

Sketch 3.5 Documentation

www.sketchapp.com/support/documentation/

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01 Introduction

Sketch is a vector drawing app intended for designers of all sorts. Vector-based drawing is by far the best way to design websites, icons or interfaces. On top of this vector editing we have added support for basic bitmap styles, such as blur and color corrections.

We've made Sketch both powerful and easy to understand. Experienced designers can easily transfer their existing skills in a matter of hours, and replace Adobe Photoshop, Illustrator or Fireworks for most digital design tasks.

Why use Sketch

Sketch has a great UI and was built for the kind of things you want to do when you design icons or interfaces. It's a one-window app, and what you need is always in reach. We support Multiple Fills per layer and we have the best text rendering and text styles out there. The canvas is infinite and we have some great asset exporting tools we're sure you will love.

You can view the canvas both in a resolution-independent view where you have infinite precision, or you can turn on Pixel Preview and you will know exactly how every pixel will look on export - if you care about such a thing.

What Sketch is not

Sketch is not a bitmap editor. This means that if you want to do photo correction or draw with brushes, this is not the app for you.

02 The Interface

Sketch's interface is minimal by design.

The toolbar on the top contains the most important actions. The inspector on the right lets you adjust the properties of the selected layer(s). The pane on your left lists all the layers and artboards in your document, and your working canvas is in the middle.

There are no floating panels. Instead, the inspector will adapt to show you the tools you need at every moment, and hide everything else. That way you always have a completely unobscured view of your canvas.

Canvas

Sketch's canvas is infinite in size; you can scroll as far as you want in any direction, so you have complete freedom on how you set up your drawing area.

If you'd like to define a fixed frame inside the infinite canvas, simply insert one or more Artboards. For example when designing mobile interfaces, many designers create an Artboard for each screen in the app and lay them out in order of appearance.

You can view the canvas both in a resolution-independent view where you have infinite precision, or you can turn on pixel preview and you will know exactly how every pixel will look when it's being exported to a bitmap format (such as JPG or PNG).



Vector Mode



Pixel Mode

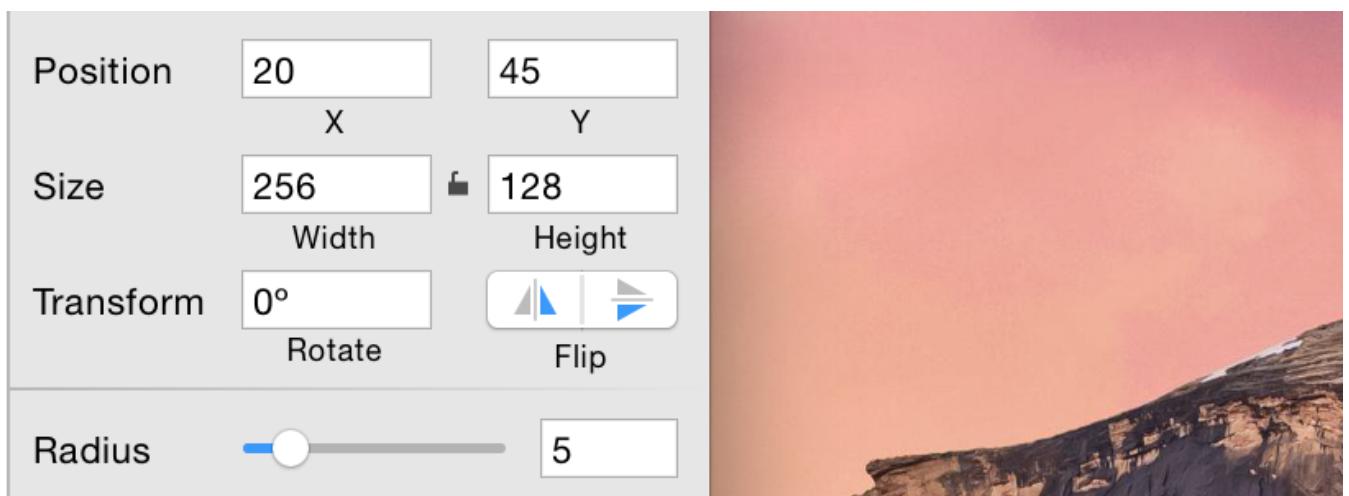
Note though that some effects such as blur will force parts of the canvas to be displayed in pixel preview mode as a blur is inherently a pixel-based effect.

03 Inspector

The Inspector on the right lets you adjust the settings for the current layer, or the options for the current tool. When you have a layer selected you will see that the inspector is divided into sections.

General Attributes

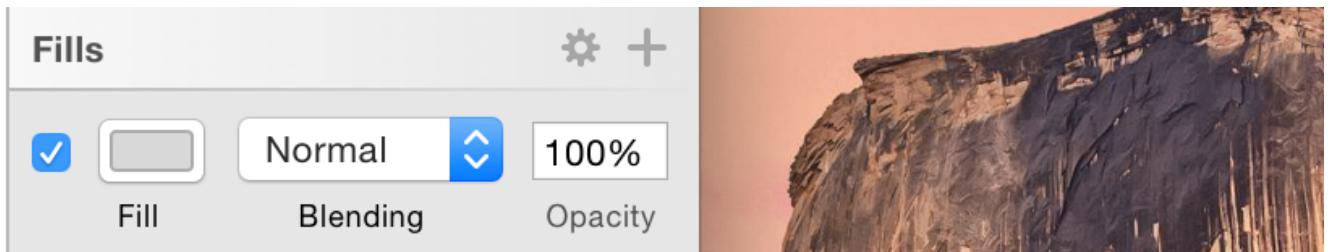
General layer styles are in the top section; the position, size, opacity, blending and (depending on the layer type) a few special options, like corner radius for a rectangle or the number of points for a polygon shape.



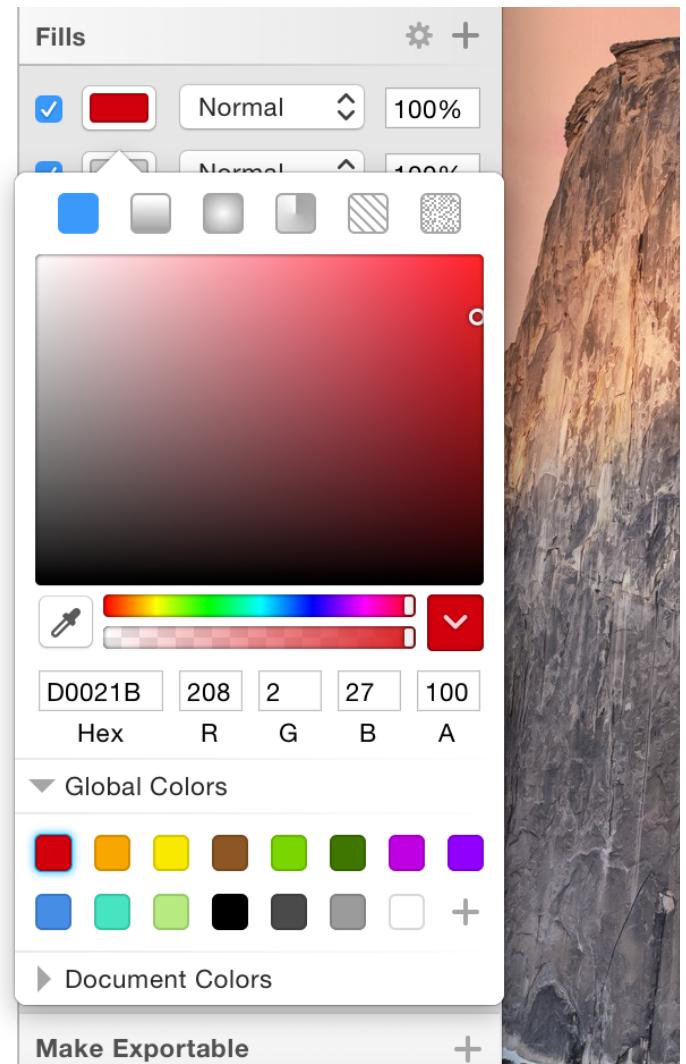
Style Attributes

Border and Fill attributes each have its own section.

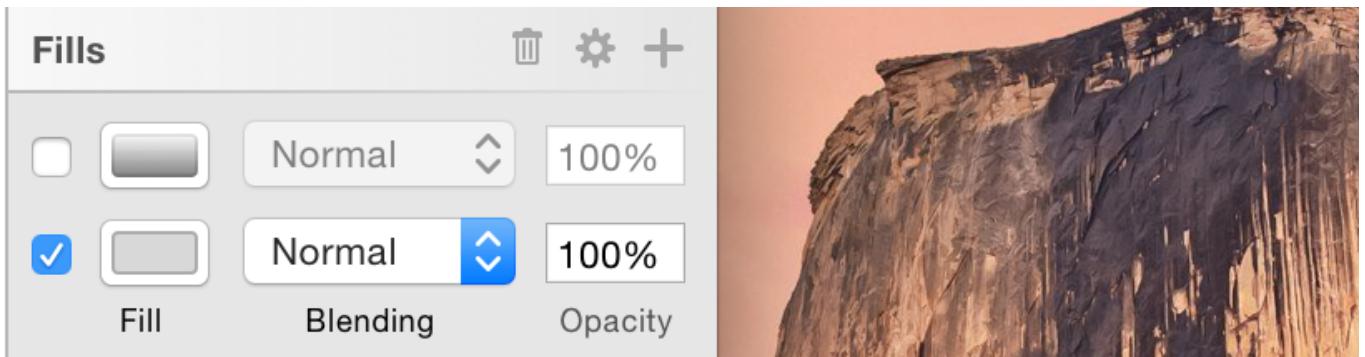
To add a new Fill or Border, just click the + icon in the section title:



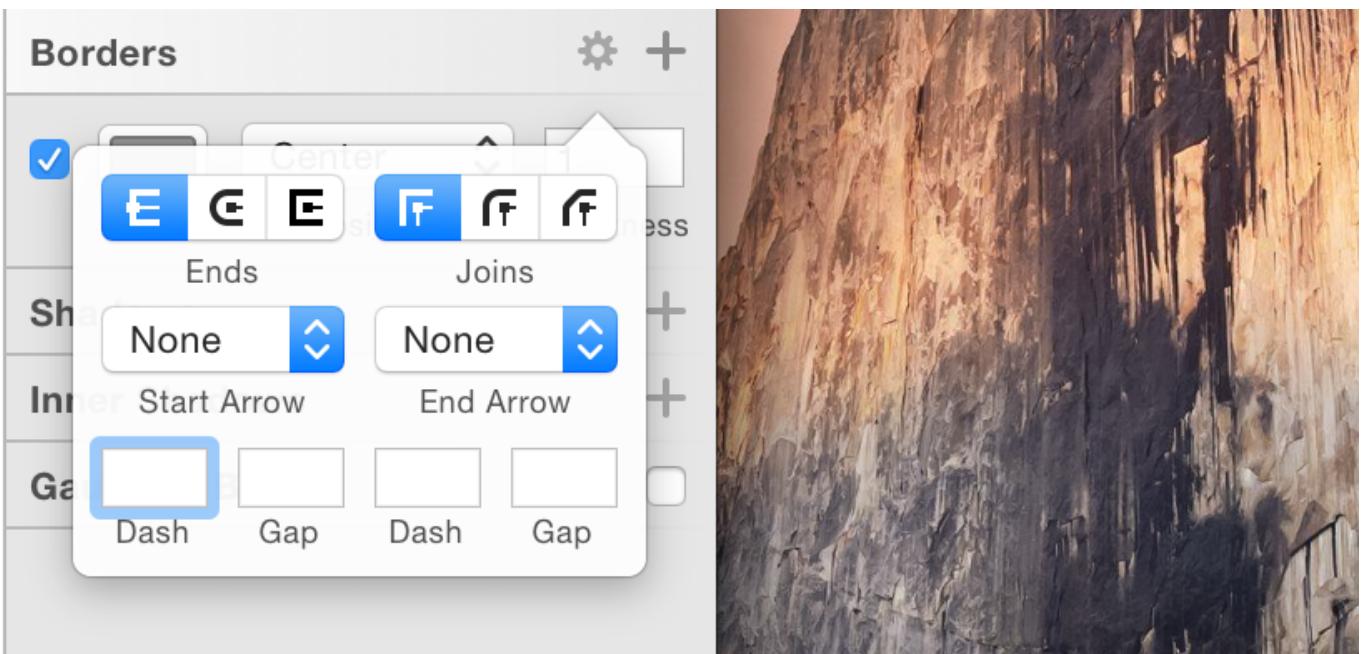
When adding a new Fill or Border, you'll get a popover where you can choose the color.



You can turn each Fill or Border off by unchecking the checkbox on its left. When one or more Fills / Borders are off, you can delete them by clicking on the Trash Can icon that appears on the section title:



To change the options for a Fill or a Border, click the Gear icon:

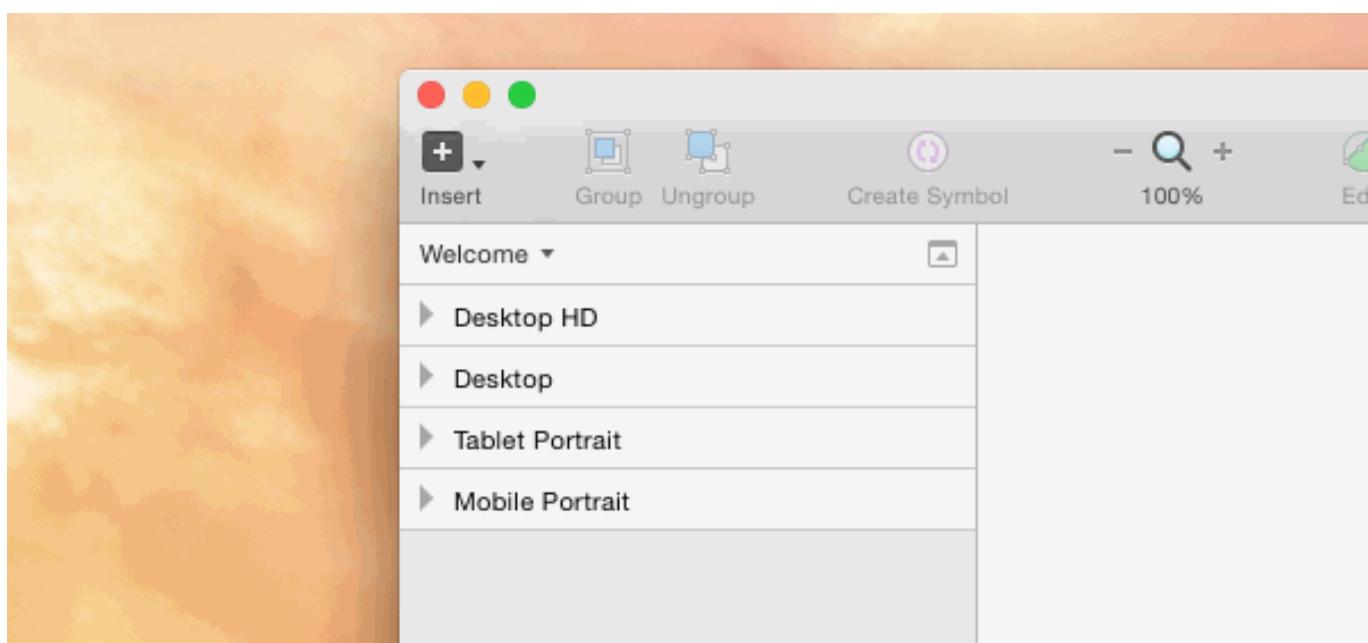


Layer List

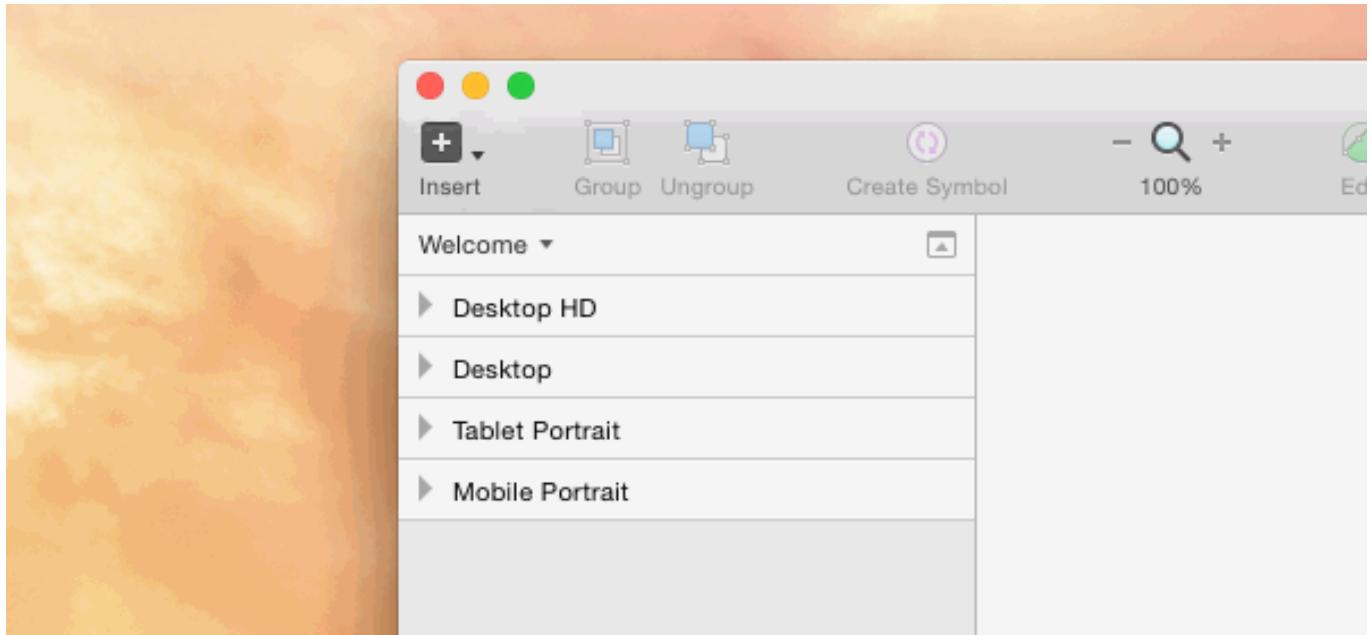
The Layer List contains a list of all layers (including Slices and Artboards) on the current page and shows a small preview for each. You can also see which one is locked, invisible, has a mask, or is marked for export. Here you can reorder layers and choose Boolean Operations for subpaths of a shape. You can also group layers or rename them to keep your document organised.

Multiple Pages

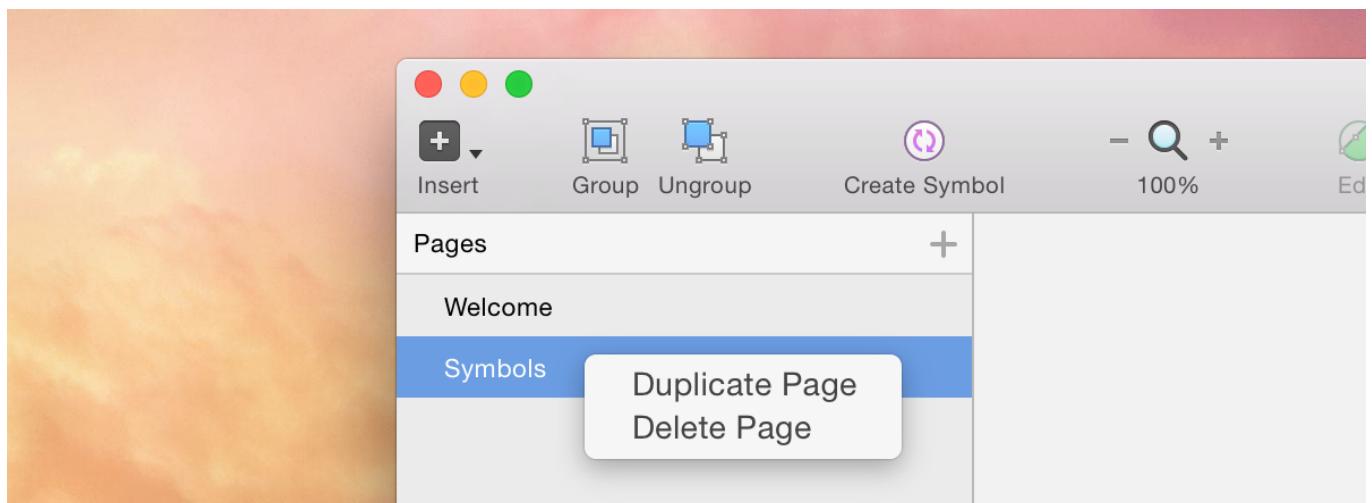
Sketch does have support for multiple pages and you can switch to other pages using the little popup above the Layer List (you can also use the Page Up / Page Down keys on your keyboard). The Layer List always shows the layers of the current page only.



If you want to add/remove pages, or drop layers between pages, you can open the page list widget:



Click the + icon to add a page. Right click a page to get a menu to delete or duplicate a page:



You can reorder pages by dragging and dropping.

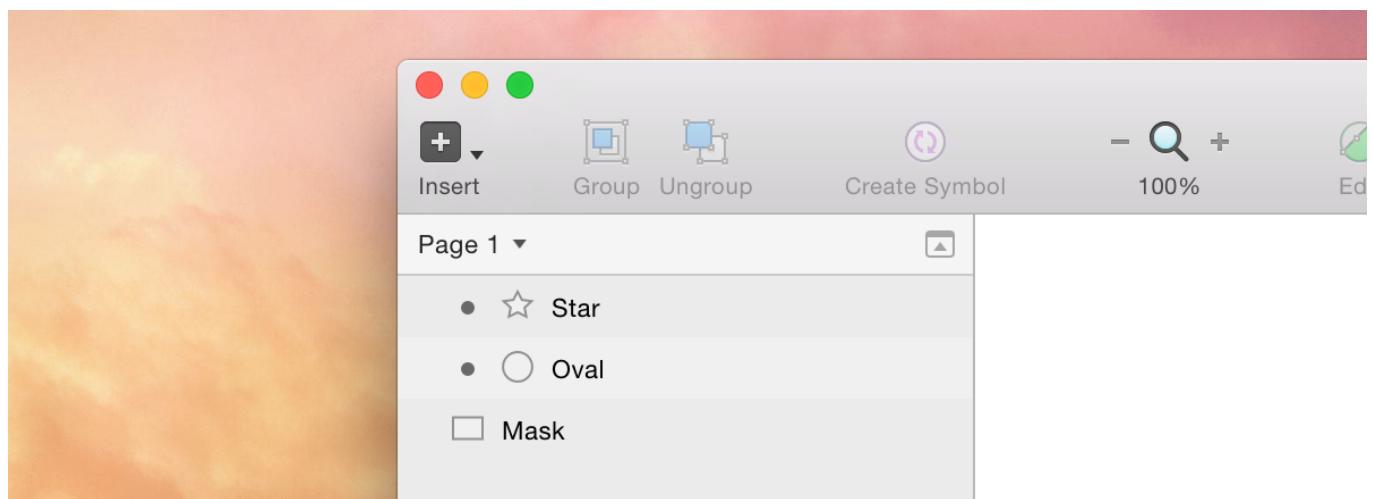
Also, you can drag layers and Artboards from one page to another (hold ⌘ to duplicate them).

Artboards

Artboards are displayed with a white background in the Layer List. You can consider them the top-level objects in your design and as such one Artboard cannot be inserted into another Artboard.

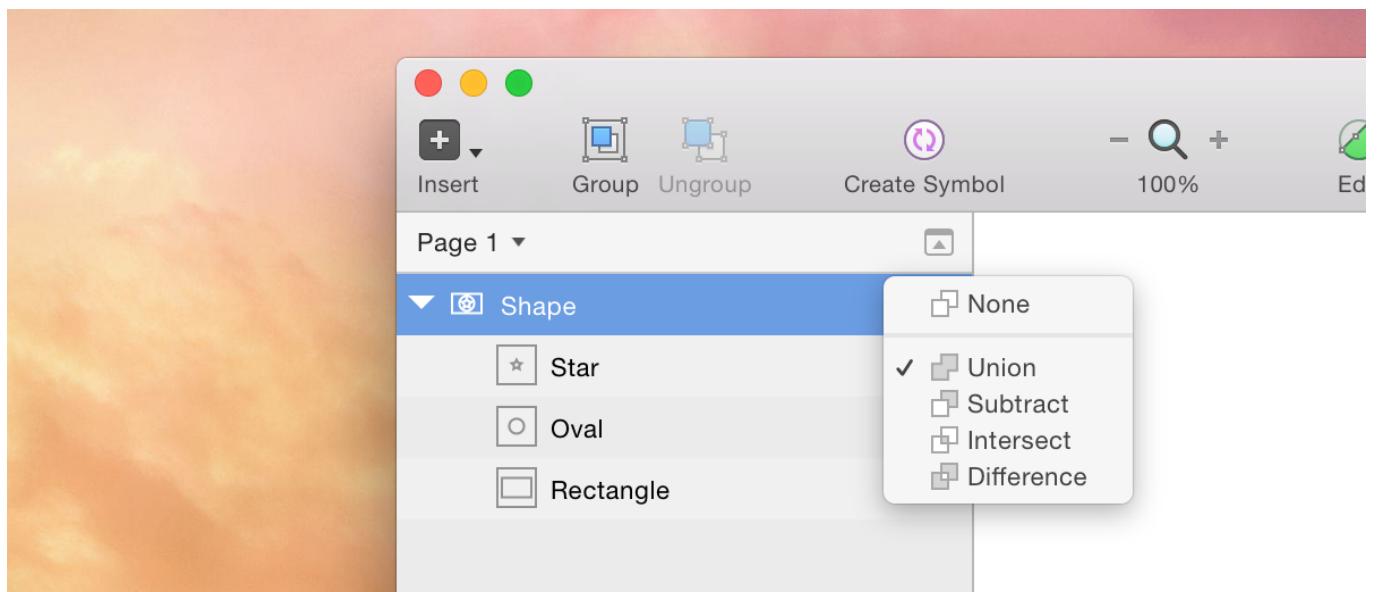
Masks

Layers that have a mask applied to them will show a little arrow in the Layer List before their name and preview. The layer that is casting the mask is the first layer below it without a dot.



Boolean Operations

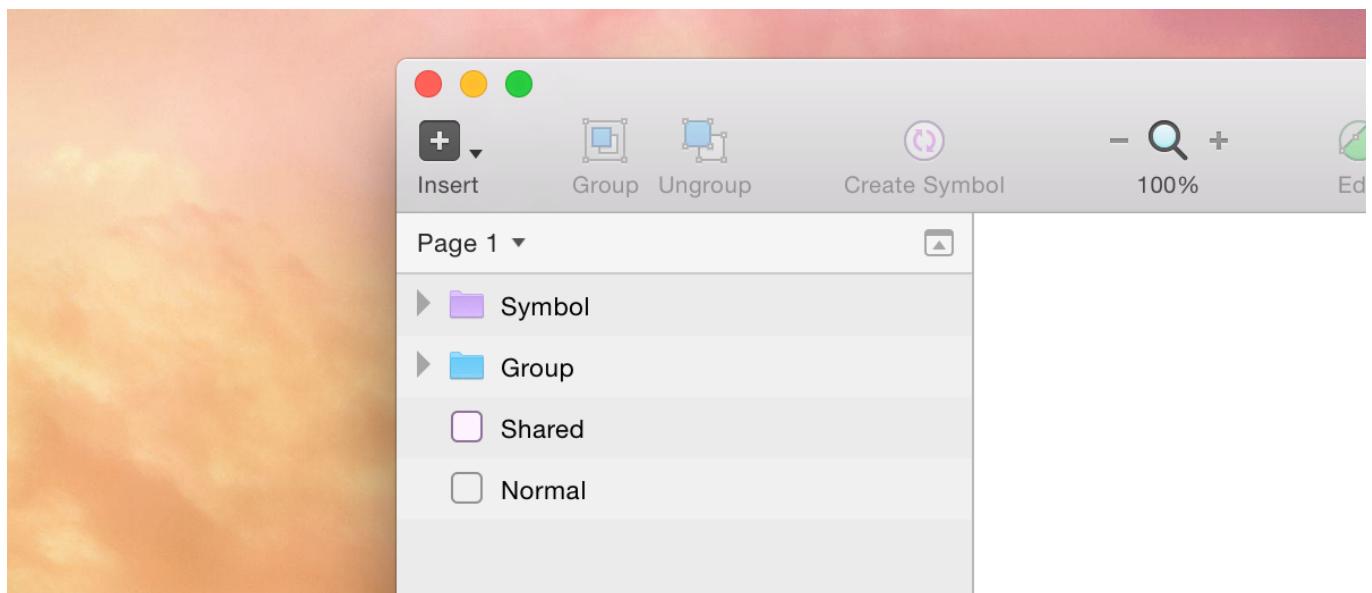
Shapes can contain multiple subpaths. If so, they're displayed as a group in the Layer List, with a disclosure arrow to show the sub-paths. Each sub-path can have a boolean operation applied to it which dictates how it is combined with the path below it, which is then fed to the path above it. The Layer List is a convenient place to get an overview of how the subpaths work together to achieve the final result and they're an easy place to change the operations if you want to do so.



Symbols and Shared Styles

Symbols are a special kind of group, which can exist in your document in multiple places. They're easily identified by the purple folder icon the Layer List uses to display them - as opposed to a blue one for normal folders.

Shared Styles are used to keep styling consistent between multiple objects and they can be applied to shapes and text layers. To indicate that a shape or text layer is using a shared style, their preview is displayed in a purple color instead of the standard dark shade of grey.



Hiding and Locking Layers

Any layer or group can be hidden from the Canvas, simply by clicking the eye icon that appears—on hover—to the right of the layer name in the Layer List. If this eye icon is visible, this indicates that the layer is hidden.

Similarly, when holding down the Option key and hovering the Layer List, a padlock icon will appear instead of the hide icon. When clicked, this will show that the layer is now locked on the Canvas, meaning it cannot be selected or moved without being unlocked first.

Toolbar

The toolbar in Sketch contains all the tools you need to create your masterpiece. The first set of tools in the default toolbar are for adding new layers; shapes, images, symbols and more.



The group and ungroup are for keeping your document organised. The next few sections are for editing layers; rotating, transforming, combining layers using Boolean Operations and moving layers backwards/forwards in the layer list.

The Export button (the last icon in the toolbar) will let you export your drawing to one or multiple bitmap or vector-based files.

Unlike many other drawing apps, Sketch does not have a toolbox with the common tools in there, instead they are in the toolbar. Additional tools and shortcuts can be added to the toolbar by right-clicking it and choosing “Customize Toolbar...”.

04 Layers

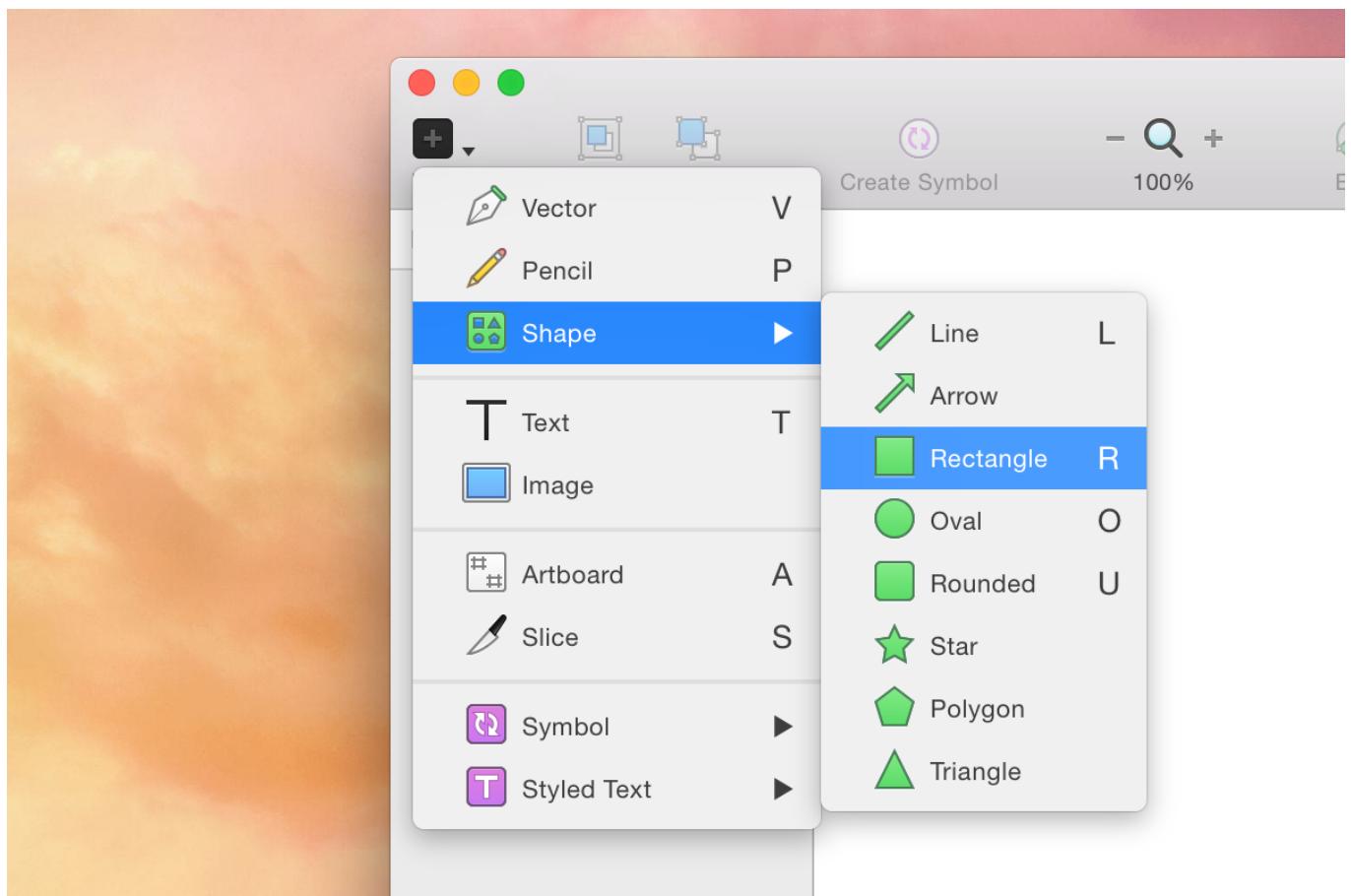
Layers are the basic building blocks of content in Sketch.

Unlike in other applications where the distinction between layers and objects is blurred, in Sketch, each object is always on its own layer. We'll be using the terms object and layer interchangeably throughout this manual for that reason.

Groups and Artboards are used in Sketch to keep your content organised and they are also treated as layers in their own right. To add new layers to your document, click the Insert icon the toolbar or go to the Insert menu in the application's global menu.

Adding Layers

The easiest way to add a layer is to pick one of the standard ones from the toolbar. Click on the rectangle shape and you will see the cursor change to a crosshair cursor with a little square in the top-right.



Now click on the canvas and drag to insert your shape. When you let go off the mouse the shape will be inserted and you can start manipulating it in other ways.

Advanced Options

As you can see, the process of inserting is easy, but there are a few hidden shortcuts that give you some additional control. For example, you can hold down the shift (\wedge) key to make your new shape square.

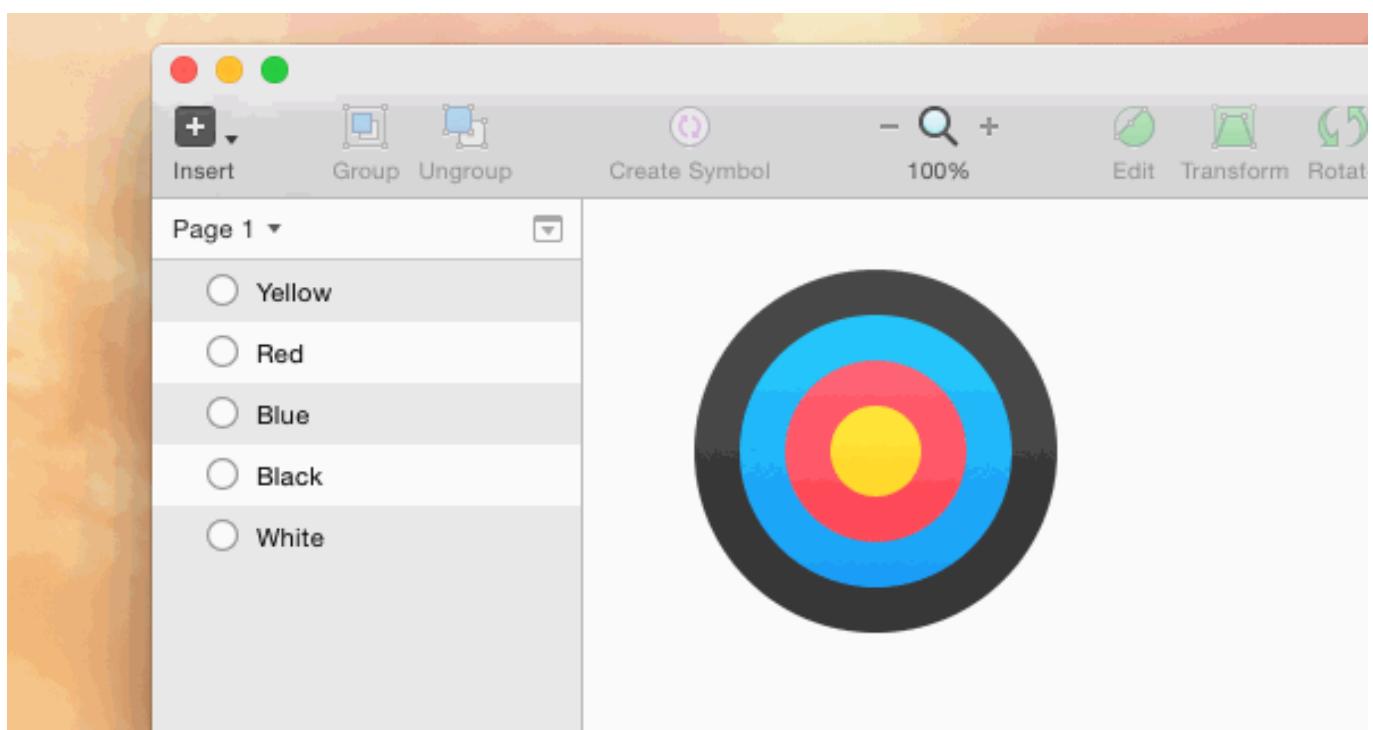
Similarly, you can hold the option (⌥) key to put the new shape's center at the point of your mouse (instead of the top-left).

Selecting Layers

Selecting layers in Sketch is easy: you just click on the layer on the canvas. Once the layer is selected, you should see eight little handles; one in each corner and one on each edge.

Note: If you don't see these handles but are sure you selected the layer, you may have accidentally hidden the Selection Handles. To toggle them, go to View > Canvas > Show Selection Handles in the menu.

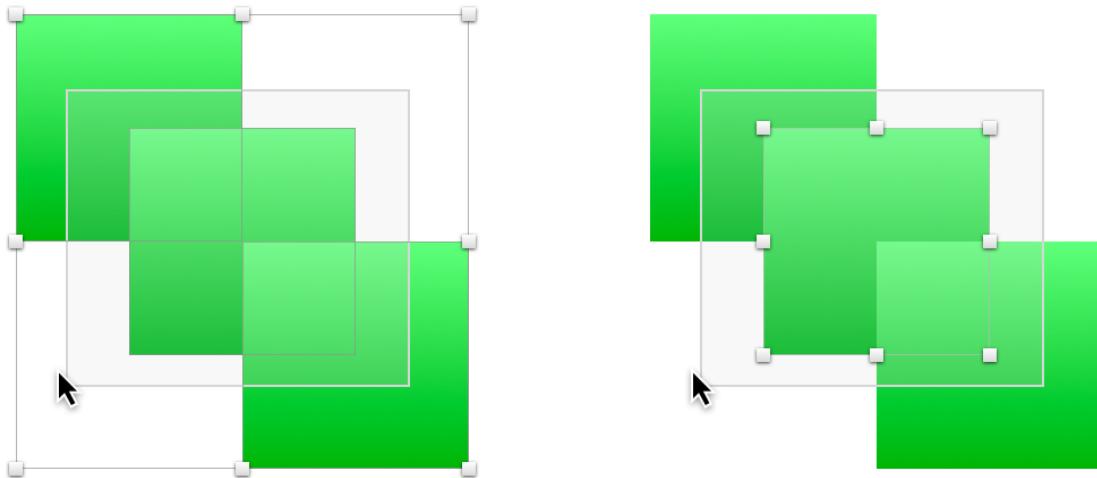
Alternatively, you can use the layer list to select a layer. Clicking a layer's name in the list will select it on the canvas:



You can select multiple layers by holding down the shift (\wedge) key on the keyboard. If you then click another layer it will preserve your original selection as well. If you hold \wedge and click an already selected layer, it will be deselected.

Click + drag from an empty area of the canvas to select everything that fits in the rectangle. Again, if you have \wedge or command (⌘) pressed, it will extend your selection or deselect any already selected objects.

If you hold down the alt-key (⌥) as well, it will only select layers that lie entirely within the bounds of the rectangle. Compare the images below. On the left: ↑ and drag. Right: $\text{↑} \text{ ⌥}$ and drag.



Overlapping Layers

To make it easy to select a layer that is buried under another layer, you can right-click and choose ‘Pick Layer’ from the menu. There you will see a list of every layer that is under your mouse.

Note: In Sketch 2.x this was accomplished by pressing $\text{⌥} \text{ ⌘}$ and clicking. This has changed in Sketch 3.0 to right-clicking instead.

A convenient shorthand for this is the ⌃ key. When it is held down, Sketch will select the second layer under the mouse instead of the top-most one. If there are multiple layers overlapping and you want the third one then you’ll have to go through the contextual menu as described above, but in some cases this can be a very convenient trick.

Quickly Selecting Layers in Groups

Groups are a very convenient way of organizing content, and sort-of prevent layers from accidental edits; until you double-click it, the group is treated as one layer and its contents can't be selected individually.

However, there are situations where you want to select a particular layer buried deep inside a hierarchy of groups. To save you lots of double-clicking while you go down deeper and deeper into the group hierarchy, you can instead hold down the ⌘ key and select that deeply buried layer straight away.

If you hold down the shift key as well you'll be extending your selection, as described earlier.

Moving Layers

You can move a selected layer by grabbing and moving it around with the mouse. To restrict movement to a particular axis, hold down ⇧ when you drag.

As you move (or resize) your layer, Sketch should automatically align your layers to adjacent layers. If this doesn't happen, you might have accidentally switched off the Smart Guides. To turn them on, go to View › Canvas › Show Smart Guides in the menu. Rulers, guides and grids are quite a big topic so they have a chapter of their own.

If you hold down the ⌘ key while dragging, you will clone the layer, leaving the original layer in its place. If you then immediately press ⌘ D (duplicate), Sketch will insert another duplicated layer at exactly the same offset as your first duplicate.

Moving an Obscured Layer

Another complication of overlapping layers is moving an obscured layer. Normally, when you click and drag a shape it will immediately be selected - if it wasn't selected yet - and moved to its new location.

Very often this is a convenience, but it can be a hindrance as well if you've got a layer selected that is completely obscured by another layer. Clicking on the layer would instead select the layer on top and move that one.

To get around this, you can hold hold down the ⌘ ⌘ keys and then clicking and dragging will not change your selection. You can even click and drag somewhere completely different on the canvas and Sketch will still preserve your selection.

Note: In Sketch 2.x this behaviour was using the A key instead but since version 3, the A key has been remapped to insert an Artboard instead.

Resizing Layers

The eight handles don't just indicate selection; you can also use them to resize a layer. Grab any of the handles and drag them to resize layer. If you also hold down the Shift key (\wedge) it will resize the layer proportionally; keeping width and height in the same ratio.

To resize just the width or height of a layer, grab the resize handles on the sides of the layer, to resize in both dimensions, use the corners.

If you hold down alt (\textbackslash) it will resize from the middle out instead of from the opposite corner.

Resizing using the Inspector

You can also select a layer and type its new dimensions in the Inspector. If the lock icon is closed, its proportions will be maintained when scaling. Also, you can use these shorthands to scale from an anchor point other than the top-left corner:

l: scale from the left (Default)

r: scale from the right

t: scale from the top (Default)

b: scale from the bottom

c/m: scale from the center / middle

So, to scale a layer so that it's 50 pixels wide, from the right, you'd set its width to 50r.

Keyboard

You can also resize layers using the keyboard. For very pixel-precise adjustments, this is usually easier than using the mouse. To do so, hold down the ⌘ key and use the arrow keys on the keyboard. $\text{⌘} \rightarrow$ will increase the width of the layer by 1px just as $\text{⌘} \leftarrow$ will decrease it by one. Similarly, $\text{⌘} \downarrow$ and $\text{⌘} \uparrow$ will increase and decrease the height by 1px respectively. Holding down the shift key changes the 1px increment to 10px instead.

Scaling

When you resize a layer, its stylistic elements will not scale up or down accordingly; a 5px stroke on a 50x50 shape will stay a 5px stroke when the layer is resized to 150x150. To resize a layer and its properties (corner radius, effect, etc) all in one go, use the Edit › Scale menu item instead:

Original



Mouse Resize



Original



Edit > Scale



Editing Layers

To edit a layer, double-click it on the canvas or click the Edit button in the toolbar. Whatever happens next depends on the kind of layer you're trying to edit, so please refer to the appropriate section below.

Note that you can at all times exit layer editing by clicking outside the layer or by pressing Return or Escape.

05 Shapes

The most common type of layers in your document will be shapes. There is a large variety of default shapes provided with Sketch such as circles, rectangles, stars and more. Some of these shapes have extra options, such as (rounded) rectangles and the star shape.

To add a new shape to your document, simply click Insert › Shape in the toolbar and choose one of the available alternatives. Click and drag anywhere in the canvas to insert the shape. While you're dragging the mouse to insert the shape Sketch will indicate how large the inserted shape will become. Let go of the mouse and the final shape is inserted. You will see the inspector update and maybe display some extra options for your shape.

Some of the default shapes in Sketch come with some interesting extra options. The star and rounded rectangle shapes being the most notable. For the star shape the radius and the number of points and the radius can be adjusted and for the rounded rectangle, the corner radius.

Shape Terminology

The basic building block of a shape is a point. These are connected by straight or bended lines into a path. A shape can have one or multiple paths. If there is more than one, they are combined together using Boolean Operations into one path. Think for example of two circular paths; one big, and one small, where the small one is used to ‘punch’ a hole in the bigger one. This concept of combining simple paths into complex shapes is discussed in detail in our section on Boolean Operations.

Editing Shapes

Whenever you draw a new shape or edit an existing one, you are essentially interacting with the points directly, and the lines that Sketch draws between those points are what you see on screen. Sometimes the lines between the points are straight lines (a line) and at other times they are bent (a curve).

Insert a rectangle from the toolbar by going to Insert › Shape › Rectangle.

Draw it on the canvas and when done, double-click it to start editing.

You will see a round point in each of the corners. You can click on these points and drag them around to change their position. You will see that the rest of the shape changes accordingly. You can click anywhere on a line between two points to insert a point on there which you can then move around independently as well. To delete a point, click on it and press backspace/return on your keyboard.

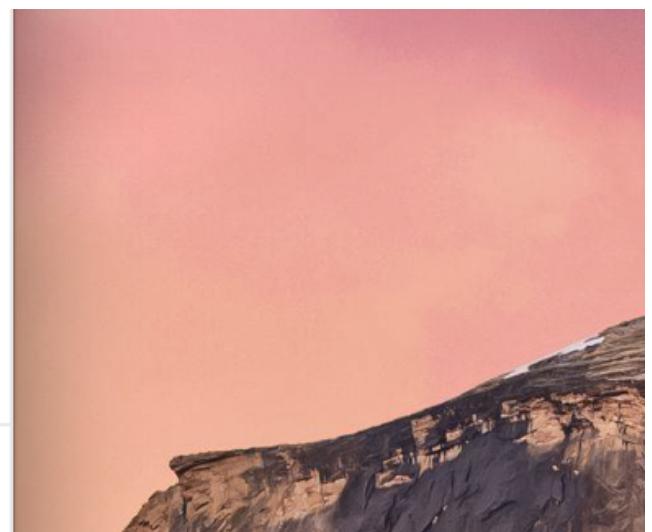
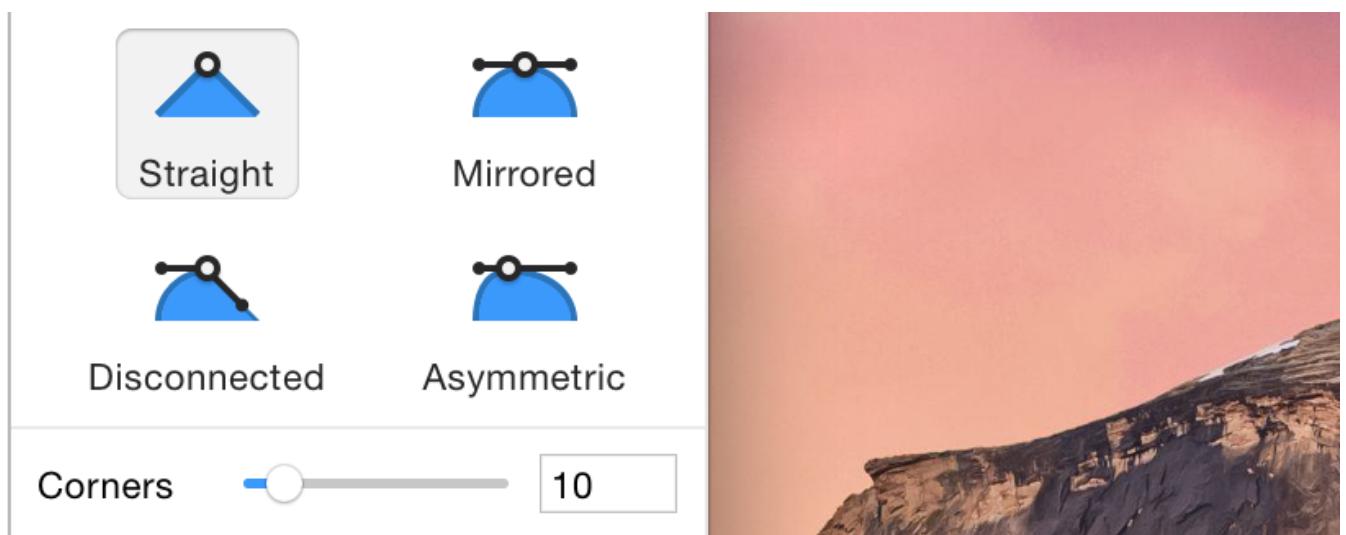
If you want curved lines instead of straight ones, you can double-click a point. You will see two little handles appear on either side of the point. They control the curvature of the line on either side. Think of these little control points as if they are pulling the line towards themselves.

For an in-depth article about how control points work in Sketch, check Peter Nowell's excellent [Mastering the Bézier Curve in Sketch](#).

Different Modes

There are different ways in which the points limit the movement of their little control points and, in turn, the kind of lines that are produced between them.

While editing a shape you will see that the inspector shows you four different modes for the point; Straight, Mirrored, Disconnected and Asymmetric.



Straight: If you apply the first mode on your shape you'll get no little control points and basically a straight line.

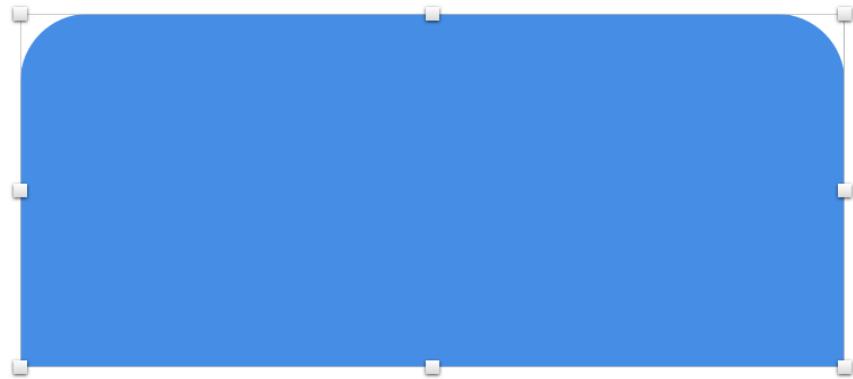
Mirrored: Control points mirror each other; they are opposite each other and at the same distance from the main - point. If a vector point is not straight, this is the default.

Asymmetric: Distance between the control points and the main point is independent, but they do mirror each other.

Disconnected: Control points are completely independent of each other.

If a point is set to Straight, you can use the slider under this section to turn the straight corner into a rounded one. If you go to Insert > Shape > Rounded Rectangle you'll get a basic rectangle with four points where the corner roundness has already been set for you.

Being able to control corner roundness on a per-point basis allows you to have different radii per corner; you can just round the top two corners and keep the bottom two sharp, for example:



Drawing versus Editing

Instead of starting with a predefined shape, you can also draw a shape from scratch by using the Vector Tool. Click Insert › Vector from the toolbar and click anywhere on the canvas to add your first point. Click somewhere else to add the second.

You will see that a line now connects both. Now click somewhere but hold down the mouse while you drag away to draw a curve. You can draw a few more lines like that and when you click again on the first line you'll close shape and finish editing.

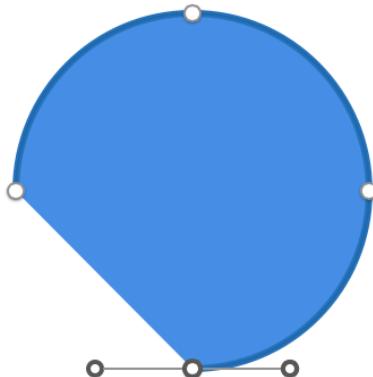
Selecting other points, inserting points on lines, and anything else is exactly the same, whether you're editing an existing shape or drawing a new one.

Closed vs Open

A path can be either closed or open. When it is closed, the last line in the path connects back to the first. When a path is open, it leaves a gap between the last point and the first. You can turn a closed path to an open one and vice versa by going to Layer › Paths › Close Path in the menu.

Whenever you are in shape-editing mode you can add new points to a path as long as the shape is open.

Note that whenever you've applied a fill-style to your shape, the fill will draw as if the path was closed - even if the border is drawn with a gap.



Shortcuts

If you hold down \wedge before inserting in a new point at the end of a vector it will instead align it at 45° angles to the previous point, ideal for drawing straight lines.

If you hold down the ⌘ key and click on a line between two points, Sketch will insert the point exactly in the middle of the line for you.

Multiple Selection

Something that may not be immediately obvious is that you can select multiple points and move them all at once. To select multiple points, hold down Shift while you click on points. You'll see that the selected point has a white centre while deselected ones are grey.

Another way to select multiple points is to hold down Shift and then click and drag from an empty area in the view to make a rectangular selection. If you are still holding down Shift when you let go it will extend the selection you had before dragging with the newly selected points.

If not, it will deselect the old points and just select the newly selected points.

Boolean Operations

When a shape you need is not among the standard shapes you will have to create it yourself. The first impulse might be to use vector tool and draw the shape from scratch. However you will find that many times, a complex shape is easy to break down into the basic shapes. With boolean operation you can do exactly that; combine basic shapes to create more complex ones.

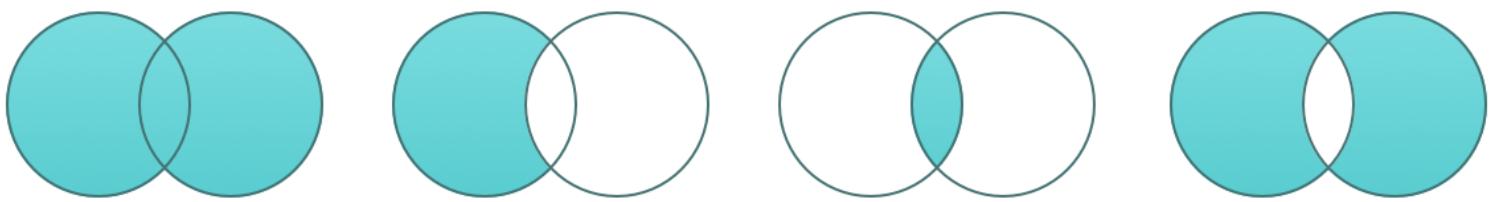
Subpaths

Sketch has dynamic boolean operations and before we can discuss those in more detail we have quickly revisit vector shapes. Most vector shapes in Sketch will consist of only one series of points; one path so to speak. However a shape can have as many subpaths as you want and the how the resulting shape will look depends on how these are combined.

When you perform a boolean operation in Sketch, it will add the topmost shape as a subpath of the second shape and use the particular boolean operation. Because boolean operations in Sketch are dynamic you can always adjust the subpaths and if one of your shapes is a rectangle, you can adjust the corner radius for this single subpath.

Operations

There are four different boolean operations and you will choose one depending on the situation.



Union: The result of a union operation is a vector that is the sum of both vectors' areas.

Subtract: The result of a subtract operation is a vector where the area of the top shape is removed from the one under it.

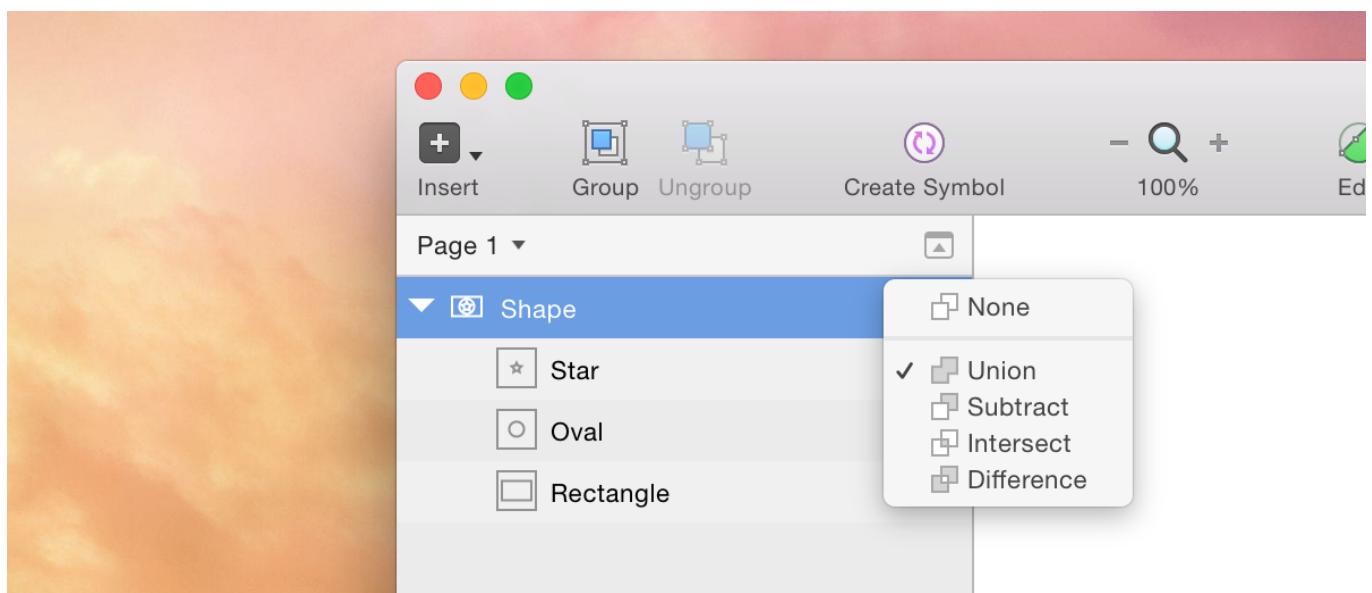
Intersect: The result of a intersect operation is a vector consisting of the parts where the original shapes overlapped.

Difference: The result of a difference operation is a vector that is exactly the part where they didn't overlap. It's the inverse of an intersect operation.

Layer List

When you have a shape with multiple subpaths in your canvas take a look at it in the layer list. Just like with normal groups you will see a disclosure arrow on the left and if you expand that you will see a list of subpaths for your shape. On the right side you pick a boolean operation for each subpath individually.

As the layer list is ordered from bottom to top; the order of the subpaths is the same. The boolean operation you pick will combine the layer with the layer below. The result of that will be passed to the subpath above if there is any.



Flattening

When you flatten a shape in Sketch, it will try to represent the multiple paths inside the shape as one path; it will, so to speak, ‘flatten’ the hierarchy. However there are many paths that can’t be flattened into one. A shape with a hole inside it will always have to be represented as two paths; one for outer path, and one for the inner path.

When Sketch cannot flatten a path it will warn when you try to do so. If you persist in flattening all the same, the subpaths you had will be replaced by different subpaths, maybe fewer paths, maybe the same number of paths.

If you're coming from other design apps you might be inclined to flatten a path after you have applied a boolean operation. In Sketch there's no need for that; you can apply as many boolean operations on top of one-another without the need to flatten.

Rotate and Transform

Rotating, and transforming are two similar, yet different features in Sketch that will allow you to edit your layers in various ways.

There are a number of methods to rotate your selected layer in Sketch. As rotation is a value measured in degrees, it can be edited via Sketch's inspector. This value can be changed to a plus, or negative value, to rotate clock—and counter-clockwise respectively.

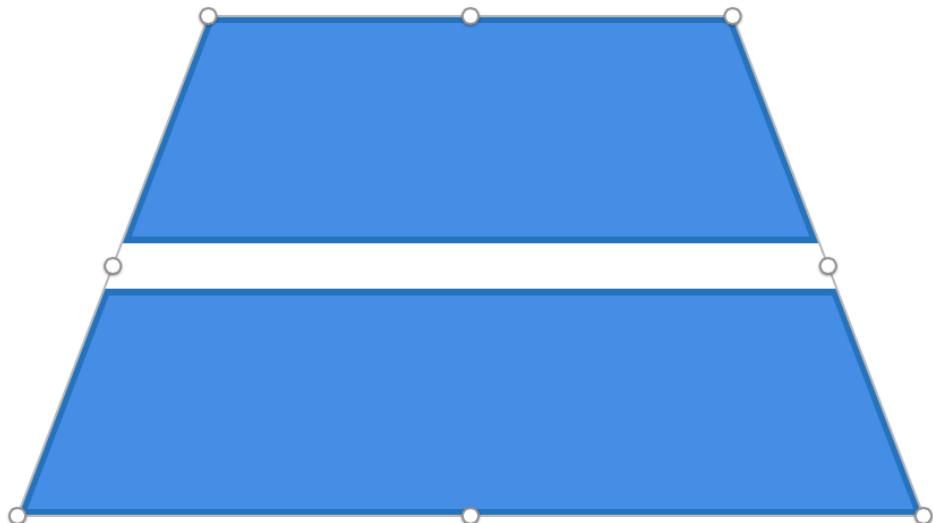
If you wish to have more control whilst rotating a layer, click the Rotate button in the toolbar to enter the rotate mode. Here you can click anywhere outside of your selected layer and begin dragging to rotate in any direction. If you hold down the \wedge key at the same time, you can now rotate in 15° increments. Perfect for obtaining an isometric or diagonal effect, as well as an easy way to rotate something as a right angle. Your rotation value will be visible in the inspector.

By default, layers will rotate around the middle of their selection, but it is easy to adjust its rotation origin. You can click-and-drag the crosshair marker to anywhere inside or outside your layer to rotate around that point. Just deselect, and re-select the layer to reset its origin to the middle of the layer.

You can also quickly rotate a layer or group in the canvas without going into rotate mode, by simply holding the ⌘ key and dragging one of the selection handles.

The transform tool can be used to distort an existing vector by skewing the points or by creating a fake 3D effect. You can use the transform tool in Sketch to transform one or multiple layers at the same time.

Select one or more layers and click the Transform button the toolbar. Grab one of the four corners to freely transform the shape or grab a dot in the middle to move two corners at the same time to skew the layer.

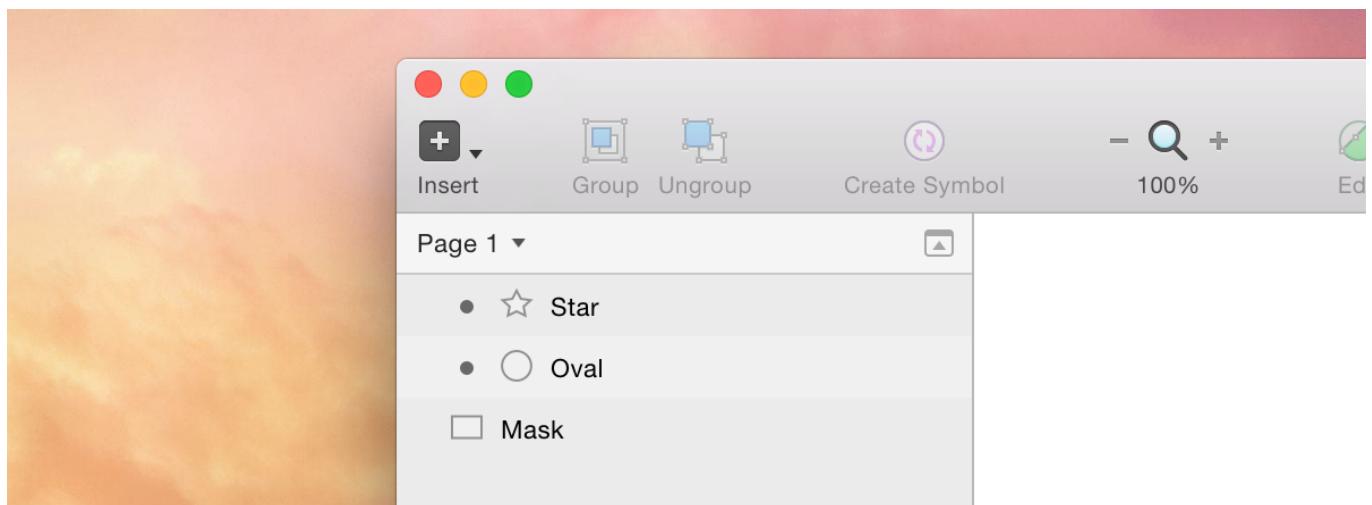


When you transform a shape from a corner you will notice that the opposite corner always moves in the opposite direction as well. This makes it easy to apply perspective effects for example. However if you do want to adjust in only one direction, hold down **⌘** while dragging.

Masking

Masks in Sketch are used to selectively show parts of other layers. For example putting a circular mask on an image will only show the part in the circle.

Any shape can be turned into a mask. To do so, select the shape and go to Layer › Use as Mask in the menu. Any layers above the mask are clipped to its contents.



In version 3.4, you can now quickly apply a mask to bitmap images, simply by clicking the Mask item in the Toolbar. This will automatically generate a rectangle behind the image to which it is masked.

Restricting Masks

If you don't want all subsequent drawing to be clipped, the best way to restrict the 'influence' of the mask is to put the mask and the layers you want clipped inside their own group. Anything above the group will not be clipped if the mask is inside the group.

Sometimes grouping is not an option. Another way to stop a mask is to do the following:

1. Select a shape that is currently masked but that you don't want masked
2. In menu go to Layer › Ignore Underlying Mask

This layer and any layers above it won't be masked anymore.

Take care when you reorder layers as suddenly more or fewer layers can get masked.

Mask with Shape

If this all seems like a lot of work for masking an image, we have good news: Select a shape and an image on the canvas and go to Layer › Mask with Selected Shape to use the shape as a mask on the image. Sketch will put both layers inside a new group and turn the shape into a mask. Basically it automates the steps listed above.

Alpha Masks

By default a mask works by taking its surface area and hiding the rest. Another way to work with a mask is to give it a gradient, and to use the opacity of that gradient to determine what should be visible and what shouldn't be.

This second mode is available for masks by selecting your mask and then going to Layer > Mask Mode > Alpha Mask.



[Video about masks](#)

Scissors

The Scissors tool can be used to cut away lines from an existing vector shape. Select an existing shape and select the Scissors icon in the toolbar or use Layer › Paths › Scissors for the menu bar.

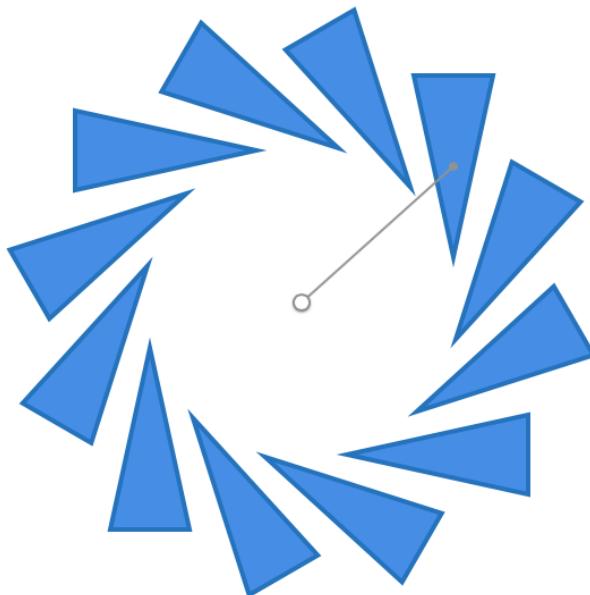
You can then click on a line in your vector shape to cut it away. When you're finished, click outside the shape or press Enter/Escape to exit the scissors tool. When there is only a single line left, you'll leave the Scissors tool automatically.

Rotate Copies

This tool is a special one in Sketch. It's not in the toolbar by default, but you can add it by right-clicking the toolbar and choosing Customize. It's also available in the menu under Layer > Paths > Rotate Copies.

This tool takes one layer and rotate copies of it around a certain point. Take the example of a flower; create just one leaf, then rotate a dozen copies around the center and you'll have your flower.

Select a layer, activate the Rotate Copies tool, enter the number of copies and close the dialog. Then position the center-dot where you want it and click outside or deactivate the tool to exit it.



Splitting

All shapes will be added as subpaths to the original shape. If you'd rather have them as completely separate layers, go to Layer > Paths > Split in the menu to turn them into separate layers.

Pencil

The Pencil tool allows you to draw freely. After you let go of the mouse, Sketch will try to smoothen the curves and simplify the path.

You can find the Pencil tool in the Insert icon in the toolbar or in the menubar under Insert as well. A quick shortcut for the Pencil tool is the P key.

06 Text Layers

Sketch uses the native font rendering of the operating system and because of that, text looks excellent. The benefit of native font rendering is that when you're doing a website design you're sure that text looks accurate. Sketch also supports text styles so you can have multiple text layers share the same font, size, kerning etc.

Overview

Adding Text

You can add text by clicking the text icon in the toolbar. The cursor changes to a text cursor and then you can click anywhere in the canvas to insert your text layer at that point. You will see text being added and selected so you can start typing immediately.

You can also click and drag to create a text box of a fixed size. When the text gets too big to fit inside the box, it will resize downwards, as opposed to a normal text box which increases its width to fit the content.

Resizing Text

When you resize a text box in the canvas its text size will not change, except when you resize auto-width text using the resizing handle at the bottom.

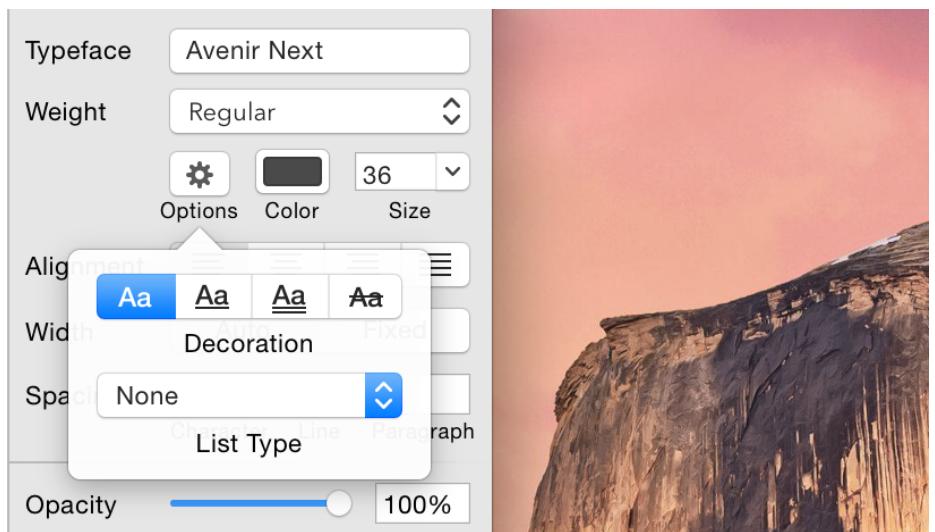


Text Inspector

When you have a text layer selected you will notice that the inspector has changed to show you all the properties that apply to text.

Below the standard layer properties there's the area for **Shared Text Styles**.

Below that you can pick the font and weight. By pressing the button with the cogwheel, you can access list options and decorations such as underline and strikethrough. A little bit below there there's spacing; Character (kerning), Line (spaces between lines) and Paragraph (the space between hard returns).



Text Color

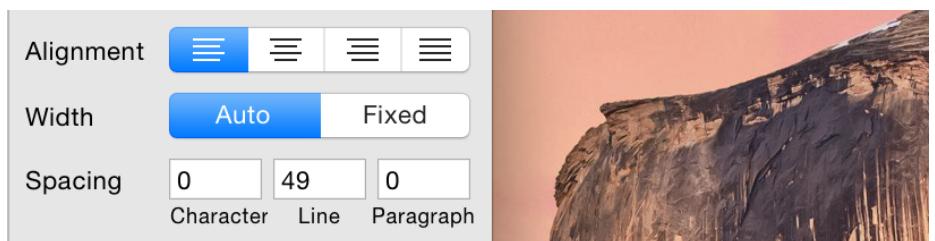
When you're editing text, you can apply specific colors to subranges of the text. You can do so using the little Color box between the font size and the text options button.

You can also apply a general fill style to the text layer, such as a gradient. However, any fill applied here will apply to the entire text layer and it will override anything you set in the color box above it.

Note that to render gradients on text, we have to convert it to a vector shape under the hood and this will cause it to lose its sub-pixel anti-aliasing.

Auto vs Fixed

The Width property (under the alignment) can be set to either Auto or Fixed. When it is set to Auto, the text box's width will expand as wide as possible to fit the text you entered. When it is set to Fixed, it'll wrap the text to its current width and instead expand below instead.



Rendering

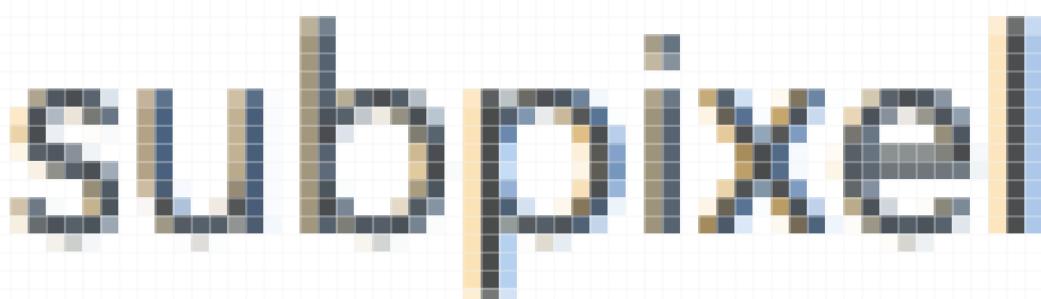
Sketch uses the native font rendering of the operating system and because of that, text looks excellent. The benefit of native font rendering is that when you're doing a website design you're sure that text looks accurate.

The system uses a technique called sub-pixel anti-aliasing to improve text rendering and Sketch will render its text using this technique as well. However there are a few caveats to this, and to understand why, we need to explain something about the underlying technology first.

Sub-Pixel Anti-Aliasing

A computer screen is made up of a grid of pixels. The problem that text rendering faces is that on regular screens there are not enough pixels on the screen to accurately draw the curves. So anti-aliasing has to be used; it slightly lights pixels that only are partially covered by the curves to give the appearance of smoothness.

Sub-pixel antialiasing goes one step further by taking into account that a pixel on a screen actually consists of red, green and blue vertical strips. So instead of lighting up the entire pixel, sub-pixel anti-aliasing lights up only the red or blue part.



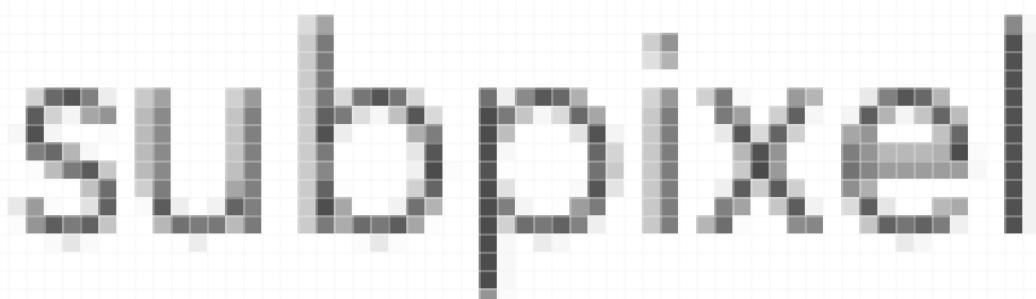
That is why if you really zoom in on text in pixel mode you can see blue and brownish edges to your text. Viewing the text at actual size though produces a good result. Users coming from Windows are not used to sub-pixel anti-aliasing and they often refer to the way OS X renders fonts as ‘fat’.

When it Fails

For sub-pixel anti-aliasing to work, the text has to be drawn on an opaque (colored) background because the system needs to know what the final composited result will look like. This conflicts with layer blending.

For layer-blending to work correctly, Sketch has to render all layers on a transparent background. That way the layers can blend together as expected and then the final result can be rendered back into Sketch’s white canvas.

So this presents us with a problem; we cannot render sub-pixel anti-aliased fonts without an opaque background, and we cannot accurately render blending with one. This means that as soon as you have one layer on your canvas with blending, Sketch has to go the transparent-background-route and your text might no longer render with transparent:



You can work around this by putting your text on top of something that is opaque, like a shape with a fill or an image.

Exporting

Another problem with transparent happens on export. On the canvas, Sketch can render the text behind an opaque background, so everything works.

However when you export a text layer to a PNG file and keep the background transparent you will notice that the text looks different; because the background is transparent we were unable to render it with sub-pixel anti-aliasing.

Like with blending above, you can work around this by putting your text on top of something that is opaque, like a shape with a fill or an image. However the area behind the text has to be transparent, there is just no way around this unfortunately, so keep it in mind when you are exporting.

Designing for iOS

When Apple introduced the iPhone they decided to not render any text on the device with sub-pixel anti-aliasing. The reason for this goes back to way red, green and blue lights make up one pixel.

As you know, the iPhone can be rotated and this means that the vertical red/green/blue pixels are suddenly stacked horizontally. And with that the entire sub-pixel technique falls apart. Apple could still render it in portrait mode and disable it in landscape, but wisely decided to keep the experience consistent between portrait and landscape.

Whenever you are designing an interface for iPhone or iPad you have to take this into account; on the canvas Sketch renders with sub-pixel anti-aliasing, however on the device it will not be rendered that way. You need to tell Sketch to not render with sub-pixel anti-aliasing, and you can do so in the Preferences. Go to Sketch › Preferences... in the

menu, and in the General tab, disable the sub-pixel anti-alias fonts option.

Text to Outlines

When you convert Text to Outlines you will notice that the text renders slightly different as well. Once again, this is due to sub-pixel anti-aliasing. The system only does this technique for text, not for shapes. Read more about Text to Outlines in Text chapter.

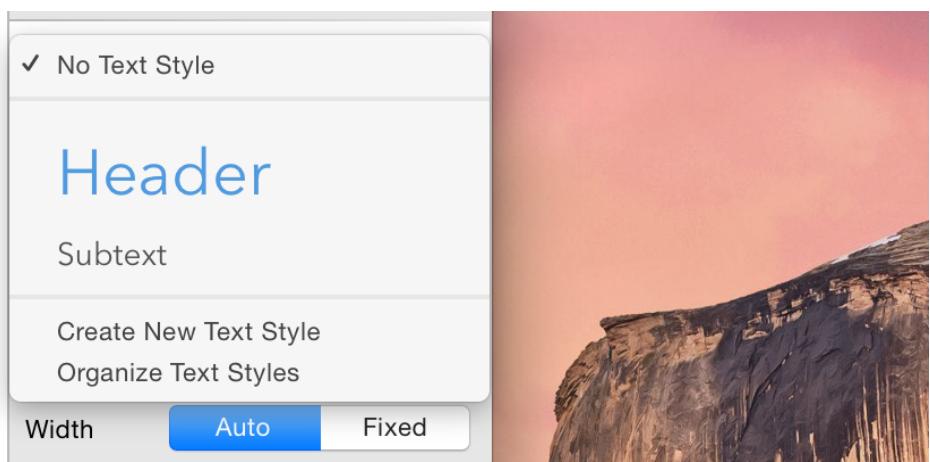
Shared Styles

You will often want to keep the style of multiple text layers the same. To do so, you can define any number Text Styles in your document and layers that conform to this style are always kept in sync.

Note that Text Styles exist on a per-document basis. You cannot share them between documents but they are available among all pages and artboards in your document.

Creating a Style

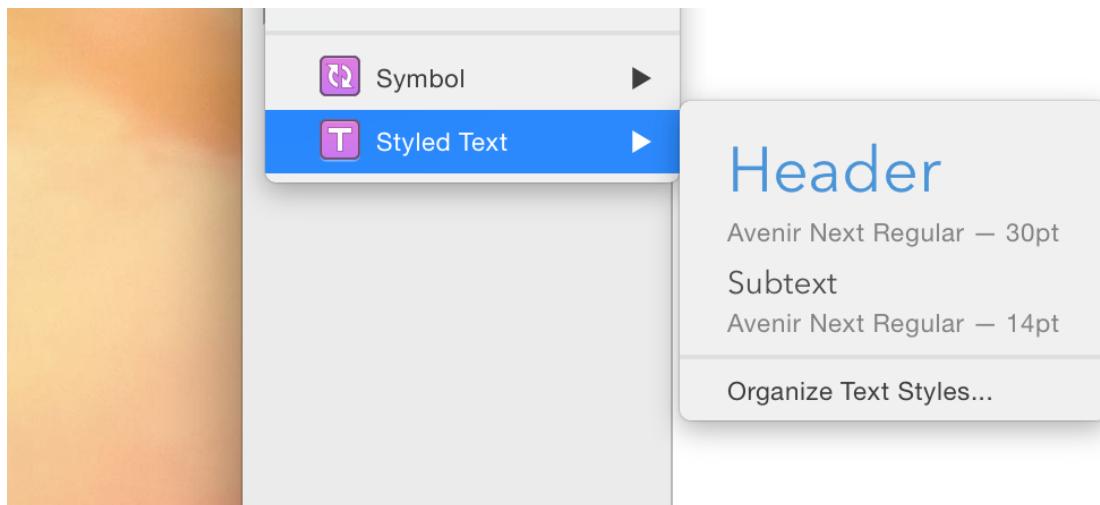
To create a text style, select a text layer, and go to Layer › Create Shared Style in the menu. You will see that the inspector updates to show you the new text style applied to the layer. Here you can also give it a proper name.



Any attribute you change on the text (except the raw text string itself) is automatically synced across to the other text layers with that style.

New Layers

You add a second text layer like you do usually and then go to the inspector and apply the previously created Style to that layer as well. A faster way to insert a text layer with a certain text style is to go to Insert > Styled Text and pick your style. You can then insert this text layer the same way as usual.



Note: In Sketch 2.x we had Text Styles as well, but they've been upgraded in Version 3. The biggest change since Version 2 is that gradient fills, shadows and inner shadows are now also part of the style of the text.

Text on Path

Sketch supports can render text on path, such as the example below:

There are two things we need for this to work; a vector shape and a text layer. When you go to the Type menu and enable Text on Path, Sketch will put the text layer on the line of the vector shape underneath it. Note that it only works if the vector shape is below the text layer; the order of the layers has to be such that the text layer sits on top of the vector shape.



Placing the text layer on the vector is as easy as dragging it horizontally across the shape. It may be hard to describe in writing, but you will see that it works very intuitively.

Convert To Outlines

Text can be converted to shapes using Type › Convert Text to Outlines from the menu. This will turn each character in your text into a shape. You can then edit the individual paths and points as you could any other shape.

Warning

However, do take care with this approach. Do not vectorize long strings of text as it will significantly slow down your document.

Converting a simple string of text into outlines results in many small subpaths and calculating boolean operations on this is really, really expensive. If you have to, split the text into as many text layers as possible, and convert those one by one.

And because you can apply gradients and everything else to text already, often there's no need to convert them in the first place.

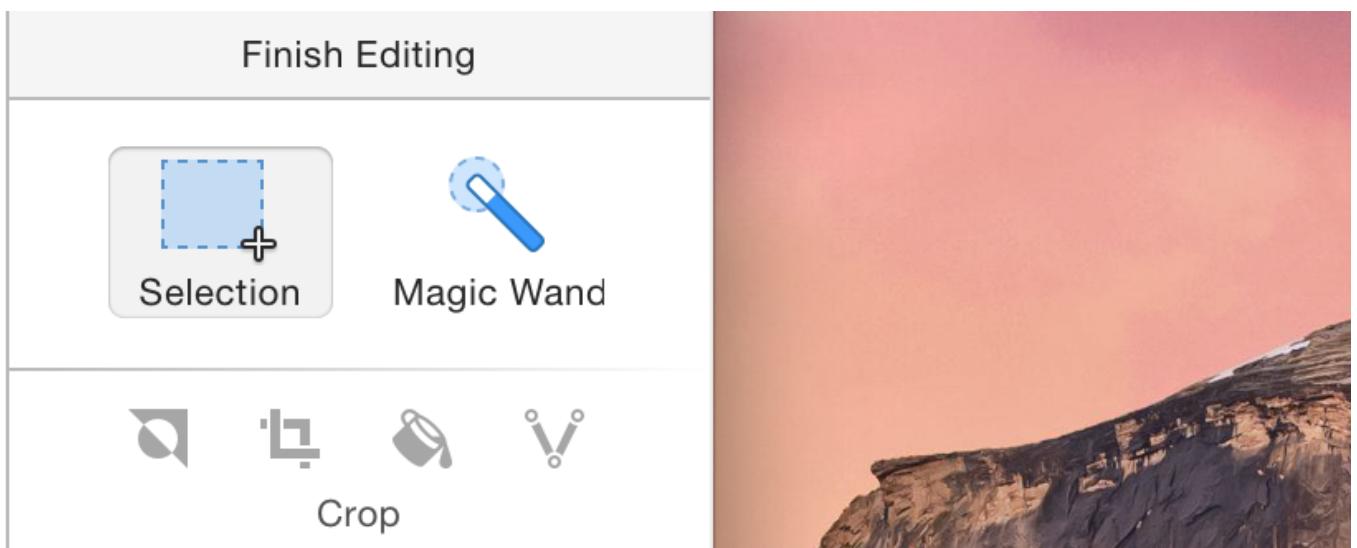
Images

Sketch has good support for handling image in your document. Sketch is however not a bitmap editor and our image editing tools are limited for that reason. However, Sketch 3 has improved in that area.

Note that you can turn any number of layers into a flattened bitmap by going to Layer › Flatten Selection to Bitmap.

Bitmap Editing

Image editing has been improved in Sketch and now has a proper UI to boot.



To start editing an image, select it on the canvas and double-click. You will see the inspector update with a few special tools. First you have to select an area on the canvas, and then pick the tool you want:

Selection: Select a rectangular area on the image

Magic Wand: Click and drag anywhere on the image to select an area. The further you drag away from the start the greater the tolerance will be.

Note that you can use Shift to add to an already-existing selection, and use \setminus to subtract from it. Once the selection is made you can either cut/copy the selection and use it for a new bitmap layer or select from the four available tools below it:

Invert: The area that was not selected will be selected now and vice versa

Crop: Crops the layer to only include the selected area.

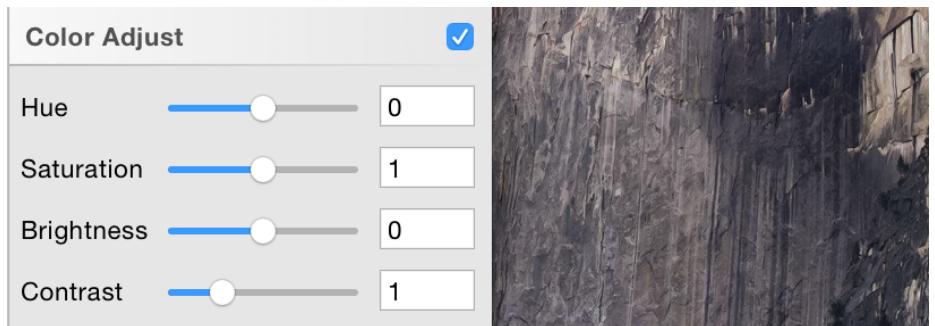
Color: Fill the selected area with a chosen color. The standard color picker will appear to let you pick a color.

Vectorize: Turn area you have selected into its own shape layer. Useful in combination with the magic-wand.

Once you are done editing, click anywhere outside the image, or press Return or Escape to exit.

Color Adjust

If you wish to tweak the colors of an existing image you can use the Color Adjust panel in the inspector to do so. You can change the Hue, Saturation, Brightness, and Contrast in this panel.



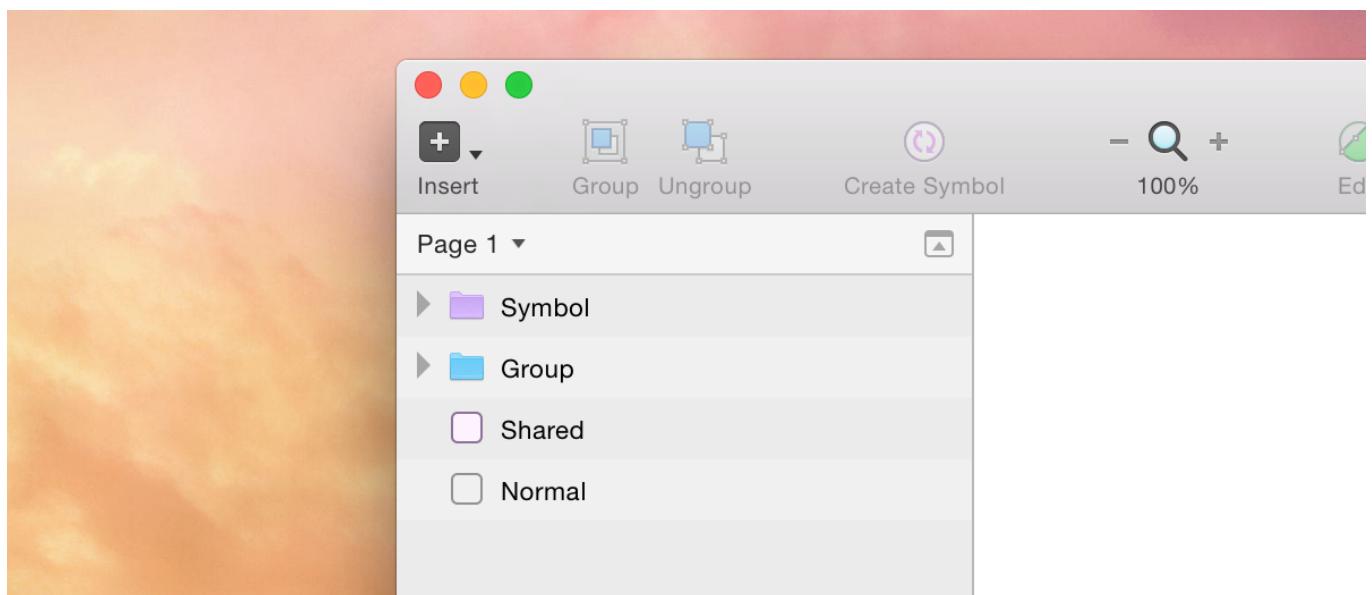
Note that this is a non-destructive effect so you can always change your values later.

07 Symbols

Symbols let you reuse groups of context easily across pages and artboards. They are local to your document though and cannot be shared between documents.

A symbol is in fact nothing more than a special kind of group.

It is also displayed as a group the layer list, but with a purple icon instead of a blue icon.



Creating Symbols

To create your first symbol, select a group, or a number of layers and click the Create Symbol icon in the toolbar, or go to Layer > Create Symbol in the menu.

If whatever you had selected wasn't yet a group, Sketch will group them together first. You now have a purple icon in the layer list and you can give your Symbol a new name in the inspector.

Now you can go to Insert › Symbol, and insert a new instance of your Symbol into the canvas. Likewise you can copy-paste or duplicate an existing instance of a symbol and Sketch will link them together as well.

Any edits you make in one instance are immediately reflected in the others.

Exclude Text

A common example of a Symbol will be something like a website header, or footer or common interface elements such as buttons. In all these cases you may want to make an exception for some of text in the symbols; each button should look the same, but its text value should probably be different.

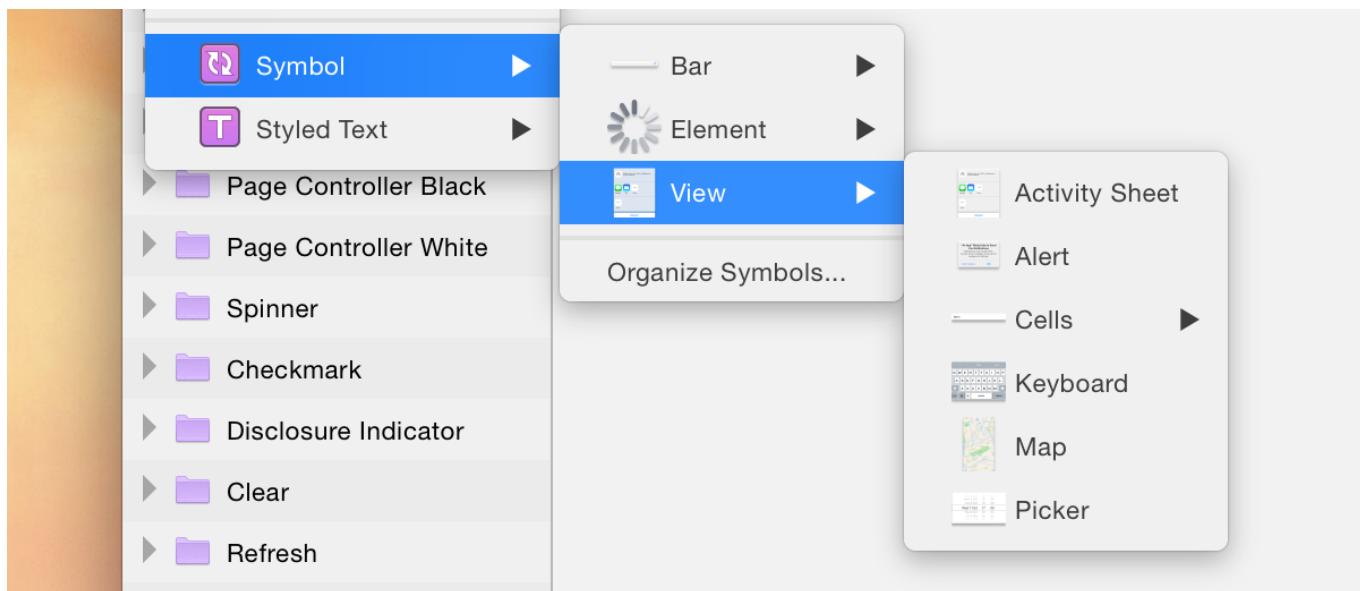
You can easily do this with Symbols, by selecting a text layer inside a Symbol and checking the Exclude Text Value from Symbol checkbox. Any edits you make to the text are now local to only that instance.

Organising Symbols

If you create a lot of symbols in your document you may want to group them together somehow, because a long list of symbols isn't that helpful.

If you go to Insert › Symbol › Manage Symbols, you will get a dropdown sheet with a list of all the symbols in your document. You can rename or delete them there. If you include a slash (/) in the name of the Symbol, Sketch will treat these as group separators. For example, two Symbols named Button/Normal and Button/Pressed will be grouped together into a submenu called Button.

Note that they are always sorted alphabetically, not in their order of creation.



Duplicating Symbols

If you want to duplicate an existing Symbol, select an instance of it in the canvas, and in the inspector click on the Symbol and choose “Duplicate Symbol”.

Swapping Symbols

In the same way, you can apply another Symbol to the currently selected instance. In the example of a pressed button and a normal button, you can swap between the two, leaving their text value the same if you've set up both Symbols to work that way.

To make this work, make sure that the text label is set to “Exclude Text Value from Symbol” in both symbols, and that it has the same name in the two (otherwise the value will be lost when swapping the Symbols).

08 Styling

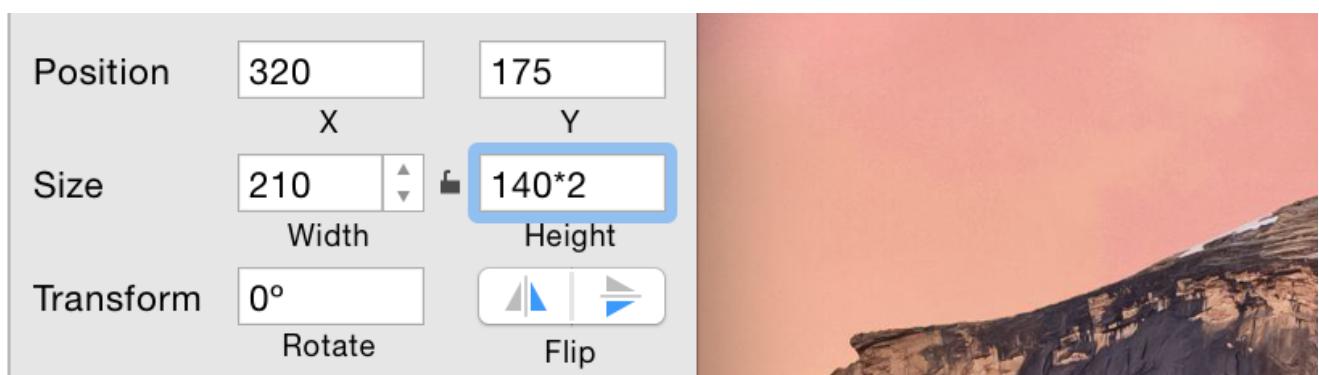
The inspector panel holds all styling options for the selected layers.

Starting with the shared styles, we move down to general opacity and general blending, followed by Fills, Borders, Shadows, Blur and Reflection. Each of these has been given its own section in this manual, so click through to read more about each.

There are however a few generally applicable tips and tricks and we'll discuss those here.

Text Fields

The text fields in the inspector aren't ordinary text fields. If you hover your mouse over them you will see little up and down arrows appear on the right-hand side of the text field. You can click those to quickly increment or decrement the value. If you press Shift, Sketch will instead increment or decrement the value by 10 times as much. And, if applicable, holding down ⌘ will increase/decrease it by a tenth of that size.



Up and Down

Once you are editing the text fields directly, the up and down arrows will have disappeared, but their functionality is still available. You can use

the Up and Down arrow keys in combination with Shift or ⌘ to achieve the increment/decrement feature as above.

Math

Another great feature in our text fields is that you can perform math on them. This works for simple math as such as adding +5 or /2, but almost any expression is supported.

Scrubbing Values

For quickly adjusting text field values you can click and drag on the little label under any text field to quickly increase or decrease its value. If you're sure about the exact value you want but just want to see its effect on the canvas, this is great way for quick experimentation.

Back on Canvas

You will be going back and forth between the canvas and the inspector a lot. Select an object on the canvas, change some text values and go back to the canvas. However normally the application's focus would remain on the inspector, so if you'd press the R shortcut to insert a Rectangle, you'd be typing that R into the text field instead.

Most of the time that's not exactly what you want. To confirm any edits you made in the text fields, press Return. If you then press the Return key again, Sketch will move the focus from the text field back on the canvas to allow you to use any shortcut and canvas-specific feature again.

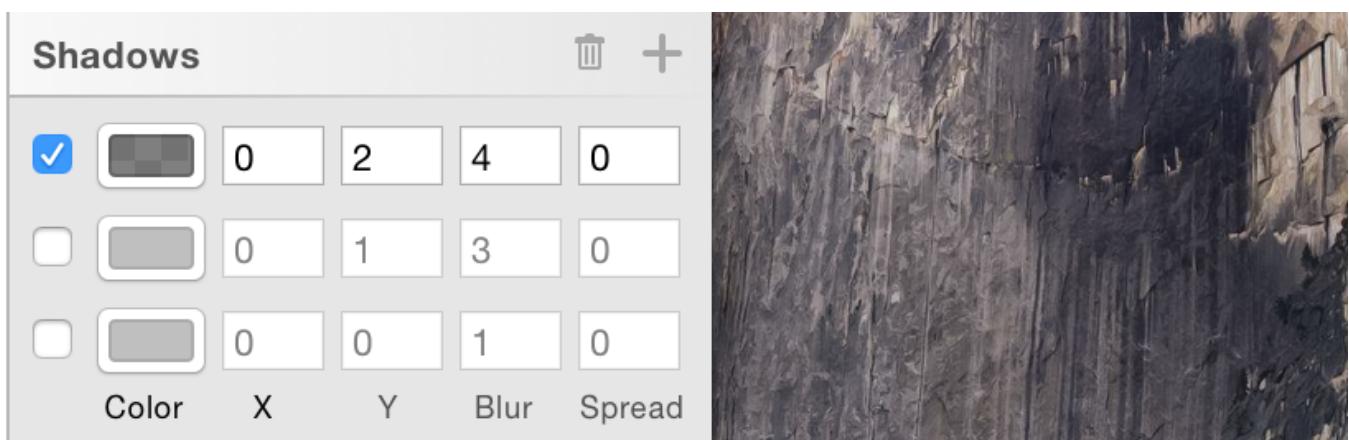
Drag Drop

A Border, Fill, or Shadow can be dragged around. To do so, grab it in an empty space between the buttons and text fields and start dragging.

You reorder fills this way and even drag them out of the inspector to remove them straight away.

Cleaning up unused Styles

An effective way to try multiple variations of some style is to have a number of borders or shadows, and selectively turn some on or off. Or whatever the reason may be, we noticed that many designers had a lot of disabled styles in their inspector.



To make it easy to remove disabled styles, as soon as you have a disabled fill or border, the section will show a little trash can icon. Click that, and all disabled styles will be removed.

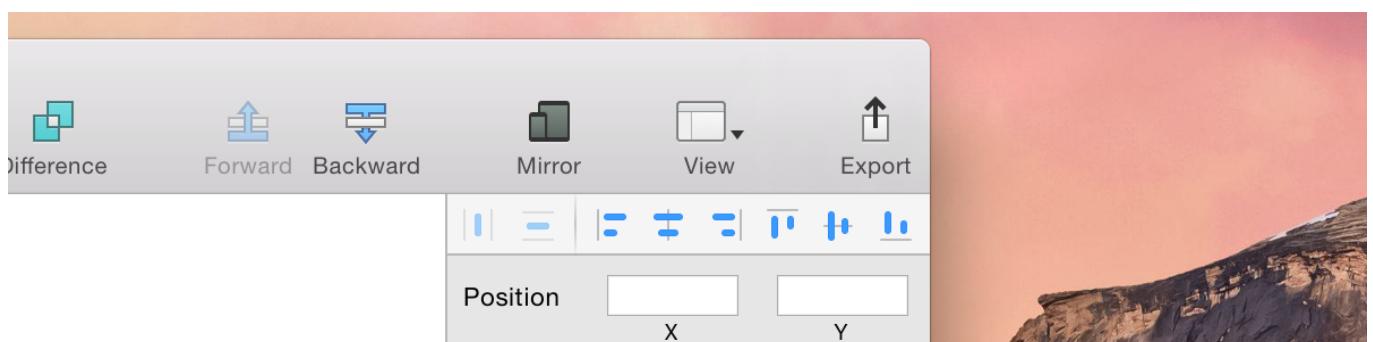
Copy Paste Styles

This is not necessarily inspector-related, but you can Copy-Paste styles between layers using the Edit menu. If you don't want layers to be permanently linked but do want to share some style elements, this is a perfect solution.

Alignment

At the top of the inspector are a few alignment-related buttons. The six buttons on the right are for aligning layers among themselves, or, in the case of a single selection, aligning that layer to the parent artboard.

The alignment icons on the left are for distributing layers horizontally and vertically. In case of distributing horizontally, the left-most and right-most layer will stay where they are and the layers in between will be spaced out evenly between them.



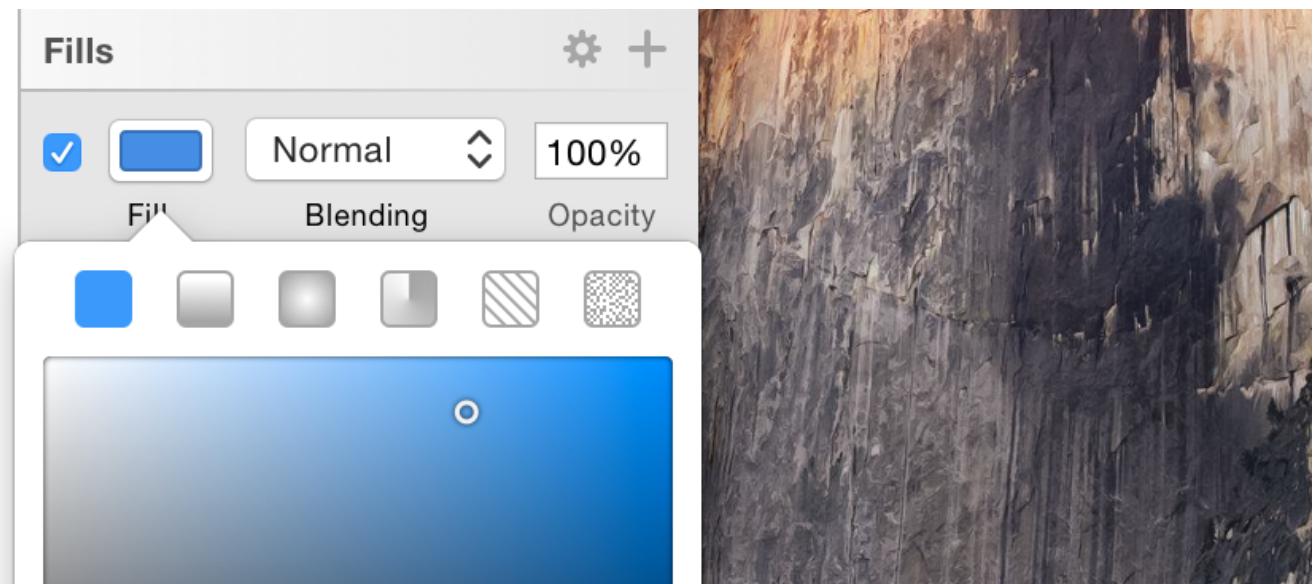
Layer-opacity Shortcut

Again not strictly inspector related, but whenever you have a layer selected you can press the 1-9 keys on the keyboard to adjust the opacity of the layer quickly to 10%-90%.

Pressing 0 brings it back to 100% Opacity.

Fills

Sketch can fill shapes with a Solid color, Gradient or (Pattern) image or Noise. To change from a Solid fill to Gradient fill, follow the steps from the Border section above. Read the chapter on gradients if you want to know how to edit an existing gradient.



From left to right the fill options are:

- Solid Fill
- Linear Gradient
- Radial Gradient
- Circular Gradient
- Pattern Fill
- Noise Fill

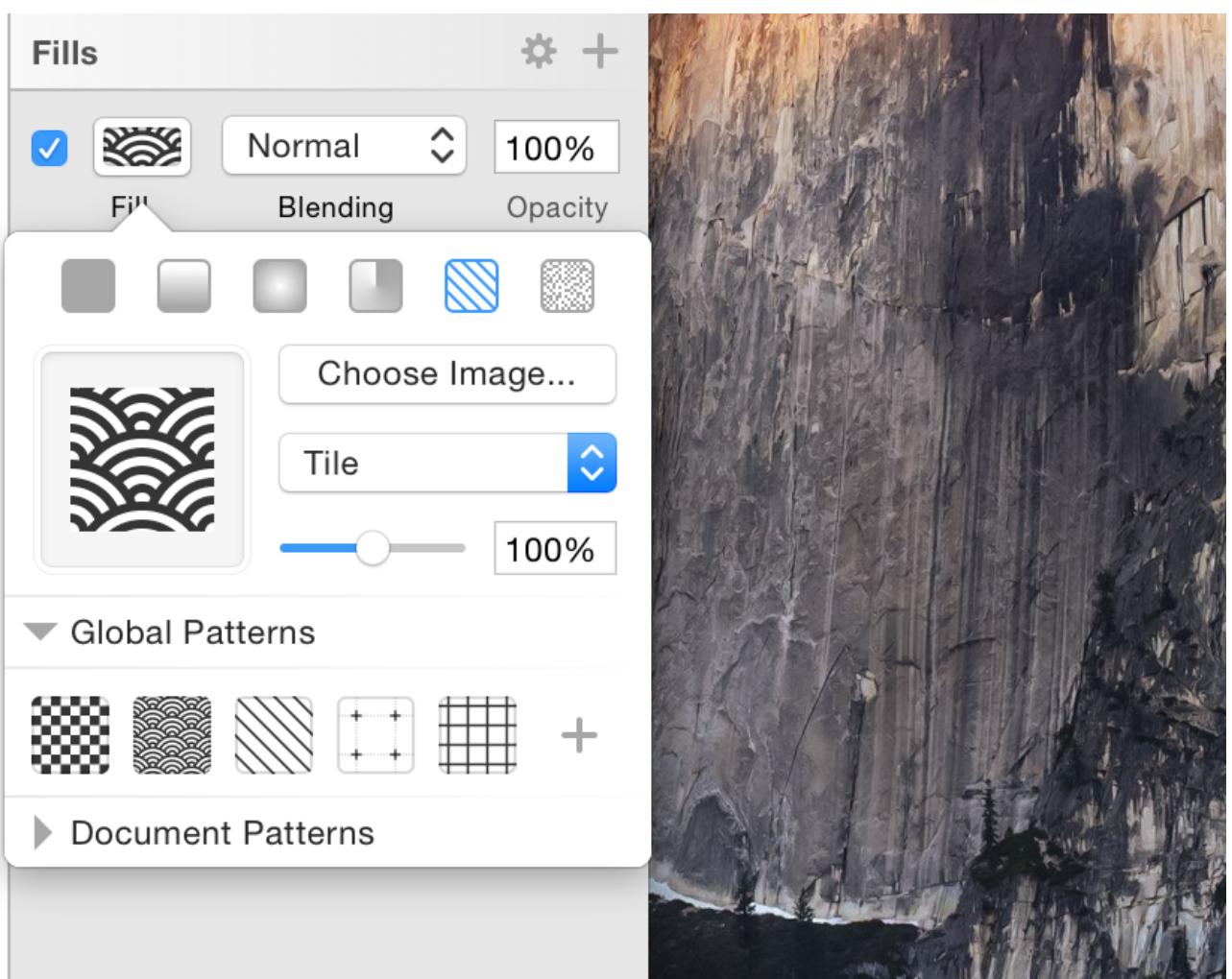
Adding Fills

You can press the + button on the right of the first fill button to add a second fill. A layer can have any number of fills which will be stacked on top of each other from bottom to top. Each fill can have its own blending mode and you can vary opacity between them too.

Note that if the top-most fill is completely opaque you won't be able to see the fills under it, but Sketch will still render them.

Pattern Fill

You can also pick a Pattern fill and choose from one of the presets or drag an image in the drop area yourself. You can set the pattern to either tile or fill.

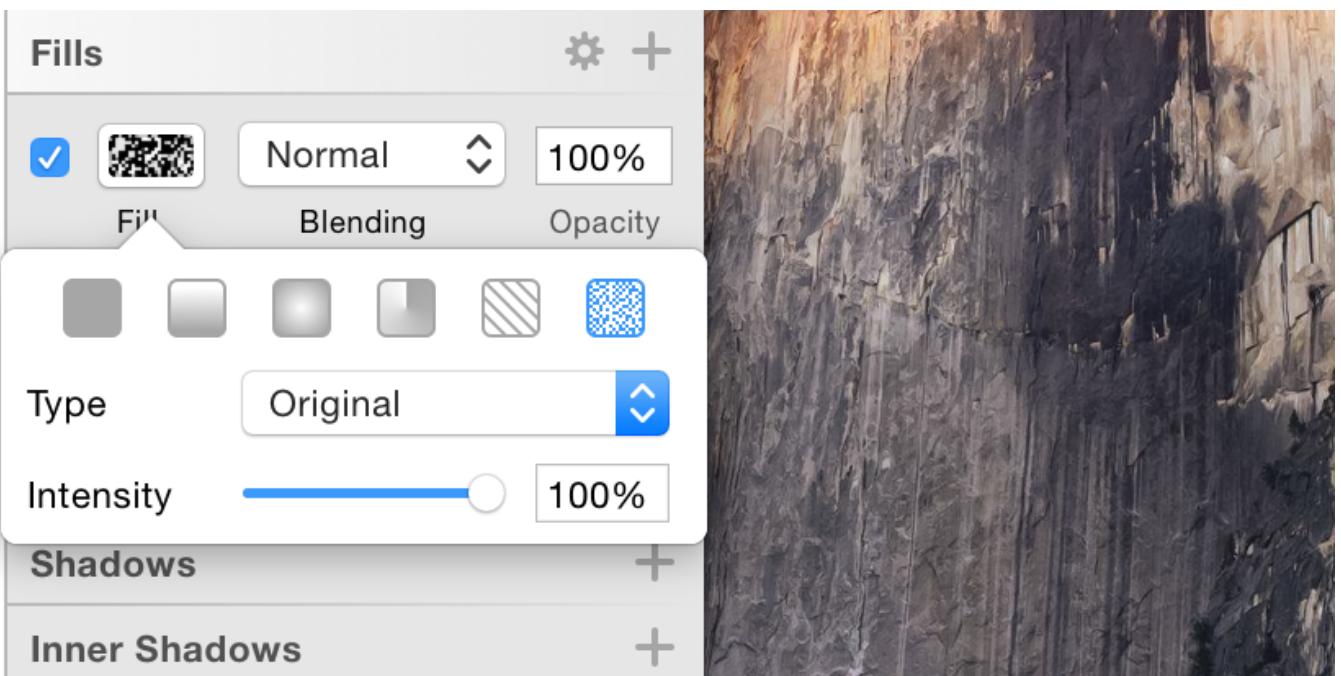


Tile: An image gets repeated over and over until the entire area of the shape is filled up

Fill: An image gets stretched up to fill the entire shape.

Noise Fill

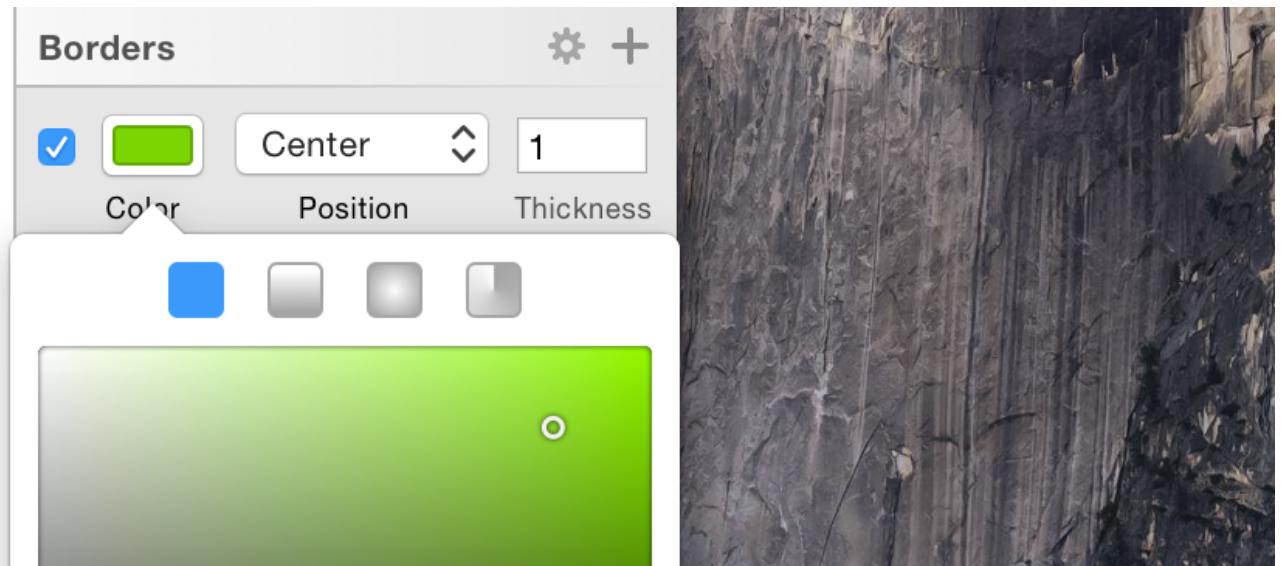
A Noise fill lets you add varying levels of grain to your layer, making otherwise dull fills and shapes slightly more realistic by adding some minor texture.



Sketch 3 comes with three more Noise images, a white, black and colored. You can now also apply custom blending to each Noise fill.

Borders

All layers except Text layers can have as many borders as you want. These can all have various thicknesses, colors and blend modes.



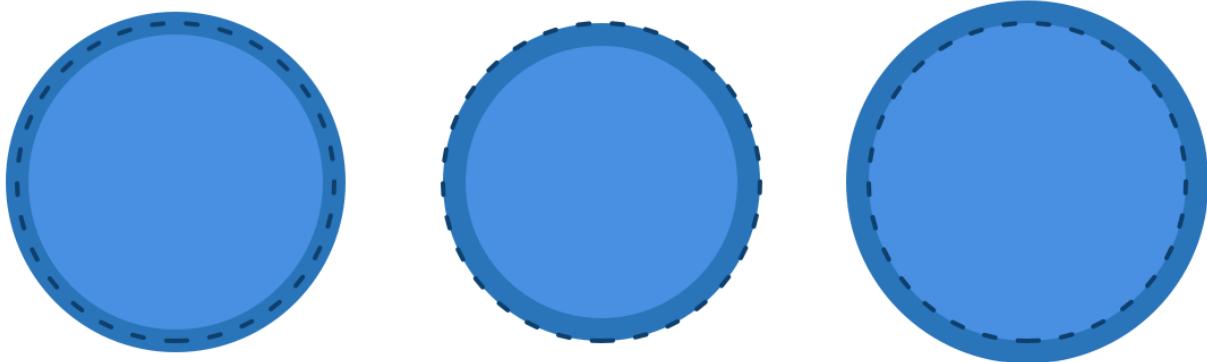
From left to right the border options are:

- Solid Fill
- Linear Gradient
- Radial Gradient
- Circular Gradient

Border Position

A border can be drawn on center, inside or outside of path. If you have a closed shape, an inside border will draw the border on the inside of the shape's contour, and outside border on the outside.

A center border draws it straight on top of the outline, and it's also the only option if the shape is not closed, such as in case of a line. After all, the concept of 'inside' or 'outside' doesn't exist on a line.



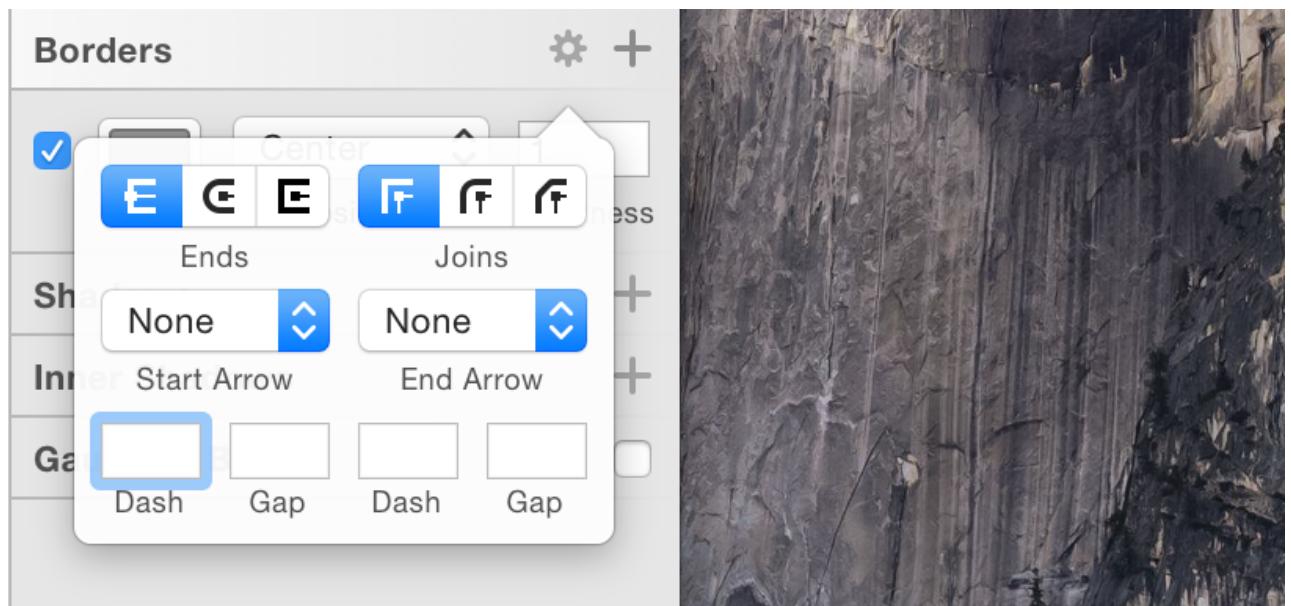
Color or Gradient

A border can be either a Solid color or a Gradient. You can switch between the two types using the color box on each fill, and switching from a flat color to one of the three available gradient types.

Editing a border gradient works in exactly the same way as a fill gradient, so read the chapter on gradients if you want to know how to edit them.

Dashed Lines

Shapes have a few more advanced options for their borders; dashed lines and changing the ends and joins of a path. Look in the Inspector's Border section and click the small gear icon. A popover will display with additional options, including four fields at the bottom for configuring dashed lines.



For example, a dash pattern of 4-2 will draw the stroke for four pixels, put a two pixel gap, draw four more pixels and then so on. A dashed pattern of 5-4-3-2 will draw a stroke of 5 pixels, a gap of 4, then a stroke of 3 pixels, a gap of two, and then start all over again.

Shadows

Shadow (outer) and Inner Shadow have the same settings and work in the same way except that one is inside and the other is outside the shape.

Each Shadow can have its own blending as well, and this can be configured in the color popover.

Spread

Each shadow also has a spread value which can be used to grow the object that is casting the shadow.

Note: an Inner Shadow on a text layer looks best if the blur radius is set to zero. Spread is also unavailable for text layers.

Blur

There are four ways in which Sketch can blur your layers and you can pick between these modes in the header of the blur section.

Gaussian Blur: This will blur the layer evenly across.

Motion Blur: Blur only in one direction, giving the illusion of motion.

Zoom Blur: Blur from one particular point out.

Background Blur: Blurring the content behind the layer.

Background Blur

The other kinds of blur are kind of self-explanatory, but Background Blur might need a little explanation

Background Blur was added after Apple introduced iOS7 so give designers an easy way to reproduce this effect. To get the right effect, make sure you have a (semi-) transparent fill on the layer, otherwise the blur effect won't be seen.

Performance

Note that blur is a very expensive effect to render - especially background blur - and the bigger the layer and the blur, the more memory and processing power it will take up. Disable blurs if you can, and if you have the choice between using background blur and regular blur, take the latter.

Color

In Sketch we built the color picker directly into the inspector. To see it, select a shape, enable the fill or border and click on the color button in either of them.

A popover window will appear and attach itself to the color box you just clicked. Depending on the kind of color you're adjusting (A shadow color, fill color or gradient), the inspector will show different options, but most of the time most of the space is taken up by the Color Picker.

The color picker is based on the HSB color model with the Saturation and Brightness on the horizontal and vertical axis of the big square respectively, and then hue on the slider underneath it. Underneath there you can change the opacity of the color.

You can change your color using the text fields below the color picker or by dragging the little indicators around in the color picker. When adjusting the saturation and brightness, notice you can hold shift to restrict moving to one axis.

HSB colors

Below there you can see the HEX value of the color and the RGBA color values. Note you can switch to HSBA color values by clicking on the RGB labels.

Frequent Colors

By clicking the color preview well (on the right of the Hue and Opacity sliders), this will reveal a list of your frequently-used colors, as well as information about how often they've been used.

This makes it easy to reuse Frequent Colors without having to create presets from them manually.

Gradients

To give a shape a gradient fill, select it, then click on the Fill button and the inspector will show the color tool. To learn how to work with colors read that chapter first. At the top of the color panel you can choose between a Color, various gradients, Pattern or Noise fills.

The available gradients are Linear, Radial or Circular gradients but each works effectively the same in Sketch.

If you pick a linear gradient, you will see two or more dots connected by a line overlaying your layer. Each dot on the line represents a color stop of the gradient and the space between the stops is drawn in a smooth transition of the colors.

To change the color of one of the stops, click on it in the canvas. You'll see that the color picker in the inspector updates to the color of that stop. Pick a new value in this color picker and you'll see the result update immediately.

To insert a stop between points, click halfway on a line and you'll see another stop gets added. You can move the stops between the starting and finishing point to determine the smoothness of the gradient and you can move the first and last point to change the direction of the gradient.

To delete a color stop, select it in the canvas and press the Delete or Backspace key on the keyboard.

Radial Gradients

If you selected a radial gradient earlier the first point on the line will be the center of the gradient and the last one will determine the size of gradient.

You'll notice there's another dot on the wider circle which you can drag to change the circular gradient into an oval one.

Circular Gradients

Circular Gradients go clockwise around the center point of a layer. You can add color stops wherever you want by click on the line and removing/dragging points works as you would the same as for linear gradients.

Gradient Bar

New in Sketch 3 is the addition of a more traditional gradient-editing bar in the inspector. You will see the gradient go from left to right, with any additional stops in between.

Shortcuts

Also new in Sketch 3 are various shortcuts for quickly positioning points. You can press the 1-9 keys on any stop except the first or last, to position it at 10%-90% of the line. So pressing 5 will put the stop always exactly in the middle of the line.

If you want to position the stop in the middle exactly between the stop before and after it, press the = key on the keyboard.

You can also use the Tab key to quickly switch between color stops and you can use the arrow keys to move the stops around on the left. Use the Shift key to amplify the effect.

Gradients on Borders

Sketch can also render a gradient on a border stroke and this works very similar to a gradient fill. Instead click on the color button of the border and repeat the procedure.

Shared Styles

Shared Styles are located in the white box between the general layer options and the style options.

You can create a new style by selecting a shape and creating a new style from the drop-down menu there. You can create as many styles as you want and you can switch between existing styles using this panel as well.

A change you make to one Shared Style is immediately reflected on all the others.

Note that they work effectively the same now as Text Styles and Symbols. The same sorting and editing options apply as there.

09 Grouping

Apart from basic layer such as shapes, images and text, Sketch has a few special kinds of layers which are really useful in organizing and presenting your export. Lastly, proper organization of layers can aid Exporting as well.

Layers in your document can be grouped so that they appear as one layer. You can move and resize them as one and yet you can still go into the group and change the individual layers inside.

Groups in Sketch are a very powerful tool. Because they are just layers themselves, groups can be grouped, moved and resized as well. If the group contains a text layer it will scale up the fonts too.

You create a group by selecting one or more layers. Then click the Group icon in the toolbar and Sketch will create a new group with those items. You can also drag objects between groups in the layer list as you would expect.

Editing Groups

Once you have created a group, you can double-click on it to view and edit its contents. You can move the layers inside the group around and even add more layers. Whenever you click on an object outside the group, Sketch will take you ‘out of’ the group so that you can select other layers in your document again.

If you now click on a layer in the group it will select the entire group instead. In a way this works exactly the same way as shapes with subpaths do.

Click-Through

By default a layer inside a group cannot be selected directly, without first double-clicking the group. If you hold down the **⌘** key however, Sketch will let you select layers nested deeply inside groups directly.

If you only use groups as an organisational component in the layer list and you don't want to have to double-click all the time, you can also mark a group as being click-through enabled in the inspector And there's even a setting in the global Preferences where you can define this behaviour for new groups.

Artboards

Artboards allow you to create fixed frames on Sketch's infinite canvas, but they're completely optional.

If you're creating a responsive web design you may want to design for different screen sizes and you could turn each screen size into an Artboard. If you're making icons you may want to limit yourself to any of the default icon sizes; you can create an Artboard for each.

Artboards are like a special kind of group. They're always 'open'; you never have to double-click to view their contents, and they don't resize to fit the contents inside. If you give an Artboard a certain frame, it'll keep that frame until you resize it again.

Adding Artboards

To create an Artboard, select Insert › Artboard from toolbar or menu. The inspector will show you some common Artboard sizes such a iOS-sized screens, common web design widths and icon sizes.

Click on a preset to insert it into the canvas, or click on the header of a group of Artboard presets to insert them all at once. You can also add your own presets at the bottom of the inspector.

If after you've inserted one Artboard, you want to insert more Artboards of that kind, you can immediately press ⌘ D (duplicate) until you have as many Artboards as you need.

Moving Artboards

Sketch will not let you select Artboards on canvas if they have content inside them. This behaviour makes it easier to drag-select multiple layers in them for example, but sometimes moving them is desirable.

You can always select an Artboard in the layer list and then you can drag it around on the canvas, or change its position or size in the inspector.

You can also click and drag on the name of the Artboard in the canvas and drag it around like that.

Grids and Rulers

Since Artboards act as their own canvas with the infinite canvas, each Artboard has its own rulers and optional grids, which is especially useful if you're combining multiple sized Artboards in one canvas; one for breakpoint in a responsive web design for example.

Read more about rulers, guides and grids in Canvas chapter.

Templates

A good example use of Artboards can be seen in the Templates we ship by default. Go to File › New From Template in the menu. If you pick the Mac App Icon template you'll see we created an Artboard for each of the common sizes.

Pages

A document in Sketch can have any number of Pages. Instead of having each Page in its own document, putting them all together in one document has a number of benefits.

For example, Symbols and Shared Styles work across Pages, but not cross-document.

Another reason for using multiple Pages has to do with performance. Sketch can easily handle a dozen Artboards on Page, but depending on their content, size and the number of them, you may find it beneficial to split the work up into multiple Pages.

Canvas

Sketch's canvas is infinite in size. You can view the canvas both in a resolution-independent view where you have infinite precision, or you can turn on Pixel Preview and you will know exactly how every pixel will look on export.

If you'd like to define a fixed frame inside the infinite canvas, simply create an Artboard using the Artboard tool.

Navigating

Navigating around the canvas is easy. You can use the scroll-wheel on your mouse or the trackpad on your MacBook to scroll in either direction. You can also hold down the spacebar and click and drag to pan around as well.

Lastly, if no object is selected you can use the arrow keys to pan the canvas as well.

Note that Page Up / Page Down switches between Pages.

Zooming

Apart from that there are various shortcuts in the View menu for zooming in and out to specific content. You can also hold down the ⌘ key and use the scroll wheel on your mouse to zoom in and out as well.

Lastly, you can use the Z key to quickly zoom into a particular area. Click and drag anywhere on the canvas to zoom the viewport into that area.

Pixel Zoom

You can view your drawing in Sketch in two ways. Which way you prefer will depend on the kind of work you do. These modes can be toggled in the View › Canvas menu by clicking on Show Pixel Grid. Note that when you're at 100% zoom (actual size) there's no difference between either mode, but you'll see it when you zoom in.

If you care how every individual pixel in your document looks then this mode is for you. What you see is basically the equivalent of first exporting it to PNG and then zooming in Preview.app.

If you don't care about this then the default view is best for you; when you zoom in you'll see everything still with smooth curves.

Forced Pixel Preview

Sometimes though you'll find that you cannot disable pixel preview even though you may want to.

This is because the Blur effect has to work on raw pixel data. This means that the only way Sketch can display these effects is by rasterizing your vectors and then applying these filters. This does mean however that a vector-preview is no longer available, so we're forced to show pixel preview.

When you try to disable pixel zoom and it can't, it'll offer to show you which layers are preventing pixel zoom. On large documents this can be quite a timesaver.

Guides

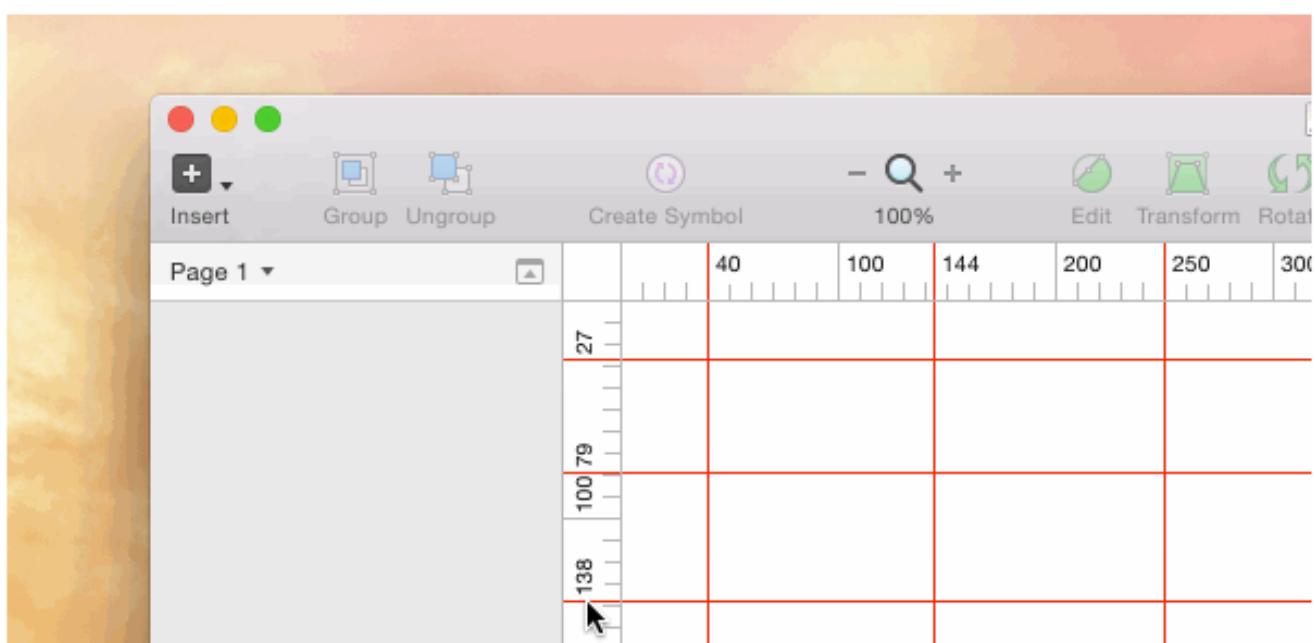
By default, automatic Guides are turned on in Sketch. They can be toggled with the View > Canvas > Show Smart Guides menu option. When you're resizing or moving layers, Sketch will try to help you align them with others layers automatically. When Sketch snaps your layer to another you'll see a red line appear that shows what exactly it is snapping to.

Rulers

Sketch has Rulers, which are hidden by default. As we've said before, Sketch has an infinite canvas and because of this the Rulers are not fixed; you can grab and drag the Ruler around to define your own zero origin.

If you need to reset the Ruler origin, just double-click the Ruler intersection area.

You can click anywhere on the Ruler to add manual Guides, and they'll stay visible as long as the Ruler is visible. You can move all the Guides at once by moving the Ruler. To move a single Guide, you have to grab it inside the Ruler, and then you can drag it around. To remove a Guide, drag it out of the view and you'll see it'll disappear:

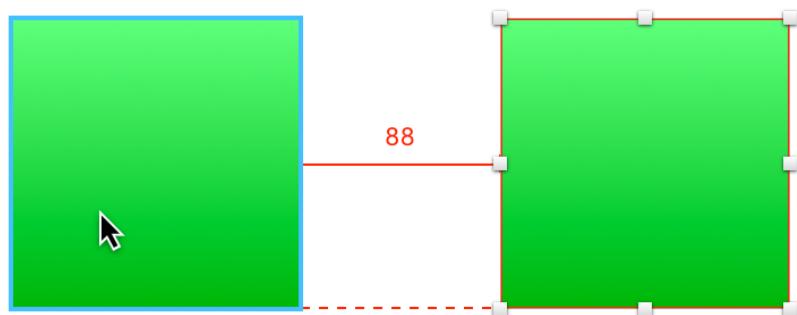


Measuring

Sketch has excellent tools built-in for making sure your content is lined up correctly. It can also be a real blessing to a developer who has received a Sketch document from a designer and needs to get exact pixel measurements done.

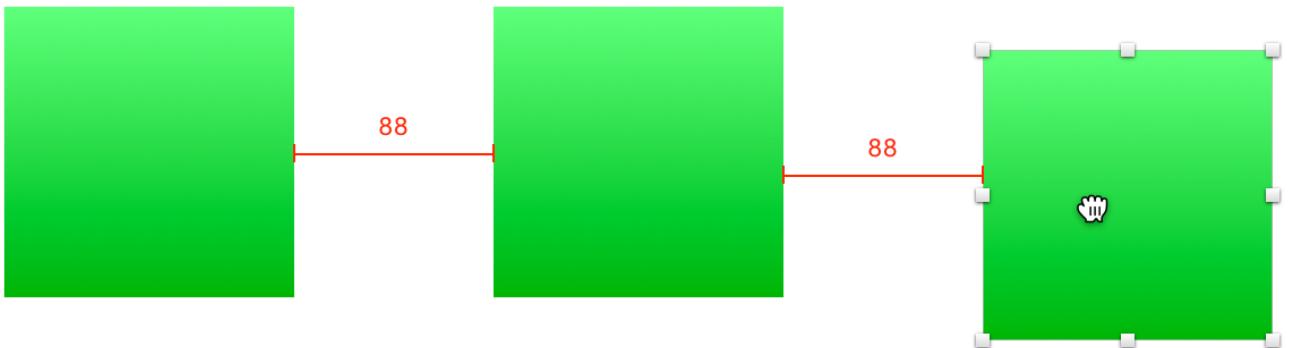
Distance

When you hold down the Option (⌥) key on the keyboard, Sketch will calculate the distance between the layer you've selected and the layer you're hovering in the Canvas or Layer List. As seen in this screenshot below:



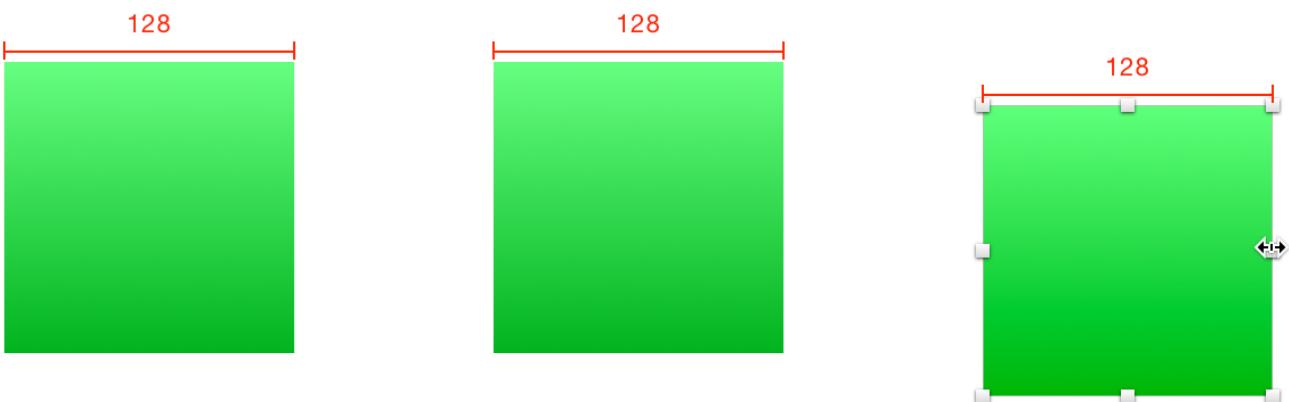
In addition, you can also hold down Command (⌘) along with ⌥ to measure the distance between layers who may not be in the same group or container.

Also, when moving an object Sketch will show you the distance to other objects when it's equal to other existing distances:



Size

In the same way, if you resize a layer, Sketch will help you by indicating other layers that have the same width or height.

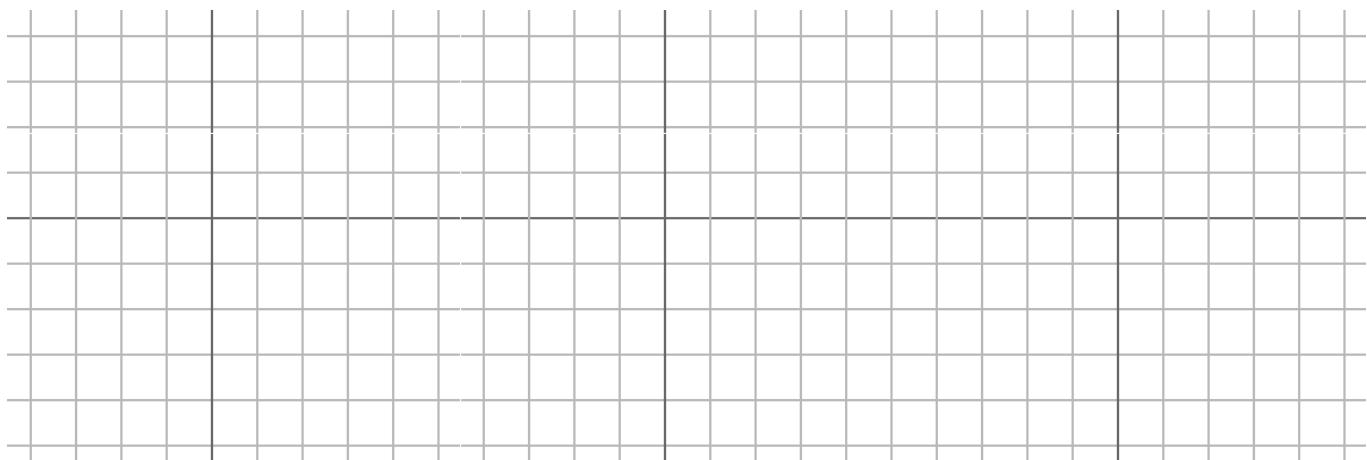


Grids

Sketch supports two kinds of Grids; a Regular Grid and a Layout Grid. Depending on the kind of work you need to do in Sketch, you may want to use one or the other.

Regular Grid

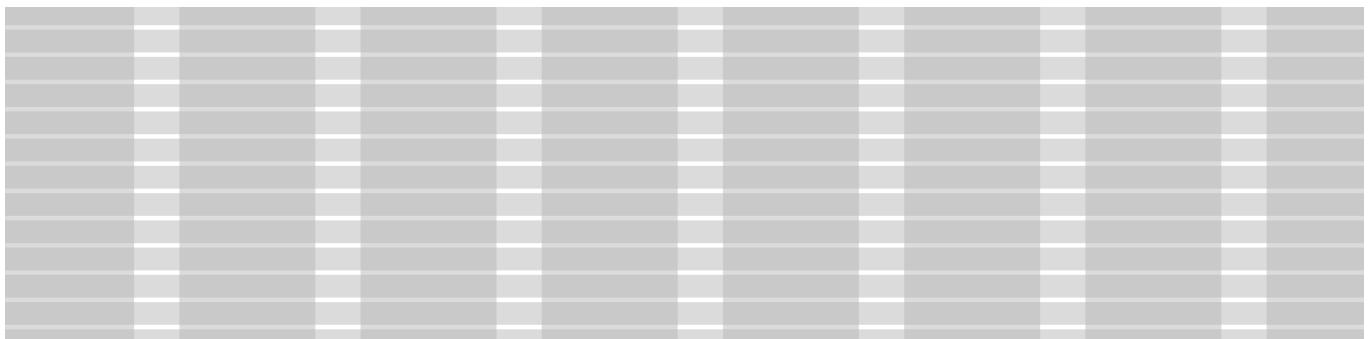
The Regular Grid is your typical square grid, with settings for the size of the squares. and how often you want a thicker line to appear. The default grid size is 20px and thick lines every 10 squares:



Select the View > Canvas > Show Grid menu option to turn on the Grid. You can edit the settings in View > Canvas > Grid Settings....

Layout Grid

The Layout Grid lets you define columns and rows, and it's perfect when you're designing web sites.



In the Layout Grid, you can change the total width of your page and the number of columns. You can also set the height of the rows and the size of the columns. There are additional settings for padding.

Sketch will do its best to place the Layout Grid in the middle of your Artboard, but after resizing the Artboard, this may no longer hold true, so in that case you can press the 'Center' button to center the Grid in the Artboard easily.

10 Exporting

To export your work, either choose File › Export... from the menu, or click the Export button in the toolbar. Sketch's canvas is infinite in size. This means that when you want to export your drawing you have to tell Sketch which part(s) you're interested in.

In Sketch 3 we've greatly improved the exporting workflow. Read more about this in [Exporting Layers](#).

When you click the Export button in the toolbar, Sketch will pop down a sheet listing all exportable layers in the canvas; Artboards, Slices and regular layers. You can export some or all of these from there. Note that if you have some exportable layers selected before you go to Export, Sketch will by default only export those.

Layers or Slices

Exporting a layer by itself means that no other elements on the canvas will be exported with it. If there's a layer on top or a background below it, neither of those will be included in the export.

This method is very useful for exporting icons or similar objects out of a grand design, but less useful for exporting your entire artwork. For that, use normal Slices or Artboards.

In [this video](#), you can see the difference between Slices, and exportable layers, as well as a general overview about exporting in Sketch.

Exporting Layers

If you have decided that you just need to export a single layer, you can do so in the inspector. Select the layer (or group) that you want to export and click 'Make Exportable' in the bottom-left of the inspector.

You will see that the inspector updates to show you that you will be exporting one image, at original size, with no suffix, and by default in PNG format.

You can click the little + icon to add another export size. By default this will export at double-size with an @2x suffix, but you can change all of that to whatever you want. If you are for example designing at @2x already, you can give your 1x export size a "@2x" suffix and create a second export size at 0.5x without a suffix.

Note that we now also support exporting to arbitrary sizes, so if you're designing for Android and you need 1.5x export, that is now possible too.

Layer List

You will also note that the icon for the layer in the list has been given a little knife icon. This is to indicate that this layer is exportable. Next time you click Export from the toolbar this new exportable layer will show up there as well, amongst your regular slice layers.

Note that you can also directly export layers from the layer list, without having to make layers exportable or define slices. If you drag any layer out of the list on to the Finder or any other app, Sketch will quickly export it for you in PNG format. If you hold down the Option key, it'll write it to the pasteboard as PDF data instead.

Slices

Slices in Sketch allow you to export a defined area on the canvas to single file. A Sketch document can have as many Slices as you want and each will export to a different file.

Slices as Layers

Slices in Sketch 3 are now treated as normal layers. The benefits of this new approach are plenty. You can now for example group a Slice together with the content that its supposed to export, and when you move the group around, the Slice moves with it.

If you temporarily don't want to be bothered by Slices in your canvas, you can turn them off at the bottom of the layer list by clicking the little knife icon.

Adding Slices

You can add a Slice by going to Insert › Slice in the toolbar and then click and drag anywhere in the Canvas to define the area. When inside the Slice tool, you can also just click on a layer and Sketch will create a new Slice exactly around that layer.

Naming

You can give each of your Slices their own name, and this is the name that will be used when you export your Slice.

A neat trick is that if you include a slash (/) it will place that Slice in a new folder. For example, if you named your Slice ‘foo/bar.png’, it would first create a folder named ‘foo’ and then create a image named ‘bar.png’ in there.

Multiple Sizes

New in Sketch 3 is that you can export multiple images out of a single Slice. If you’re doing iOS designs for example you will often want to export a single and double-resolution for each icon. With Slices in Sketch, this is easy. Just click the + icon in the inspector to add a second size.

Each size can have its own custom Scale, Format and Suffix. The suffix is required because normally the filename is derived from the name of the Slice, but with two exportable sizes, you need to suffix one of them. By default the second size you add will be a 2x size with a “@2x” suffix according to iOS’s naming convention.

You are however not restricted to just 2x export; you can export to any resolution or size with any suffix you want. If you design at double resolution already for example, you can give your 1x size a “@2x” suffix and have your second size be at 0.5x.

Group Contents Only

Sketch 2 had a way to export only certain layers for each Slice. And while this concept was easy to understand, it quickly turned into a messy process if you wanted to change things or started replacing elements in your design.

Instead in Sketch 3, each Slice now just has one checkbox; Export Group Contents Only. When this is checked instead of exporting everything on the canvas, the Slice will now only export the layers inside its own group, discarding any overlapping layers outside it, or any background layer behind it.

Trim

The last option available on every slice is Trim. With this turned on every Slice that will be exported will have transparent pixels trimmed away from its edges.

For example: You defined a slice somewhere in your document of 30 by 40 pixels, but it contains a single oval which is just 15x15 pixels. Instead of resizing your slice to fit exactly around this oval you turn on Trim, and Sketch will trim away the transparent pixels in your 30x40 slice until a small 15x15 image is left.

File Formats

Supported file formats for exporting:

JPG: A commonly used format for photos but it does not support transparency.

PNG: If your drawing contains transparent pixels this will be the best choice.

TIFF: Supports transparency but its file size is bigger.

PDF or EPS: Preserve vector objects. Note that transparent gradients are not supported in the PDF standard.

SVG: SVG support is quite good on shapes and text support, however, shadows are not supported.

Non-supported file formats for exporting:

PSD: Adobe Photoshop's file format is closed and not supported for export. If you have access to Adobe Creative Suite, you can export your work as .PDF and import to Illustrator. From there, export the project as a .PSD file.

AI: Adobe Illustrator files are not supported, but Illustrator can open .PDF or .SVG files exported from Sketch.

Artboards

Artboards in Sketch 3 can also directly be exported, forgoing the need to add extra Slice layers to the document. Just add an export size to Artboard and next time you click Export, Sketch will include the Artboards as well.

When you click on Export for the first time, and you have some Artboards in your canvas, Sketch will assume you want to export those and will make them exportable automatically.

CSS Attributes

Sketch has a nice little feature to help web designers in getting their designs from a static mockup in Sketch to real HTML.

If you select any number of elements in the canvas, you can then go to Edit › Copy CSS Attributes in the menu. Sketch will then create CSS declarations for the borders, fills, gradients, shadows and text styles used in the selected objects.

Sketch transfers its gradients to CSS gradients too. As the syntax for gradients is kinda hairy, this is a real time-saver. Transferring designs from Sketch to CSS is now very easy indeed.

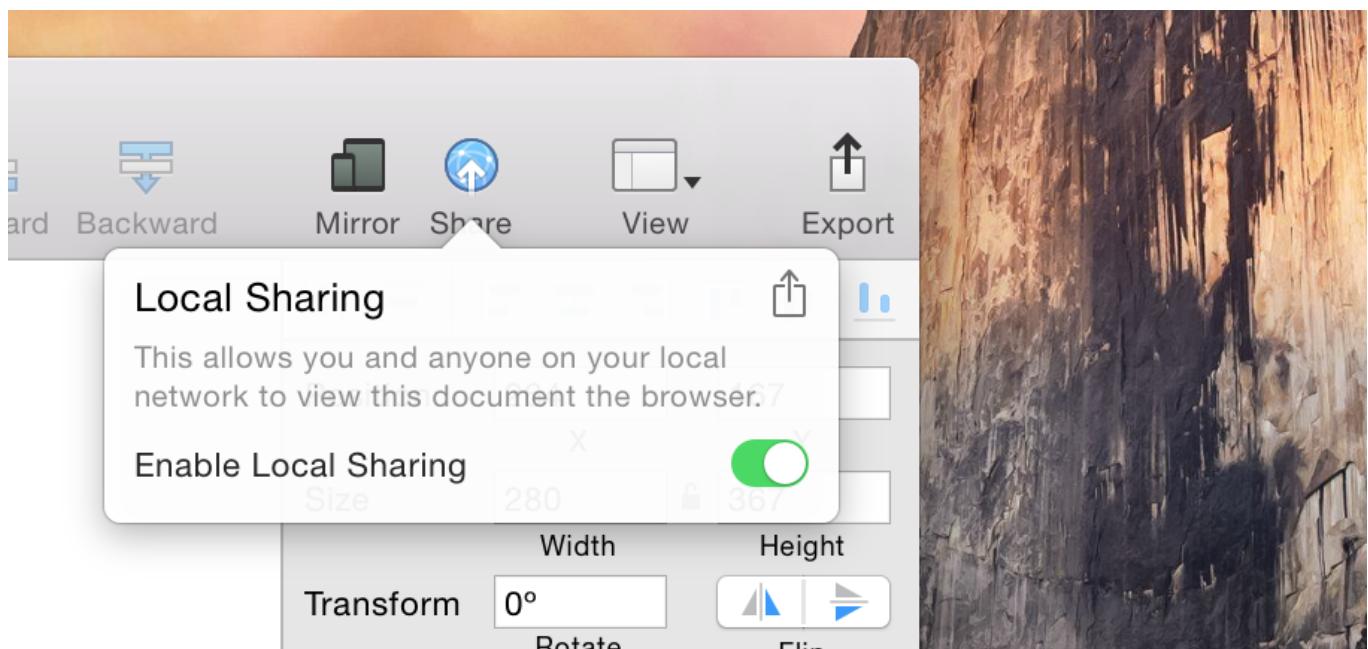
Printing

Artboards and Slices in Sketch can be printed. Go to File › Print, and you'll get a list of your Artboards, or Slices if you have no Artboards. The standard printing dialog will appear and you will be able to print.

Note that we have default Artboard sizes for A4, A5, and A6 paper formats.

Local Sharing

Sketch 3.4 introduced the ability to securely share the contents of your file to a local server. This can be done by clicking the Share item in the toolbar.



Once clicked, a popover will appear asking you to flick the switch and share your content. If you decide to do this, a browser window will appear and your designs can now be previewed and any changes you make in Sketch will be reflected in the browser as the preview automatically updates.

This means that you can update, share, and preview your Artboards live on Windows, Android, iOS, or any other device with a browser — whether that be mobile, TV, or fridge — that is connected to the same local network.

Note: Once you share the contents of your document, it can be viewable by anyone on the local server. To stop sharing, simply turn the switch in the popover off.

11 Preferences

Sketch's preferences are divided up into General, Canvas and Layer-specific sections. Consult the relevant chapter to find out more about the settings in each tab.

- General
- Canvas
- Layers
- Plugins

We also have a number of preferences without a visible control in the Preferences panel:

svgExportCompact

Used to tell Sketch to export compact SVG files. We add some metadata to exported SVG files, to make it easier to re-import them in Sketch. However, if you are sure you won't import them, you can disable the saving of metadata by running this into your Terminal.app:

```
defaults write com.bohemiancoding.sketch3 svgExportCompact -bool yes
```

If you ever need to disable this feature, run:

```
defaults write com.bohemiancoding.sketch3 svgExportCompact -bool no
```

svgExportSkipAssignIdToLayerName

When this is set to YES, Sketch will not use the name of the layer for the id field of the layer in SVG export:

```
defaults write com.bohemiancoding.sketch3  
svgExportSkipAssignIdToLayerName -bool yes
```

Please note: due to the way OS X caches preferences, you'll need to log out of your user account and log back in again for the changes to apply.

nudgeDistanceSmall and nudgeDistanceBig

These control the increments that Sketch uses when using the arrow keys to move and resize a selected shape.

The default values are 1 for nudgeDistanceSmall and 10 for nudgeDistanceBig. If you want to change them, run this:

```
defaults write ~/Library/Preferences/com.bohemiancoding.sketch3.plist  
nudgeDistanceSmall -float 2.0
```

```
defaults write ~/Library/Preferences/com.bohemiancoding.sketch3.plist  
nudgeDistanceBig -float 8.0
```

General

Auto Save

If enabled, the OS X feature Auto Save will automatically save your Sketch file regularly so it can be accessed, and reverted via Versions.

Pixel Fitting

The pixel fitting options will round layers and points to the nearest whole pixel. Subsequent preferences will enable you to have this behaviour when resizing or aligning layers to ensure objects don't sit on fractional pixels.

Vector Import

Should PDF and EPS files be imported as flat ‘images’, or should Sketch try to interpret the path data inside them and make the shapes editable?

Sketch Mirror

Should Sketch Mirror always update to show whatever Artboard you have selected on the Mac or should it operate independently?

Canvas

Font Rendering

Enable or disable sub-pixel anti-aliasing. When designing for the Mac or the web you will want to leave this one, when designing for iOS you'll want to turn this off.

Note: If the system preference “Use LCD font smoothing when available” is off, the in-app font rendering preference will have no effect.

Read more about sub-pixel anti-aliasing [in here](#).

Retina Canvas

Retina screens for Mac and iOS use four physical pixels to represent one ‘traditional’ pixel. Retina Mac devices have four-times as many pixels as the older models, but display everything at the same size. They just use these extra pixels to provide more detail to fonts, images etc.

By default Sketch does the same; the extra pixels are used to provide more detail, but the physical size of the drawing stays the same. If you don't want this behaviour and really want every physical pixel to be counted as one pixel in sketch, turn off the Retina Canvas preference.

Animate Zoom

The animated zoom will provide context from where you have zoomed from. If off, your document will update to the new zoom level with no transition.

Zoom In On Selection

When you tell Sketch to zoom in via the View › Zoom In / Zoom Out commands, Sketch will by default zoom into the center of the canvas. By turning on this checkbox it will instead focus in on the selected layers.

Zoom Back to Previous Canvas Position

Using this option, Sketch will zoom out to the position you had on the canvas before you started zooming in. By default when you zoom out, Sketch zooms back straight from the center point currently on canvas, but if you scroll around a lot while zoomed in and you expect to return to the previous position on zoom out, use this checkbox.

Colors

The color selected in the preferences will be visible if the Smart Guides option is on, and appear when layers align, or when measuring whilst holding Option.

Layers

Enable Click-Through for New Groups

When on, any new groups created will have their containing layers instantly accessible without the need to hold Command to select them. With any group selected, you can individually toggle this option per-group via the Inspector.

Offset Duplicated Layers

By default, Sketch offsets duplicated objects by 10px from the original. If you turn this off it will be pasted straight on top of the original.

Rename Duplicated Layers

If enabled, Sketch will append “Copy” to the layer’s name to ensure the layer name is unique. If disabled, layers will share the same name as the original.

Strip Text Style

When turned on, Sketch removes all font, paragraph and color information from the text layer you paste in. Often when copying text out of either a web browser or a text editor, the style information is also copied. Enabling this setting will ignore that.

Flatten Bitmaps

This option allows you to select what resolution you would like bitmaps images to be flattened to (Layer > Flatten Selection to Bitmap). If you are using a retina display, flattening to a 2x resolution is suggested.

Plugins

Sketch 3.4 brings a new preference pane to the application, Plugins. Here you can filter, toggle, and uninstall any third-party Plugins you have installed in Sketch without having to go via the Finder.

In this pane, you can view a Plugin's metadata, such as name, Plugin author, description, and version number. The checkboxes that appear to the left of the details let you switch a Plugin on and off, allowing you to disable them without having to uninstall (this is especially useful if you have many Plugins but don't need them enabled for all projects).

Legacy Plugins

Sketch 3.4 introduced a new Plugin format, which makes it easier for developers to distribute and update Plugins, and makes them more future-proof. Older Plugins, created for previous versions of Sketch will be grouped together under the cell "Legacy Plugins".

If your favorite plugin is not shown on the top list, contact the Plugin's author to ask them to update the plugin to the newer format.

Get Plugins

At the bottom of the preference pane, is a button to "Get Plugins...". Clicking this will lead you to our Plugins page where you can see a selection of curated Plugins to download and use in Sketch.

12 Other

Importing

Sketch supports several file formats for importing. You can simply drag and drop files onto the Sketch icon in the dock, or directly into an open document.

Supported File Formats:

JPG: A commonly used format for photos but it does not support transparency.

PNG: If your drawing contains transparent pixels this will be the best choice.

TIFF: Supports transparency but its file size is bigger.

SVG: Sketch supports importing SVG files, but note that the coverage may not be 100%, as SVG has some concepts that Sketch does not support.

PDF and EPS: Sketch supports importing PDF and EPS files, but as with SVG files, it has some concepts that Sketch does not support and so they won't be displayed.

If you have an EPS, PDF or SVG file that we Sketch does not import correctly, please contact support and we will try to get it to work properly for the next update.

Non-supported Formats:

The list below covers file formats commonly used for graphic design, but not currently supported in Sketch.

PSD: Sketch can only import .PSD files as flattened bitmaps.

AI: Sketch can only import .AI files as flattened bitmaps.

Performance

Sketch can easily deal with reasonably complex drawings, but if you end up with a big document you may want to know a few things about what is impacting Sketch's performance.

Blurs

Blurring layers is expensive. Sketch has to render the layer first into an offscreen bitmap (which is expensive), and then applying a blur on that (which is really expensive). The larger the blur radius the more expensive it gets.

For a 1px blur radius, Sketch needs to examine each pixel around each pixel; that makes for nine pixels to be examined per pixel to calculate the new average value. Increase the blur radius to two pixels and so on and it increases exponentially.

Note that Background blur is even more expensive than normal blurring is so keep that into account. If all you're trying to do is blur an image, blur that, and don't use background blur.

Shadows

The same goes for shadows. Rendering (big) shadows on (large) layers is expensive, and more shadows mean more delays. Inner shadows with spreads are especially expensive.

Multiple Pages

Sketch can easily handle a dozen Artboards on a page, but if that is combined with big shadows and blurs or even more artboards, things will slow down. One easy fix is to put some Artboards on another page.

Text to Outlines

Boolean operations are incredibly complex mathematical calculations to perform if you want to get it right. If you have a shadow with a few dozen subpaths, each with boolean operations, you'll run into trouble.

This is why you should take care with vectorizing text. You can apply gradients directly on text without the need to vectorize them first, so keep that in mind. Other than that, if you can, put each character into its own text layer before vectorizing.

Shortcuts

Sketch has quite a few handy shortcuts available which will be good to know when you spend a lot of time in it.

General Shortcuts

^ L	Toggle Layout.
^ G	Toggle Grid.
Space	Hand Tool.
Enter	Edit currently selected layer.
Esc	Exit the current tool, deselect all layers or go back in the inspector.
Tab / ⌘ Tab	Cycle through layers in the current group.
⌘ 2	Zoom to the selected layers.
⌘ 3	Center the selected layers in the canvas.
Z	Zoom Tool. Hold down and click or drag an area with the mouse. Reverse zoom using ⌘ Z and click.
§	Temporarily zoom out to 100% (use ~ on US keyboards)

Inserting Layers

R	Insert a Rectangle.
O	Insert an Oval.
L	Insert a Line.
U	Insert a Rounded Rectangle.
T	Insert a Text layer.
V	Vector Tool.
P	Pencil Tool.

Moving and Resizing Layers

↖ + Drag	Duplicate a layer.
↖ + Hover	Display distance between other layers.
↖ + Resize	Resize from both ends.
↑ + Resize	Preserve aspect ratio.
↖ + Drag	Duplicate a layer.
↖ + Hover	Display distance between other layers.
↖ + Resize	Resize from both ends.

These are the somewhat hidden shortcuts, but many more are listed in the menu of course. Mastering keyboard shortcuts will really help you increase the speed at which you work.

If you find that a certain action could benefit from a better shortcut, please do let us know.

Article: Color Management

Before we can discuss how Sketch handles colors though, it is important to know a little bit about color management in general.

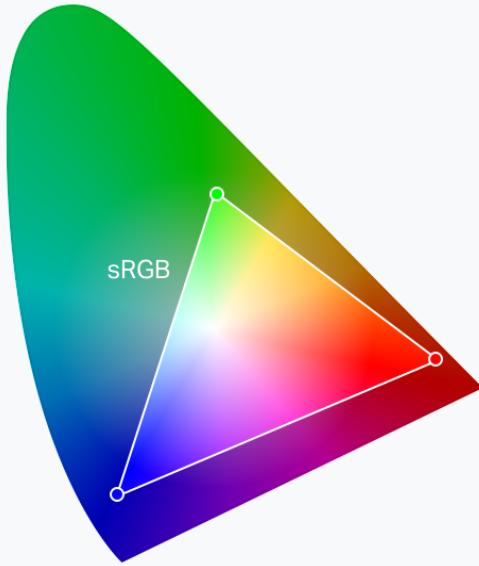
Colors in General

Colors are usually represented as RGB (Red, Green, and Blue) or HSB/L (Hue, Saturation, and Brightness/Luminosity) components. But that's only half the story. In order to draw an actual color, you need to know which color space those components belong to.

Here's an idea that might help visualize the problem. Think of all possible colors laid out on chart. Each color space is represented by a triangle upon that surface, with the maximum expressible red in one corner of the triangle, green in the other, etc. So any RGB value basically specifies an actual point inside that triangle. There are a few things to learn from this:

1. Not all possible colors can be represented by a color space; anything that falls outside the triangle can't be represented, even if your display could technically show it.
2. Since each color space is a different triangle upon this surface, you can't express the same colors in every color space.

If you convert a color to a different color space, you're in effect changing your triangle whilst trying to maintain the same position on the canvas. The RGB values of your color will change as the triangle determines the co-ordinate's space. There's also a real possibility that your original color was at the edge of its color space triangle and now falls outside the new triangle. The visible color will have to change slightly to fit back into the new triangle. In short: converting colors between color spaces is dangerous because your colors might look different afterwards.



When it comes to digital design, most designers only think in RGB colors, and not in color spaces. When you specify a color in HTML, you're only specifying the RGB. The implicit assumption is that the web browser will pick the color space. Safari follows the W3C standard here and picks the sRGB colorspace. The latest version of Chrome however uses your display's color space and so if you have a unusually calibrated monitor, the same RGB values could look completely different between the two browsers.

When you save an image to disk, you're in effect writing a big list of RGB values to a file. To make sense of those RGB values, an image will often also include the color space that those RGB values are representing. To save on bandwidth though, many images online have their color profiles removed (that's what 'Save for Web' does) because browsers interpret all images as if they were saved with an sRGB color space – even if they have a completely different color profile embedded! An application like Preview respects the color space that the file was written with though and displays the colors in that color space. So now we have the problem that the same image can look different in Safari, Chrome and Preview. No wonder everybody is confused...

Colors in Sketch

We chose not to burden Sketch with complicated color management support since it would confuse most of the users. Instead, we recognize that the vast majority of our users are designing for the web or for mobile, and Sketch treats colors in a way that makes the most sense for those use cases. After all, everything is sRGB on the web by force, and iOS has no concept of color spaces either.

So what does Sketch do? When you pick a color in Sketch we only store the RGB values. When we render to the screen we interpret those values using the color space of your monitor. This way we can guarantee that if you pick a color from another part of the screen—maybe a window controlled by another application—the values that Sketch stores and displays will look exactly like that color.

When we export an image, we interpret our color values in the sRGB colorspace. We also save the color space in the metadata, unless you have ‘Save for Web’ checked in the export panel. Regardless of that setting though, the intent has been to save with sRGB, which works nicely with Safari as it interprets all images as being saved with sRGB in the first place. If you would also open the image in Preview, it would recognize the sRGB profile and render it as close to Safari as possible. We believe this way we get the most consistent color representation possible.

There is a downside though; if you open your exported image in for example Preview, and put it next to your Sketch window, you might see that the colors are not completely identical. Remember, that’s because when Sketch draws the image in its window, it’s using the screen’s profile, but when Preview draws the image, it may be treating the image as being sRGB, then converting it to the screen’s profile.

Then again, Preview and Safari may not agree either, as one of them will ignore the color profile completely. Also keep in mind that your website may be viewed on an Android device that does not even use sRGB, or on an older iPhone with a slightly different profile.

The takeaway of all this is that getting consistent colors between different images and between images and HTML/CSS is not trivial, but that Sketch makes it relatively easy; if you use the same RGB values in your artwork in Sketch as you use in the CSS on your website, the colors will match (as long as your browser follows the W3C spec).

Sketch helps you by always saving as sRGB, and if you strip away the color space to save a bit of space, it wouldn't change the way your image is displayed in a web browser. As a web or mobile designer, this is what you would expect, and this is how Sketch works.

Just keep in mind that using the screen color picker to pick colors from various windows cannot possibly guarantee keeping the RGB values consistent.

Article: Pixel Precision

Producing pixel-perfect designs is important especially when designing for mobile and when we want the final product to have that extra layer of polish we all admire. We've highlighted tips and tools you can use to achieve pixel precision in Sketch. [Video](#).

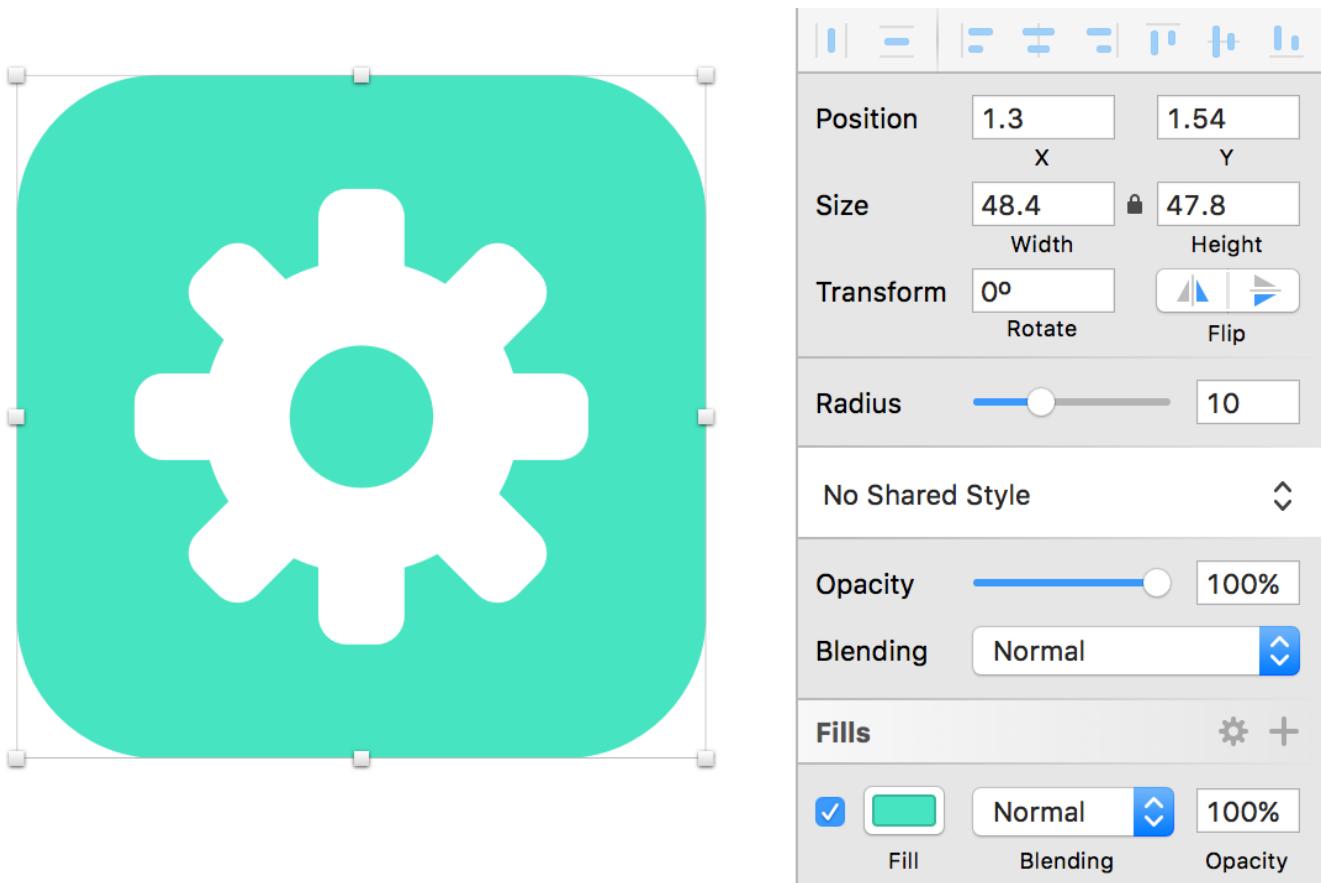
With Sketch you get best of both words; scalable vectors and precise pixel control for sharp edges and outlines. While Sketch can automatically align your shapes to pixel edges, it also provides you with the ability to preview and edit each pixel. This is especially important when you're preparing assets for different screen sizes and pixel densities. In the original iPhone there was only one screen size and only one resolution; one point equaled one pixel. Today, with Retina displays in iPhone and the various Android pixel densities, things are looking more complex. But with Sketch's preset Artboards, a bit of planning, and some simple mathematics, preparing assets for multiple screen sizes and pixel densities is a breeze.

Designing in 1x as a base

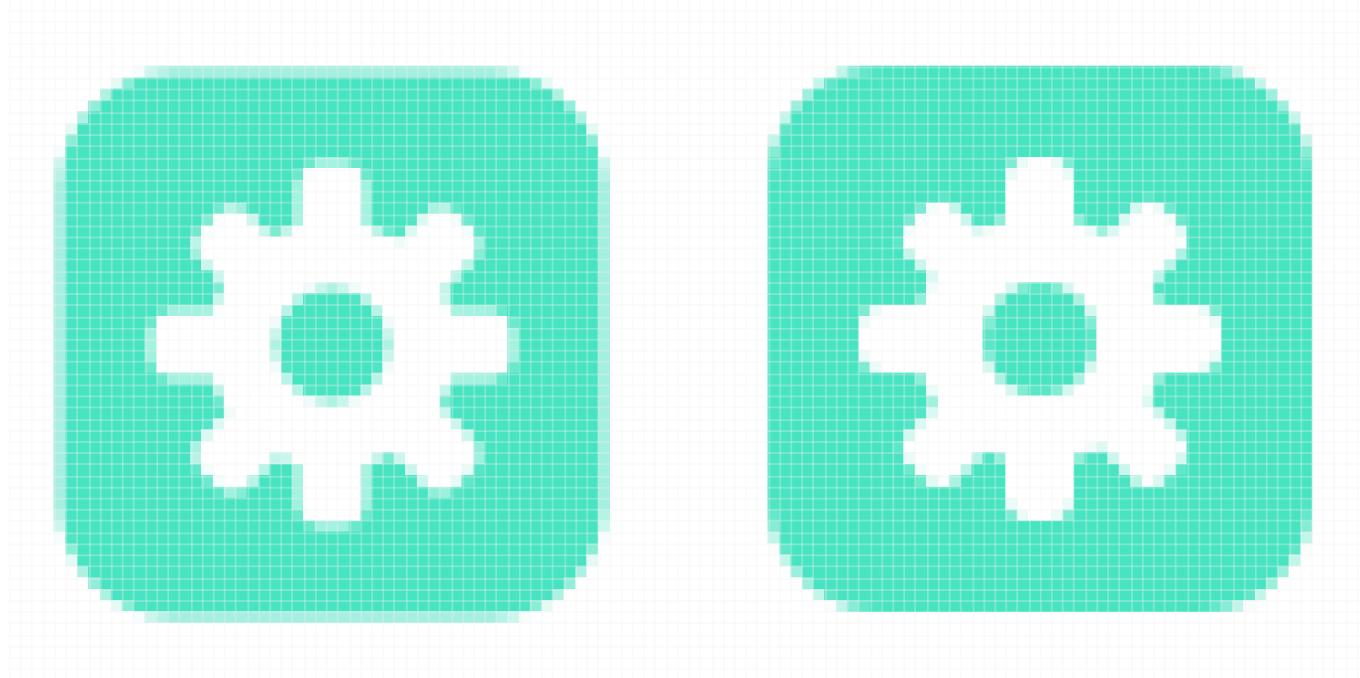
When Apple introduced the first Retina iPhone, many designers started designing in 2x resolution immediately, scaling down to 1x for legacy phones as an afterthought. However, when Apple introduced the iPhone 6 Plus this became problematic. After all, if you design something pixel precise at 2x, chances are if you scale it up by 1.5x, it'll end up on a fractional position. Many designers have gone back to designing at 1x, because when vector dimensions are scaled by 2 or 3, you're guaranteed that they're not ending up on fractional digits.

Inspector

The first way to detect whether your designs are pixel perfect is to be aware of their Position and Size values. The Inspector is the main command center of your Sketch document. It contains all properties and details for a selected shape or layer. This is your go-to place for spotting pixel imperfections. These irregularities manifest themselves in the form of fractional numbers.



Fractional numbers cause the rendering of sub-pixels — the main reason why your exported bitmap asset might have blurry edges. You can fix this manually; just edit the Position and Size values to full numbers. Working with shapes within groups can be tedious, but with ⌘+Click, you will be able to directly select any shape and edit its values.

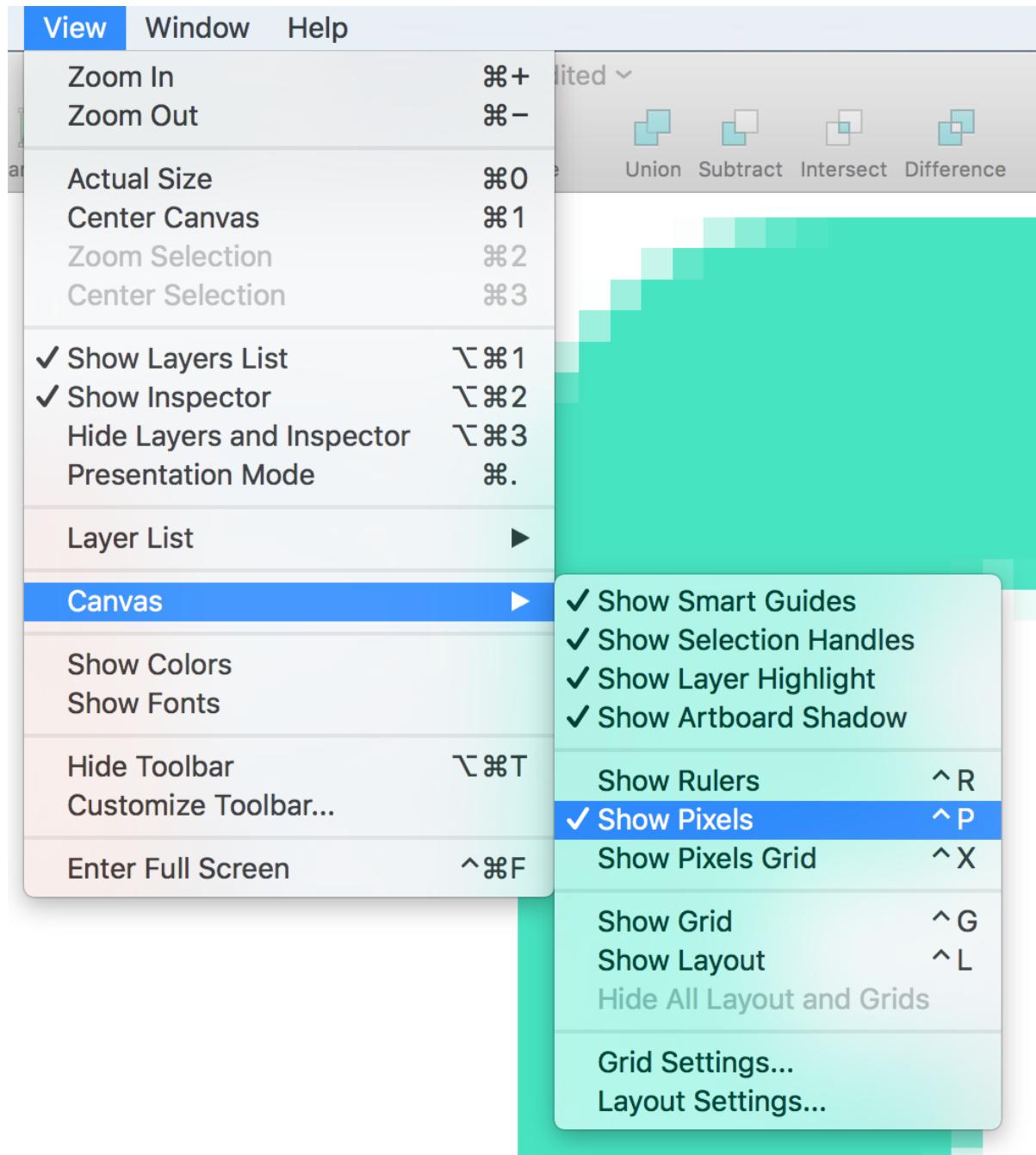


Exported PNG samples. Half-pixels asset on the left compared to pixel perfect asset on the right.

Show Pixels

Seemingly smooth vector curves and edges can be deceiving. By enabling Show Pixels, you will be able to see every individual pixel in your document. This setting can be enabled by going to View > Canvas > Show Pixels (^P). Additionally, you could customize your toolbar to include “Show Pixels” icon.

What you see will be equivalent to exporting the image to PNG and then zooming in. Note that when you're at 100% zoom (actual size), there is no difference between either mode, but it will show itself when you zoom in.



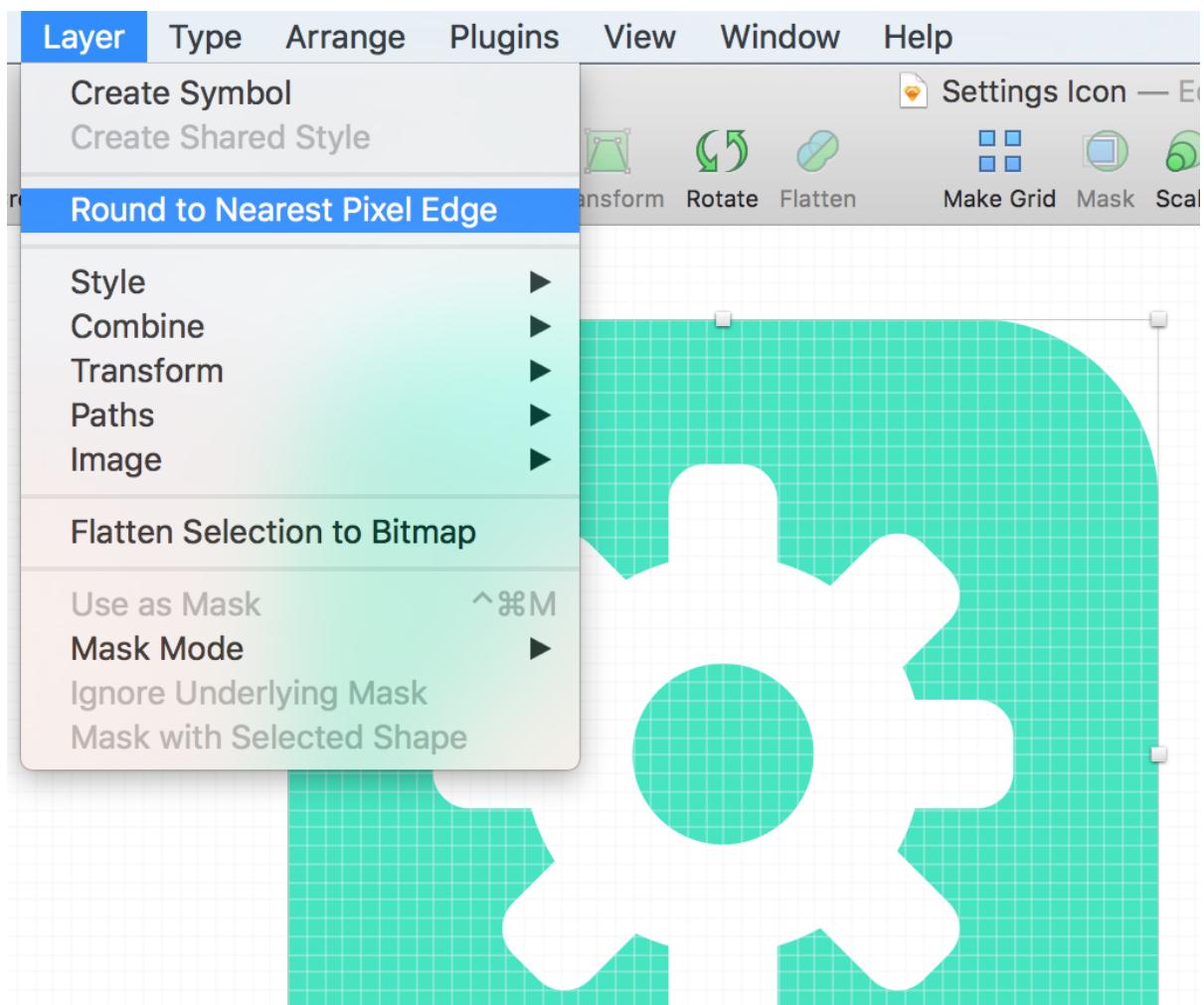
If you want a hint of what your design will look like upon export, but don't want to look at big blurry pixels, then Pixel Zoom is your friend. Make sure Show Pixels Grid is enabled by going to:

View > Canvas > Show Pixels Grid (^X).

Show Pixels Grid allows you to differentiate fuzzy pixels in low contrast that would otherwise go unseen. When combined with Show Pixels, any edges that do not align with the pixel grid will be visible.

Round to Nearest Pixel Edge

Referred to as the best hidden feature in Sketch, Round to Nearest Pixel Edge, solves many pixel alignment imperfections. Once you have spotted a vector shape with sub-pixel values, you can select the shape and then select Layer > Round to Nearest Pixel Edge. Additionally, you could customize your toolbar to include “Round to Pixel” icon.



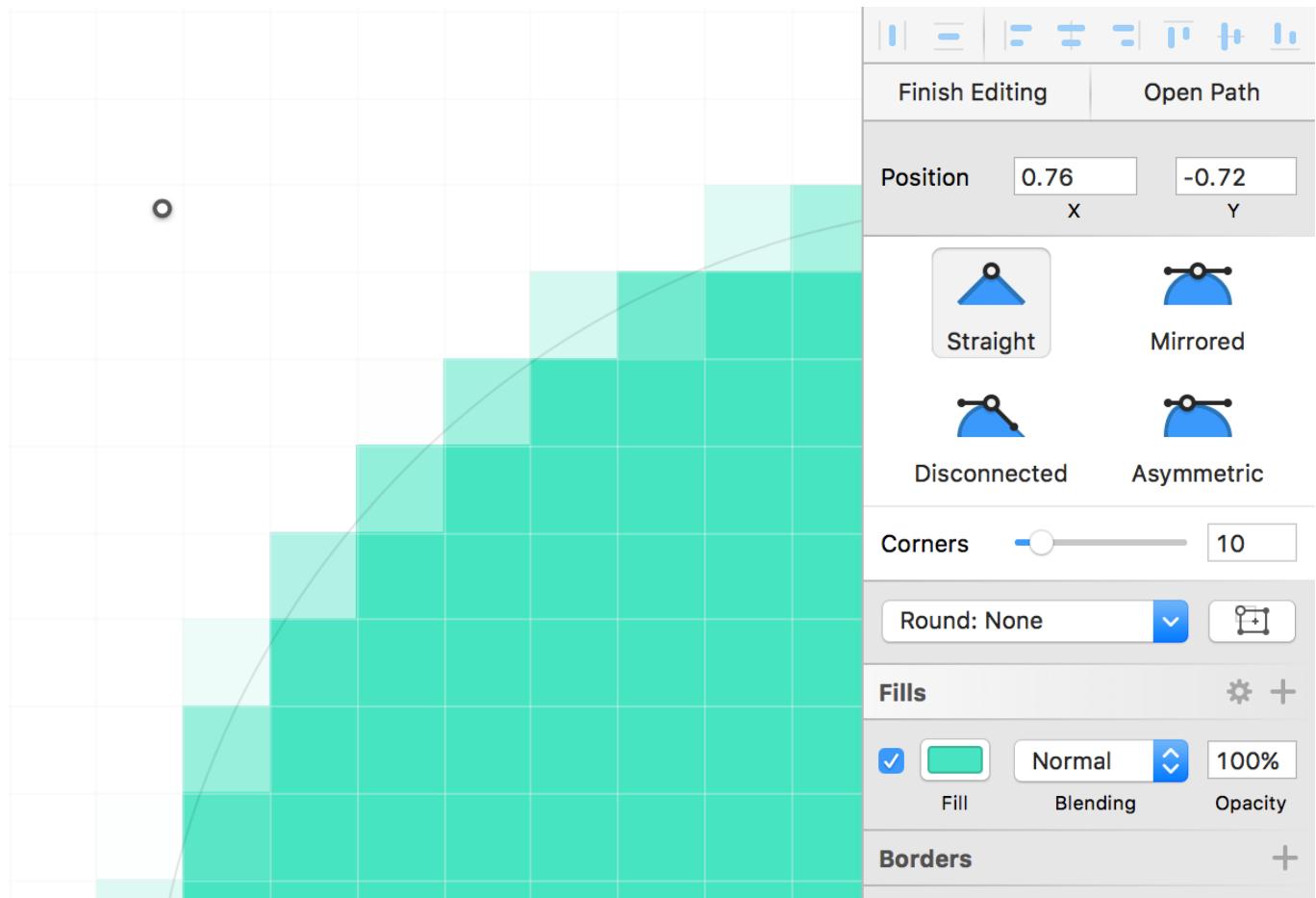
Sketch will automatically align the edges with the pixel grid. This works for both the Position and Size values. This feature provides a quick way to ensure your designs are consistent, especially when importing icons.

Shape Editing

Sometimes your shape may not be aligned as desired, but you can easily edit the individual vector points. To do this, just double-click or select the shape and click on Edit in the Toolbar. All vector editing options will appear in the Inspector. Here you can switch between four different point modes and select a pixel rounding preference.

Pixel rounding preferences in Edit mode.

Pixel precision is nice when needed, but you don't have to limit yourself. For example, when designing tiny icons, you can disable the pixel rounding preference for complete freedom of point movement. However, if you want to ensure that your shape's edges are consistent,

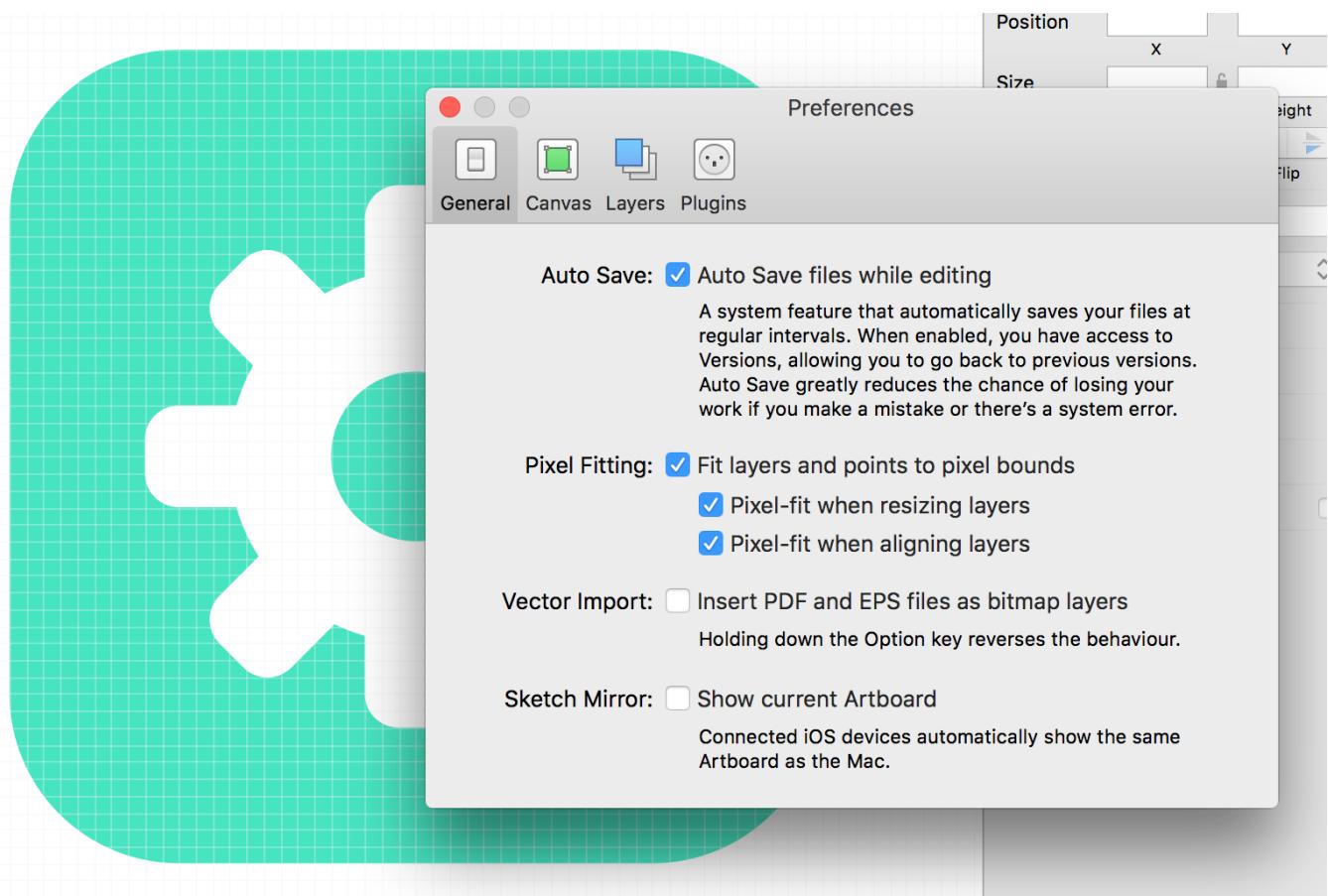


enabling “Round to half pixels” or “Round to full pixels edges” will snap your vector points to half or full pixels respectively.

Setting pixel rounding preferences in Edit mode to ”Round: None”

Pixel Fitting

A global setting that ensures pixel perfection from the start is the Pixel Fitting setting, found in Sketch › Preferences› General tab › Pixel Fitting. This preference makes sure any layer you insert or resize ends up on a full pixel edge, with the exception of rotation. If you’re frustrated by the lack of pixel grid freedom you have at times, you will want to disable Pixel Fitting.



The end of the documentation.

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