



## User Manual

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# SVG Importer Manual

Thank you for purchasing SVG Importer! You are a great supporter. I developed this plugin because of the lack of easy to use robust vector graphics solution.

SVG Importer has undergone many changes. From early hard to use utility, to full finished product. There are still some struggles to make SVG Importer blend with Unity as possible, but I personally think that it is fairly easy and fast to use.

Enjoy vector graphics in all its glory. If you have developed any game with SVG Importer don't hesitate to send me your screenshots and we will create a nice gallery of vector powered games.

Again, I humbly thank you, for any help directly contact me.

Jaroslav Stehlik  
[jaroslav.stehlik@svgimporter.com](mailto:jaroslav.stehlik@svgimporter.com)  
Czech Republic, Prague

# SVG Importer I File format SVG 1.1

## **supported features**

- Linear Gradients
- Radial Gradients
- Symbols
- Clip Paths "experimental"
- Cutouts
- Strokes
- Complex Shapes

## **unsupported features**

- Masks "SVG mask will no be supported due to hardware limitations"
- Text "most graphics editors can convert text to curves"
- Filter Effects "Does not mean that we can not use custom shaders in the future"
- Animation

Please request features which you would need the most by email.

# Document Setup

## RGB Colour Mode

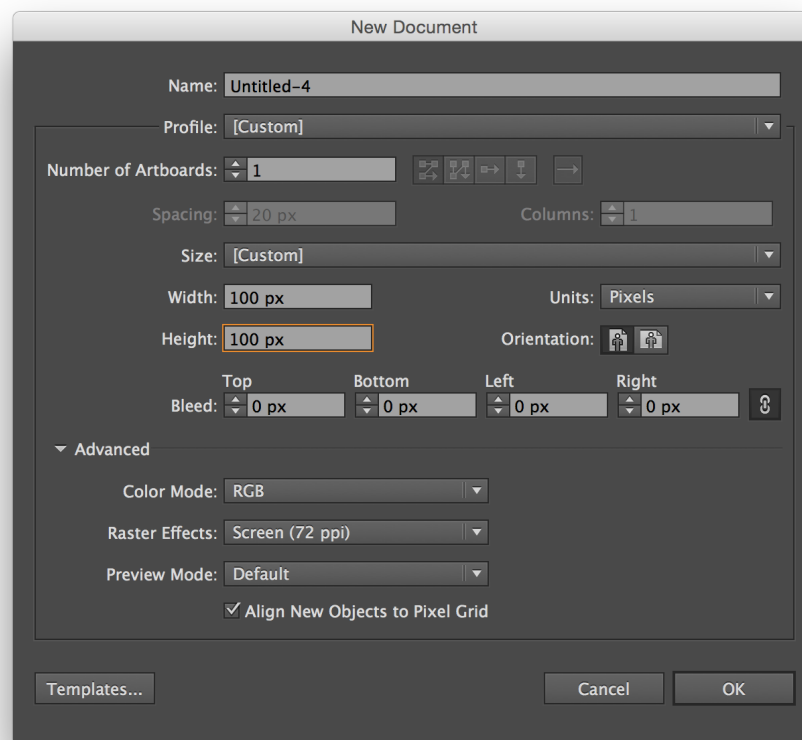
Always create your document in RGB colour space - CMYK will simply look wrong in your game.

## Use RGB Colours

Also, some programs can work with CMYK colours even if they are in RGB mode. Keep in mind that any CMYK representation will simply look wrong in your game.

## Keep your scale consistent 100 pixels are 1 meter in Unity

When creating vector graphics, it is important to keep your scale consistent. It is best practice to create 100px x 100px grid which will represent the unity 1m x 1m grid.



**Avoid Clip Masks and texture f“lls.**

**Symbols are an experimental feature now, keep that please in mind.**

**Embedded images are also not supported.**

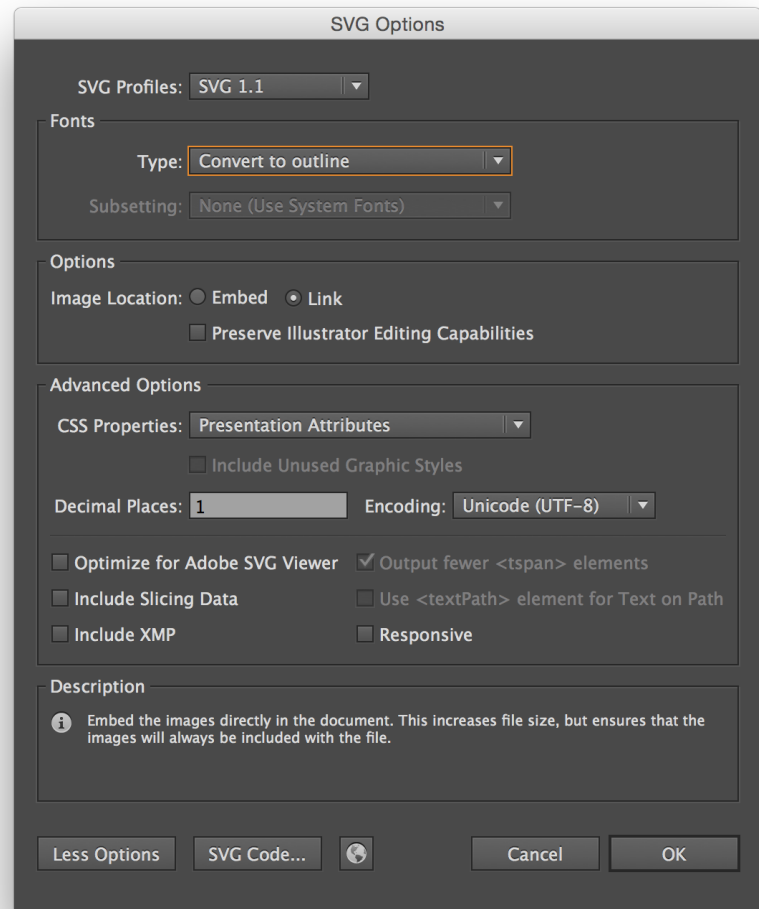
# Document Export

- Export your file as SVG 1.1
- Convert all your text to outlines.
- Use 1 decimal place if possible.

## Adobe Illustrator has a bug in all versions.

Never ever open an SVG file directly in Adobe Illustrator, because it will import incorrectly with errors. And then never save it to SVG file because your scales and strokes would be messed up.

Always keep your original source files as \*.AI, \*.afdesign, \*.cdr, in your place and export SVG files from your source files.



# Document Organisation

## **Keep source files outside Unity**

Keep your source files and SVG files outside Unity project.  
It will help your workflow greatly.

Copy and paste your SVG files in Unity Asset folder to import them.  
Importing SVG Files is destructive operation.

The reason for that is, that Unity does not currently support custom file extensions.  
So the most intuitive way to import files is to drag them into Unity Asset folder and  
SVG Importer will automatically create an SVG Asset from them.

However, it is possible to recover the SVG file from the SVG asset by clicking "Recover SVG File"

## **Update SVG File**

To update your SVG Files with a new one simply overwrite the file or drag and drop in the same directory with the same filename. This will update the original SVG File which will automatically propagate in all your scenes without any hassle.

# SVG Asset

## SVG Asset is your SVG File

When you drag and drop your SVG File into Unity Asset folder it will automatically create an SVG Asset. This is fully imported SVG File with all gradients, shapes etc.

### Format

Every graphics card has two different rendering modes.

### Opaque

This mode best fits for non-transparent objects which utilise the Z-Buffer which will discard non-visible pixels as soon as possible. This greatly improves the performance, because you render only what you see.

The only downside is that you have to handle your z position manually to avoid z-fighting glitches and artefacts.

### Transparent

This mode is best when used on transparent or semi-transparent objects. It does not use Z-buffer and it can suffer from great performance loss. But it can be fully alpha blended, great for fade in/out effects. This mode behaves exactly the same as Unity Sprites.

### UGUI

This mode is purely for the new Unity UI. Instead of triangles, Unity UI uses Quads. Because of this fact we have to emulate quads from triangles which suffer from wasted space about 1/4 of the original size. Also, it can be fully transparent and supports Unity Masks.

### Mesh Compression

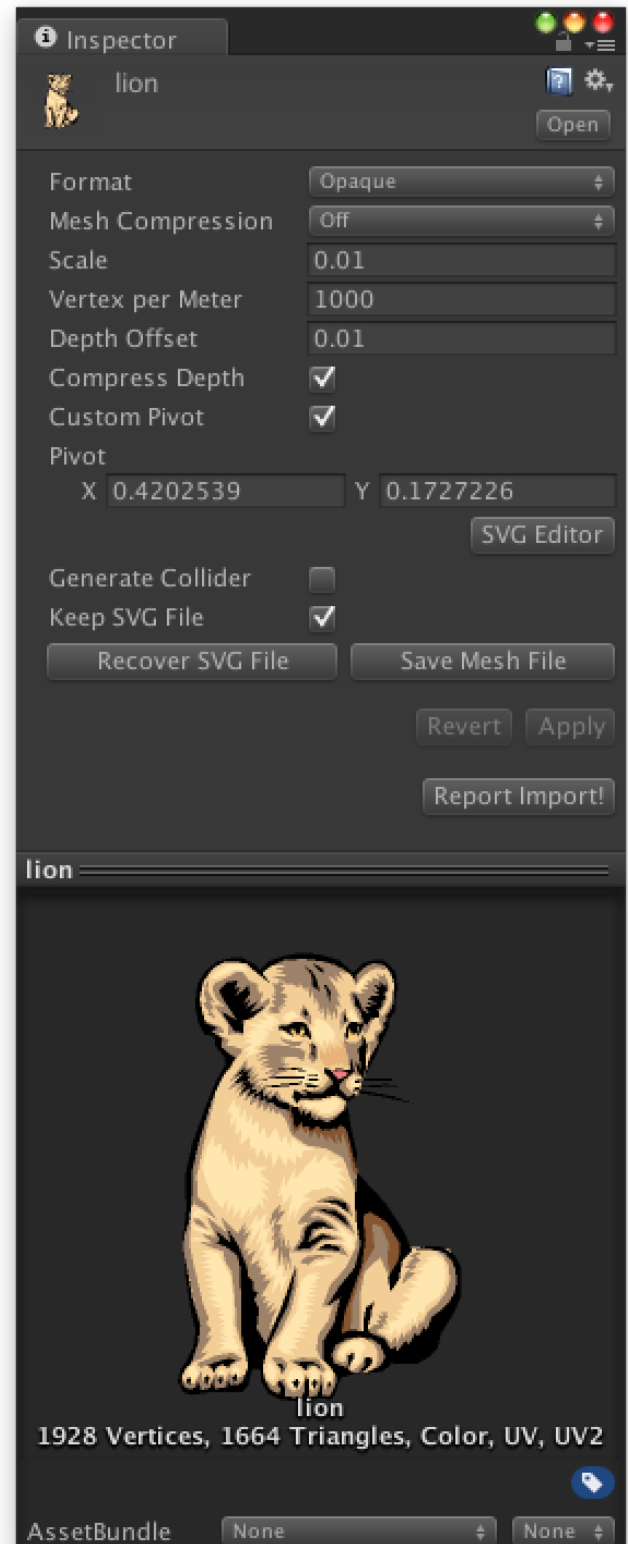
Increasing this value will reduce the file size, but might introduce irregularities.

### Scale

This will not change the quality of the mesh, it will only scale it down.

### Vertex per Meter

This is the quality value of the Mesh. The higher the value is the better the quality.





### Compress Depth

This option is available only if Format is set to Opaque.

It will greatly reduce the z depth spread of the graphics, which could be much easier to work with.

### Custom Pivot

Turn this on when you need more precise settings of your pivot point.

### Pivot

The pivot point of the graphic represents how the graphic should align.

### Generate Collider

This option will automatically add polygon colliders in any new files added to the scene.

It will generate outline of the graphics so your polygon collider is able to reproduce the physical shape of the geometry. For adding colliders to existing SVG renderers add SVG Collider to them.

### Keep SVG File

This will include the original SVG text document in the final build. Turn off, for smaller file size.

### Recover SVG File

You can recover your original SVG file to your desired destination.

### Save Mesh File

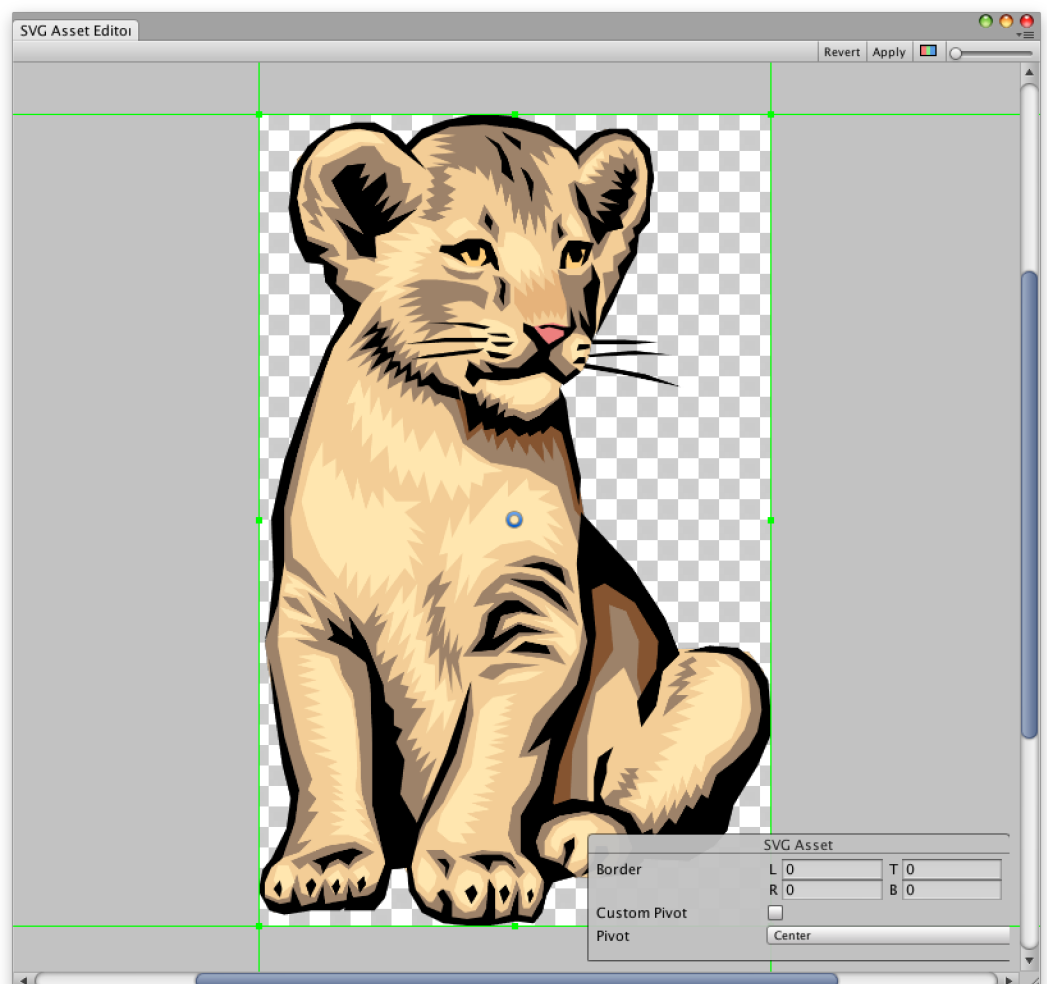
This will save the mesh generated by SVG importer so it can be used in any other way than for SVG graphics. For instance as a particle system emitter or particle it self.

### Report Import

If your SVG file was wrongly imported and you feel that the file should be correct, please send it to me simply with this button so I can evaluate it for further examination.

### SVG Editor

This is the place where you can precisely setup your pivot point or setup the 9 slicing borders.



# SVG Renderer

Unity Menu

Game Object/2D Object/SVG Renderer

## Does remind me of Sprite renderer

Yes, It should.

### Vector Graphics

Put your SVG asset right in there to change the image.  
When set to none it will render nothing.

### Color

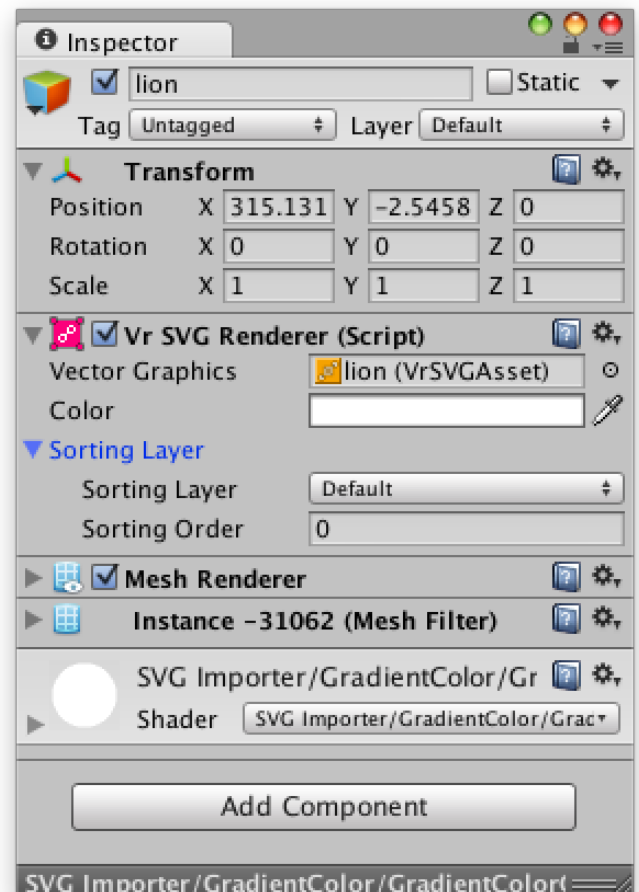
Recolour your artwork simply. You can also use it in animation.

### Sorting Layer

The layer used to define this sprite's overlay priority during rendering.

### Sorting Order

The overlay priority of this sprite within its layer. Lower numbers are rendered first and subsequent numbers overlay those below.



# SVG Image

Unity Menu  
Game Object/UI/SVG Image

## Does remind me of UI Image

Yes, It should and also it is fully compatible with Unity UI. That means, you can use it the same way in buttons, scrollbars, lists, groups, masks etc.. as you would with Unity native UI Image.

## Vector Graphics

### The format of your SVG Asset has to be UGUI!

Put your SVG asset right in there to change the image. When set to none it will render nothing.

below you can see how much vertex budget does your SVG Image take. UI Canvas has a limit for how many vertices can be rendered in it. The reason is because UI was designed for simple quad billboards and not actual vector graphics :) Keep that in mind.

## Color

Recolour your artwork simply. You can also use it in animation.

## Material

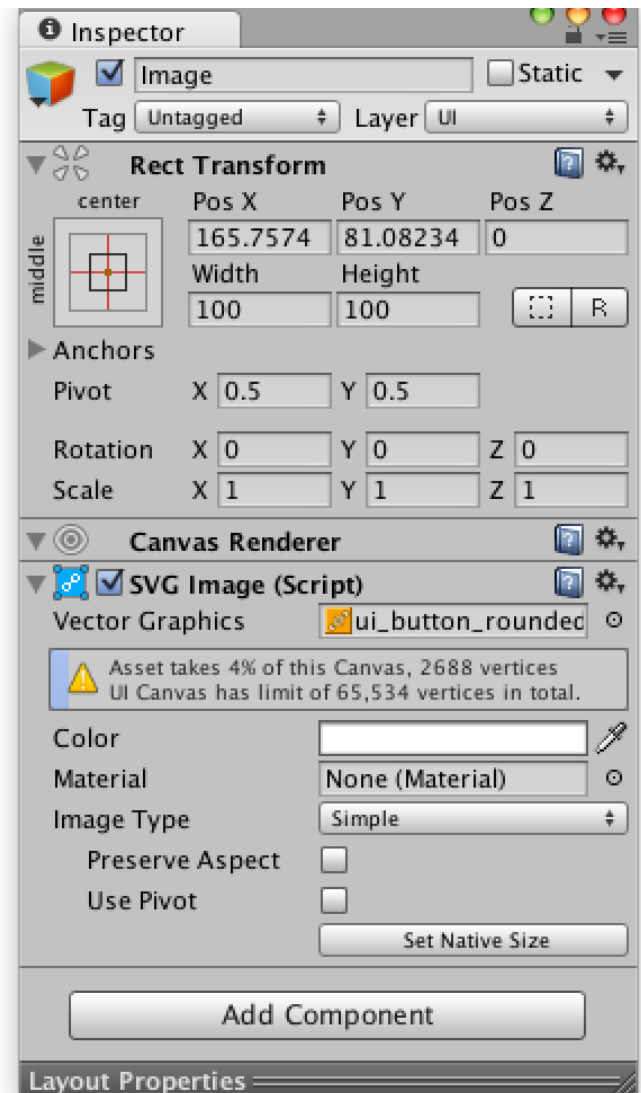
Override your material with a custom one.  
This part is experimental and not really tested yet.

## Image type

Simple - scales the image as usual

Sliced - uses the 9 slicing.

Slicing border has to be set in the asset it self under SVG Editor section. 9 slicing is used mostly for preserving nice looking round corners.



# SVG Frame Animator

Unity Menu

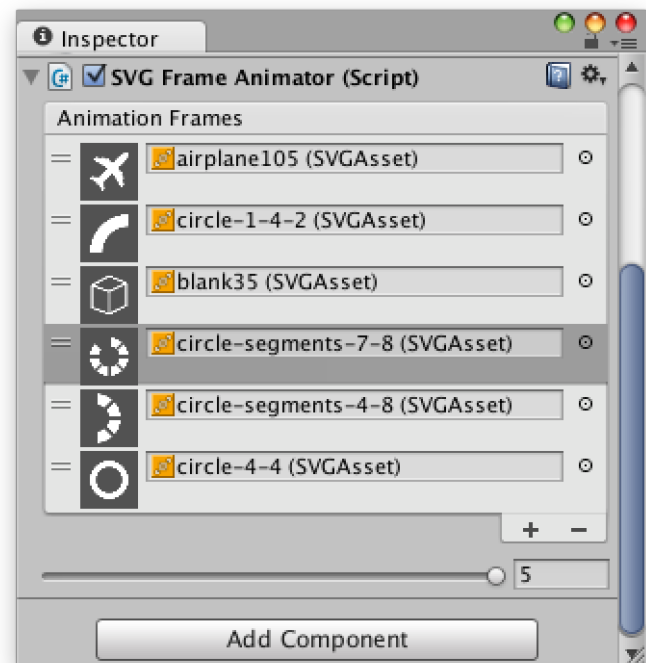
Miscellaneous/SVG Frame Animator

## Easy way of doing frame by frame animation

Simply drag and drop your SVG Assets in to Animation Frames array or click Add frame animation.

When you have at least two frames for animation an animation slider will appear.

This slider is possible to animate directly in Unity Animation Window.



# SVG Collider 2D

Unity Menu

Component/Physics 2D/SVG Collider 2D

## **Quality**

Value ranges from zero to one. Zero is almost nothing and one is the original shape of the SVG Graphics. It is recommended to use value about 0.9 to reduce duplicate points or points which are very close to each other.

Polygon collider also tends to give some warnings that the collider has discarded some shapes because it failed the Physics validation. This is due to Physics 2D "Box2D" minimum world space unity limitation. If any shape is smaller than that unit it gets discarded. So please be aware that, this is an Physics2D limitation.

# SVG Settings

Unity Menu

Window/SVG Importer/Settings

## SVG Importer has its default settings

You can simply override them as you wish.

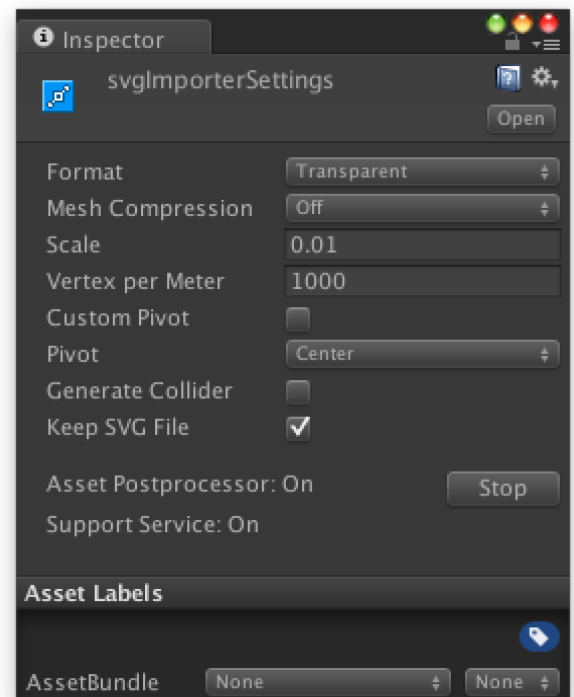
The next time you will import any file, it will use these settings. So SVG Importer can fit your workflow much better.

## Asset Post-processor

If you want to stop automatic SVG Import you can deactivate it here.

## Support Service:

This service runs in Unity background and ensures that you can Drag and Drop your SVG Asset directly in your scene.



# Contact author

**Jaroslav Stehlik**  
Czech Republic, Prague

Web-site:  
<http://svgimporter.com>

E-mail:  
[jaroslav.stehlik@svgimporter.com](mailto:jaroslav.stehlik@svgimporter.com)

YouTube Channel:  
<https://www.youtube.com/channel/UCfS37PIF9fhUC-saiBHZE-g>

Facebook Page  
<https://www.facebook.com/svgimporter?fref=ts>

Twitter:  
<https://twitter.com/svgimporter>

Linkedin:  
<https://www.linkedin.com/profile/view?id=48692474>