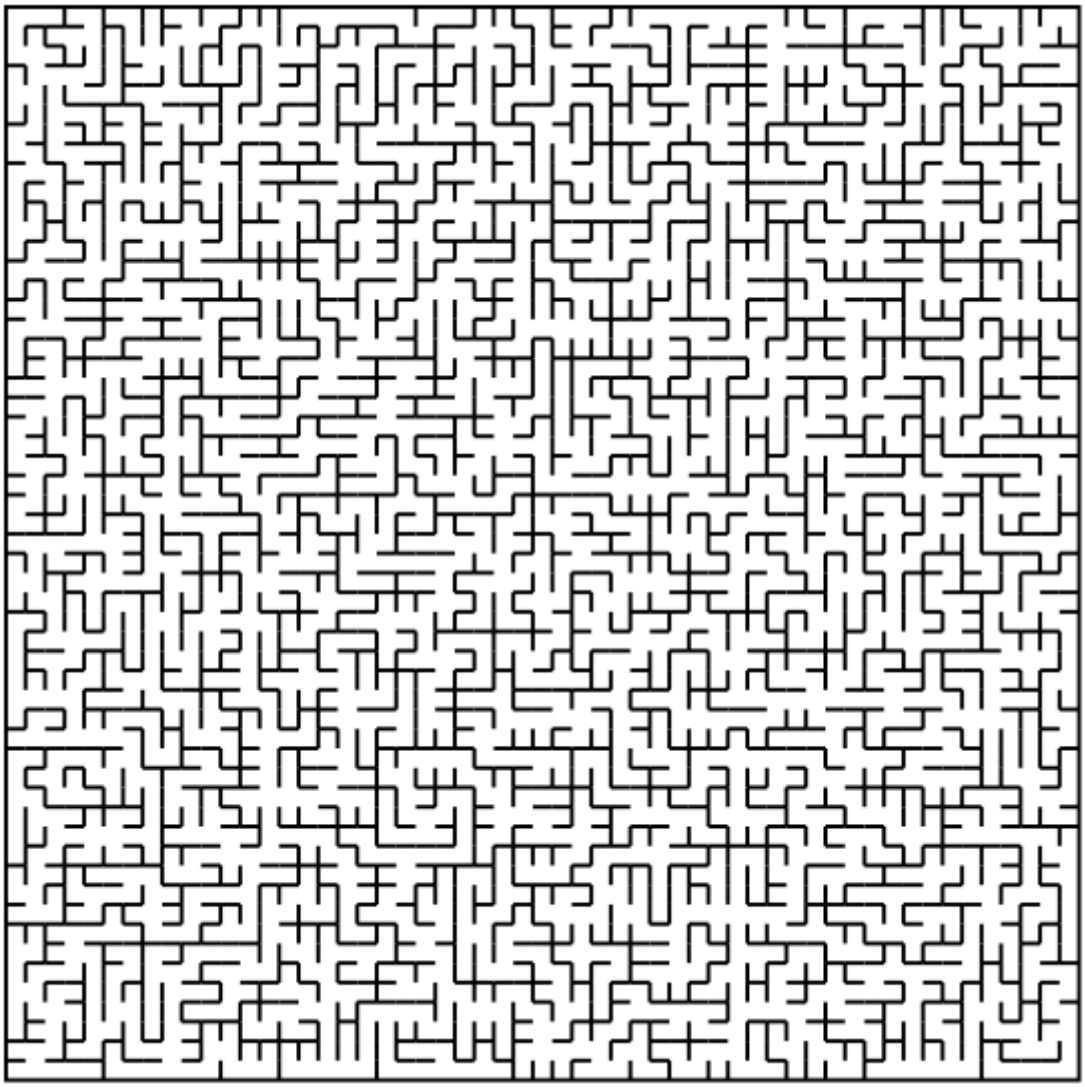
Sample Output



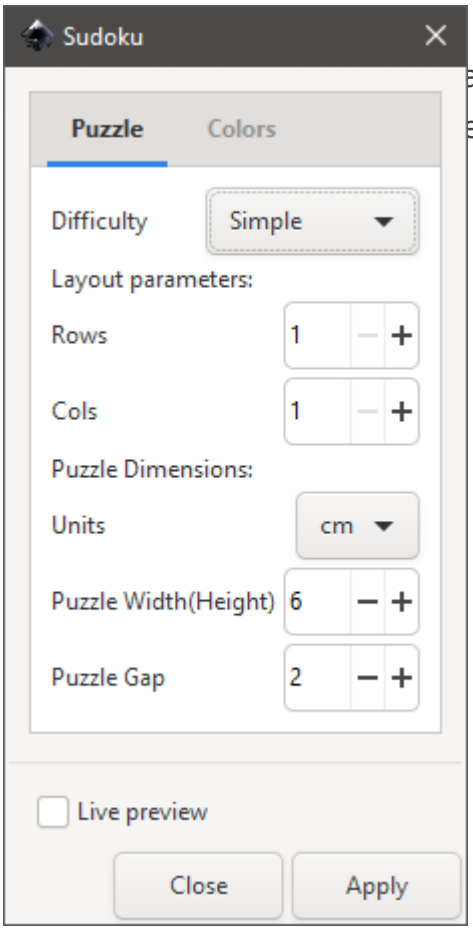


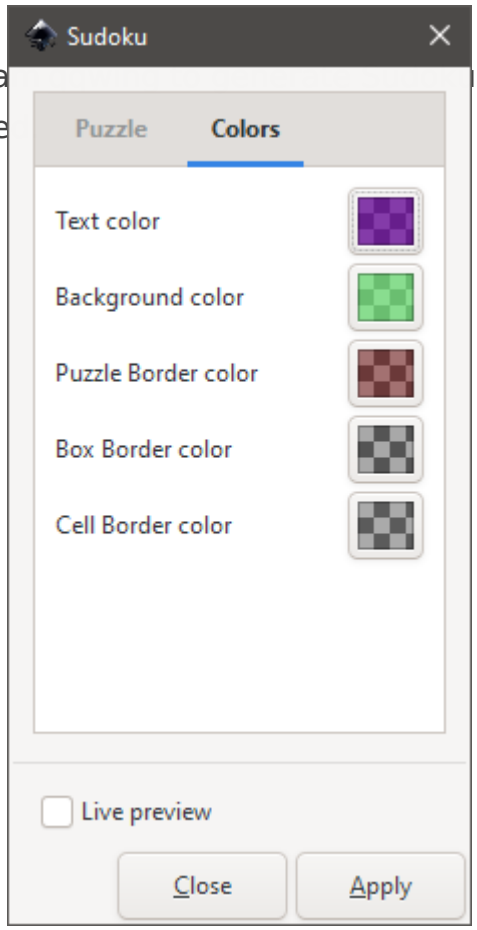
Maze

Source of extension: https://inkscape.org/de/~thjazi/%E2%98%85maze



Sudoku





data. The executable for

Example output

2		8			6	5	9	
		5	1		8	6		7
	6					1		
	5		7	2			4	
		7				9		
	2							
1							5	
	8	4		9		7	1	
	9							