

Chapter Fifteen

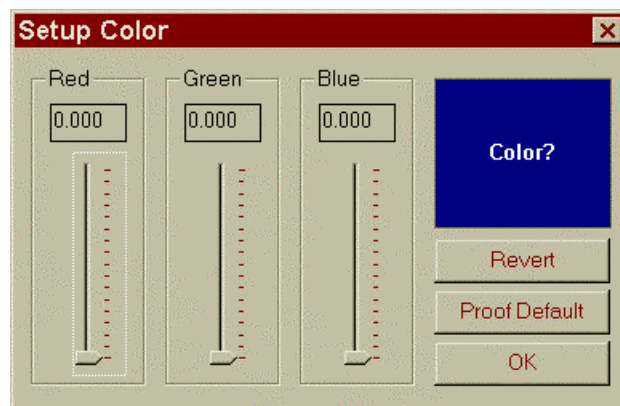
ADVANCED LAYOUT TOPICS

Chapters 9, 10, and 13 described how all elements of a layout drawing are put in place. Chapters 11 and 12 covered the addition of Object Classes and Paths to a layout. This chapter provides additional information to help you improve the appearance of your animations through improved layouts.

First, Proof Animation's customizable color palette is described, so you can fine-tune the displayable colors. Next, the advanced Snap options, Snap-to-Endpoint, Snap-to-Line-Midpoint, Snap-to-Arc-Center, and Snap-to-Tangent, are covered.

Fine Tuning the Color Palette

You can fine tune one or more of a layout's colors by clicking **Setup, Colors**. When you do so, a dialog box similar to the following will appear:




To select a color for editing, click on the **Color?** button and select a color from the palette menu that appears. Once you've selected a color, you can change its red, green, and blue content by (1) typing a number between 0 and 1 in the appropriate box, (2) dragging any of the sliders, or (3) clicking on a slider and pressing the up or down arrow keys to make small changes or the Page Up or Page Down keys to move in larger increments.

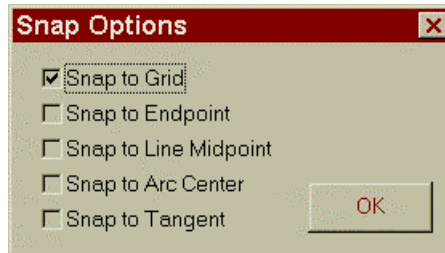
Exercise 15-1: Changing the Color Palette

You can try your hand at customizing the Color Palette using the **paint** animation in the **exercise** folder. First observe the animation for a while, then fine-tune the color F5. To do this, click **Setup**, **Colors**, then press the large **Color?** button, and select color F5. When you select color F5, all F5-colored elements on the screen will blink. Watch F5 change as you manipulate the controls in the Setup Color dialog box.

Once you achieve a “good” shade of F5, **Jump** back to time zero, restart the animation, and watch as your custom color is applied to all cars designated as F5. To restore F5 to its original color, click on the **Revert** button in the Colors dialog box.

Snap-to-Endpoint and Snap-to-Tangent

When we looked at the Snap options in Chapter 9, we described only **Snap-to-Grid**. If you click on the  **Snap** button, the following dialog box will appear:



As you can see, there are four choices in addition to Snap-to-Grid. More than one **Snap** option can be on at the same time.

Snap-to-Endpoint imparts a “magnetic” attraction of the cursor to endpoints of Lines and Arcs. When the mouse cursor gets reasonably close to an endpoint, it jumps onto the endpoint.

Snap-to-Line-Midpoint imparts a “magnetic” attraction of the cursor to the middle of Lines. When the mouse cursor gets reasonably close to the midpoint of a line, it jumps onto the

midpoint.

Snap-to-Arc-Center imparts a “magnetic” attraction of the cursor to centers of Arcs. When the mouse cursor gets reasonably close to any Arc center, it jumps onto the center.

Snap-to-Tangent affects line drawing. In the course of drawing a Line, if the line becomes reasonably close to being tangent to an Arc, the line jumps to a point of tangency. If you are dragging a line by one end, the other end of the Line will be moved to accomplish tangency. Snap-to-Tangent is particularly useful if your layout has shapes or guidepaths in which non-orthogonal Lines are tangent to non-endpoints of Arcs.

Exercise 15-2: Drawing Tangent Lines and Arcs

The following is an exercise that uses Snap-to-Tangent.

Bring up corner2.lay in the exercise folder and enter Draw Mode.

You’ll see a green area and a yellow area. Can you make the yellow area match the green area?

You’ll need to use Lines, Fillets, and Snap-to-Tangent. Go ahead and give it a try, or consult the tips below.

The tricky part of this exercise is getting the 45-degree Line in place so that it is tangent to the inner Arc. In order to do this, you’ll need to make the inner Arc first.

Be sure Snap-to-Grid is the only **Snap** option on. Extend the connecting lines by editing them with the mouse. Add the Arc by using **Fillet** with Trim On. (The radius is 5, which you can verify by editing the green Arc.)

Now draw a 45-degree line with plenty of extra length. With Snap-to-Grid on, this should be easy. If you have trouble getting the angle correct, you can type 45 directly into the **Angle** field in the Line toolbox.

Now turn Snap-to-Grid off and Snap-to-Tangent on. Grab the line near its center and maneuver it toward the Arc until it snaps into place. It’s a good idea to turn Snap-to-Grid back on when you are done.

Now all you need to do is add the two outer Arcs using **Fillet**. The radius of each is 10.

