# What's new in SketchUp Pro?

## SketchUp Pro (Desktop)

### Making Information Modeling Useful

Ultimately, we think 'BIM' is about using information in your model to make better buildings. Our focus is to help users embed and manage information in a SketchUp way.

### Advanced Attributes

Advanced Attributes allow you to embed your model with useful information when you create and manage components. We've added fields for Price, Size, URL, Owner and Status to the component creation dialogue as well as Entity Info.

### Aggregation in Generate Report

We want to make the information in SketchUp models as useful as possible. In this release, we plan to improve Generate Report to allow users to aggregate component data, so you can extract and organize information contained in your models. That means, you can configure Generate Report to sum parts & quantities for schedules and cutlists, or create detailed pricing estimates by listing prices by layer.

### IFC Export Improvements

BIM doesn't really work if information can't move freely between applications. We've dialed in our IFC exporter to ensure that the attributes you assign or manipulate in SketchUp stay with your work when it leaves SketchUp.

### Better Section Planes, Better Drawings

Section Planes are basically essential to architectural composition, so we've made some big improvements.

### Named Section Planes

It seems simple, but naming something is the first step towards making it easier to find, organize, and edit that something. Now, even when your section planes are hidden, they're right at your fingertips. Here's how it works…

Create a new section plane and choose a name for it and a short symbol that will display in your

modeling window. Your section plane is now a unique SketchUp entity that can be found in Outliner and manipulated in Entity Info. Use Outliner to quickly find, select and edit specific planes. Use Entity Info to edit naming conventions and organize section cuts into layers, then control the visibility of your section planes via Styles.

**Filled, Styled Section Cuts**

Filled Section Cuts are now baked into *SketchUp Pro*. Open Styles > Edit > Modeling and toggle on 'Section Fills.' Go ahead and set your desired fill color; in this Style, SketchUp will render a fill on top of cleanly modeled sections. We'll even help you troubleshoot geometry problems that are preventing SketchUp from recognizing the section you want to fill. Oh, and the Styles dialogue now lets you designate colors for your section cut fills.

**Section Plane Performance**

While we were at it, we improved performance for models that use section planes to hide large amounts of geometry. Basically, the more geometry you section off, the more you'll benefit!

## Other notable SketchUp improvements

Our engineers and designers are constantly thinking of minor tweaks that make a real difference in your daily use of SketchUp. Below are a few changes which may not make headlines but still stand to majorly improve your workflows.

**Outliner**

While adding support for Section Planes, we also improved Outliner's overall load performance and sort order so that your component names load in alphabetical and numerical order.

**Drawing Improvements**

Draw a rectangle about its center using modifier keys. Use simplified inferencing options for line and arc drawing. Employ quicker control for rotated rectangles. Small, smart changes that help you draw exactly what you want.

**STL Import/Export**

The SketchUp STL extension is by far the most popular download from Extension Warehouse. Going forward it might not be, because now SketchUp natively supports the import and export of STL files (on both desktop and web).

**Preferences Refactor**

We've improved SketchUp and LayOut preferences so that they are organized and migrated the

same way between version upgrades. It should be easy to use the latest, greatest versions of our software!

**Mac Improvements**

For Mac users, we've added anti-alias settings. Go to SketchUp > Preferences > OpenGL to control the pixel blending, which is the resolution of smoothness in your geometry.

**SAAW Lines**

SAAW (Stippled Anti-Aliased Wide) Lines are an entirely new way that SketchUp renders lines (e.g., edges, axes, guides, text/dimension leader lines, rubber band lines as you draw, component bounding boxes, section plane borders/cuts... ) Sounds pretty fundamental to SketchUp, right? It is, and the good news is that you should barely notice it. This type of line rendering is supported by WebGL and required by OpenGL 3.0, as well as the technologies we expect to use for years to come. We won't be talking to our users much about this directly, but it's good for the inner circle to understand more about how drawing works!

**And still… other SketchUp Improvements**

At the heart of SketchUp is a commitment to continuous improvement in performance and usability. This means, every release, you can expect a variety of changes you might not notice because things just work better.

There are even more bug fixes and performance improvements you can swot up on in the release notes.

# LayOut

## Better LayOut, Much Better Drawings

LayOut is where people harvest their 3D work in SketchUp to produce **_excellent_** drawings. Our commitment for LayOut is to help professionals make much better drawings, much quicker, and with as much control as they need.

**Scaled Vector Drawing**

Now you can use LayOut's vector illustration tools to draft in 2D at scale. Use your SketchUp model as a base for accurately scaled construction details, or just sketch a detail from scratch in LayOut (which is what a lot of LayOut users want to do). Re-set scales as you wish and your work will resize as necessary. As you would expect, your scaled illustrations are fully supported by LayOut's Dimension and Label tools.

### DWG Imports

One reason that drawing in 2D at scale is important is that a lot of LayOut users are trying to work with imported AutoCAD geometry via the DWG format. So in this release, we're introducing LayOut's ability to import DWG files. DWG projects import at scale and support the pages, title blocks, and blocks. Even better, LayOut users can now help themselves to the vast world of free DWG libraries. And yes, we also improved the quality of DWG files you export from LayOut.

### Group Edit

To support scaled drawings, we made a juicy change we think LayOut regulars will notice right away: Editing grouped entities in LayOut now works just like it does in SketchUp. That means it's way easier to draw and manipulate grouped entities. LayOut users can also control "rest of document" visibility when editing within a group.

### Drawing Tool Improvements

For 2018 there will be a range of improved drawing tools in LayOut. Inferencing, chamfering and filleting, arcs, offset arrays, selections: LayOut will be better at everything you need to draw details or create beautiful illustrations.

### Multi Viewport Dimensioning

What sounds like an enabling physics concept for teleportation is actually a pretty simple LayOut idea. Users will be able to draw dimensions across SketchUp viewports in order to create a specific section detail.

### Precise Dimensions

LayOut dimensions can now be as precise as SketchUp dimensions. That's up to 0.000001 inches. Do the math: that means LayOut can show the decimal equivalent of 1/64" (0.015625").

### Advanced Attribute Labels

Like all of the information in your model, SketchUp's new advanced attributes are easily available when drawing LayOut labels.

## Other LayOut Improvements

### Entity Locking

Similar to group editing, locking entities is fundamental to how many people organize and navigate projects (both models and documents). Now you can easily lock individual LayOut entities to cut down on accidental selections.

**Unicode Font Support**
With Unicode font support, LayOut will work much better in languages that don't use Roman characters.

## Extensibility

**Create LayOut drawings using the SketchUp Ruby API.**
Now you can use SketchUp's Ruby API to tell LayOut to create a set of drawings from your 3D model.

# The Future of 3D for Everyone

## SketchUp Free

In 2018, we are launching free software that anybody can use to learn and master 3D drawing. It is likely to be called *SketchUp Free* (subject to change), and you can **launch it in a web browser**.

Evolved from a year of beta testing, *SketchUp Free* has improved in speed, stability, and functionality. By design, this app delivers the core of SketchUp's 3D modeling.

We feel a deep responsibility to empower people everywhere to transform ideas into reality. So we've created a free version of SketchUp that...

- **... is easier to learn and simpler to use than ever**. You don't need hundreds of buttons and dropdowns for 3D drawing

- **... is more accessible** to everybody, everywhere. Even Chromebooks and Linux users can run *SketchUp Free* on any WebGL enabled browser

- **... is version less.** That means you are always using the newest version.

- ... **is powered by Trimble Connect**, so your projects are stored on the web by default, always backed up (no more autosave!). When you use Trimble Connect to host SketchUp files, your work stays up-to-date on our desktop, web, mobile, and XR software

## What's happening to *SketchUp Make*?

*SketchUp Make* is still available for download on our website.

But *SketchUp Make* isn't the future of free 3D modeling. We haven't updated *SketchUp Make* this year and we won't be updating it in the future. Users of *SketchUp Make*, can continue working in the current build. A shift to web browser means more people can access, learn, and master 3D drawing.

We'll continue to invest heavily in the development of our desktop software, *SketchUp Pro*. Today, more professional designers than ever rely on our paid desktop software, *SketchUp Pro*.

## Network Licenses

For customers with a network license for SketchUp Pro, here are the high points.

- License management happens in the cloud! There's a number of redundancy and backup systems in place so that customers shouldn't encounter an outage.

- SketchUp Pro will need to have a constant connection to the Internet when using a network license as well as access via ports 5053 and 50530. However, customers can check out a license for offline use – for up to seven days — which will take a license seat from the general pool. We have a Help Center article with [more details](#) on how to set up this type of license.

- It is possible for companies to purchase an "on-premise" or "offline network license" in the event that they're unable to use the network license server that we made available in the cloud.

- **Important!** Customers who have a SketchUp Pro 2017 Network license, need to understand what happens when SketchUp Pro 2018 comes out. When licenses are auto-upgraded to a newer version – because they have an active maintenance & support plan – the old license is marked as "On Hold" in our licensing database, and the new license is marked as "Active." The SketchUp Pro 2017 network license will remain in the "On Hold" state until a computer is authorized with their new 2018 license information. When this happens, the customer will have access to both SketchUp Pro 2017 and 2018 for 60 days. After 60 days, they will only have access to SketchUp Pro 2018. The following chart shows the progression of these events;