SketchUp Is Sooooo Slooooooooow

The bigger your model, the worse your computer's performance. What makes a model big? In a nutshell, faces.

TIP Do everything in your power to keep your model as small as you can. Here are some tips for doing that:

- **Reduce the number of sides on your extruded circles and arcs.** See Chapter 6 for instructions.
- **Use 2D people and trees instead of 3D ones.** Three-dimensional plants and people have *hundreds* of faces each. Consider using 2D ones instead, especially if your model won't be seen much from overhead.

Some models are just big, and you can't do much about it. Here are some tricks for working with very large SketchUp models:

- **Make liberal use of the Outliner and layers.** As we explain in Chapter 7, these SketchUp features were specifically designed to let you organize your model into manageable chunks. Hide everything you're not working on at the moment — doing so gives your computer a fighting chance.
- **Substitute simple forms for large numbers of complex components.** For example, insert sticks as placeholders for big sets of 3D trees, cars, and other big components. The tips for replacing components in Chapter 5 explain how to swap the placeholders with more complex components.
- **Turn off shadows and switch to a simple style, such as Shaded in the Default Styles collection.** It takes a lot of computer horsepower to display shadows, edge effects, and textures in real time on your monitor. When you're working, turn off all that stuff. Chapter 10 is all about styles.
- **Use scenes to navigate between views.** Scenes aren't just for presenting your model — they're also great for working with it. If you create scenes for the different views you commonly use and with different combinations of hidden geometry, then you don't have to orbit, pan, and zoom around your gigantic model. To speed up things even more, deselect Enable Scene Transitions (in the Animation panel of the Model Info dialog box). Chapter 11 is full of tips on working efficiently with scenes.

You Can't Get a Good View of the Inside of Your Model

It's not always easy to work on the inside of something in SketchUp. You can do these things to make it easier, though:

- **Cut into your model with sections.** SketchUp's Sections feature lets you cut away parts of your model — temporarily, of course — so that you can get a better view of what's inside. Take a look at Chapter 11 for the whole story on sections.
- **Widen your field of view.** *Field of view* is the part of your model you can see on-screen at one time. A wider FOV is like having better peripheral vision. You can read all about it in Chapter 11.

A Face Flashes When You Orbit

If you have two faces in the same spot — maybe one is in a separate group or component — you see a *Z-fighting* effect. SketchUp is deciding which face to display by switching back and forth between them; it's not a good solution, but certainly a logical one — at least for a piece of software. The only way to get rid of Z-fighting is to delete or hide one of the faces.

You Can’t Move Your Component the Way You Want

When you insert some components into your model, the components by default *glue* to faces. A glued component instance isn’t actually glued *in one place*. Instead, it’s glued to the plane of the face you originally placed (or created) it on. For example, if you place a sofa component on the floor of your living room, you can move it around only on that plane — not up and down.

This gluing behavior comes in handy when you deal with things like furniture; it allows you to rearrange things with the Move tool without accidentally picking them up.

If you can’t move your component the way you want to, context-click it and see whether Unglue is an option — if it is, choose it. Now you can move your component around however you want.

Bad Stuff Happens Every Time You Use the Eraser

When you use the Eraser tool, it's pretty easy to delete stuff accidentally. Worse yet, you usually don't notice what's missing until it's too late. Here are some tips for erasing more accurately:

- **Orbit around.** Try to make sure that nothing is behind whatever you're erasing; use SketchUp's navigation tools to get a view of your model that puts you out of danger.
- **Switch on Back Edges.** When you're doing a lot of erasing, choose View ⇒ Edge Style ⇒ Back Edges. That way, you can see every edge in your model, and you're less likely to erase the wrong ones.
- **Double-check.** After you do a lot of erasing, give your model a quick once-over with the Orbit tool, just to make sure that you didn't get rid of anything important. Put a sticky note on your computer monitor that says something like *Check after Erase!* just to remind you.

All Your Edges and Faces Are on Different Layers

WARNING Using Layers in SketchUp is a dangerous business. Chapter 7 has tips you should follow when using layers, so we don't repeat them here, but here's the short version: Always build everything on Layer0, and put whole groups or components on other layers only if you really need to.

If you used layers and now things are messed up, here's what you can do to recover:

1. **Make sure that everything is visible.**

   Select Hidden Geometry on the View menu; then (in the Layers panel) make all your layers visible. Just make sure that you can see everything in your model.

2. **Choose Edit ⇒ Select All.**
3. **In the Entity Info panel, move everything to Layer0.**
4. **In the Layers panel, delete your other layers. When prompted, tell SketchUp to move anything remaining on them to Layer0.**
5. **Create new layers and follow the rules in Chapter 7.**