

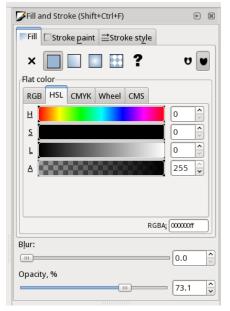
# LESSON 5: GRADIENTS & PATTERNS

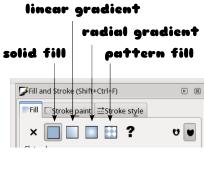
Find out how to make linear and radial gradients and use patterns to fill in your paths!

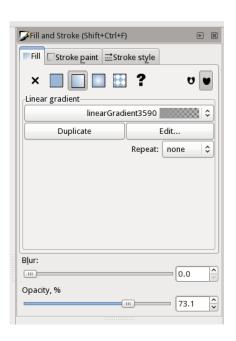


## USING THE GRADIENT TOOL

First, draw a shape or path on the canvas – let's draw a circle using the circle tool. Open up the 'Fill and Stroke' dialog by selecting the Objects > Fill and Stroke menu at the top of the screen or by hitting Ctrl + Shift + F. The 'Fill and Stroke' dialog will appear in a dock towards the right of your Inkscape window. With your circle selected, make sure you are on the 'Fill' tab of the dialog, then click on the 'linear gradient' button in the dialog.







Fill and Stroke dialog with a solid fill selected.

Fill type selector – the second from the left Fill and stroke dialog with linear gradient is for the linear gradient fill.

fill selected.

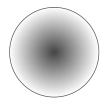
After clicking on the 'linear gradient' button, you should see your circle filled with a linear gradient. Go ahead and click on the 'radial gradient' button – you should now see your circle filled with a radial gradient. Finally, click on the 'pattern fill' button – and your circle should be filled with a pattern (usually stripes by default):







LINEAR GRADIENT

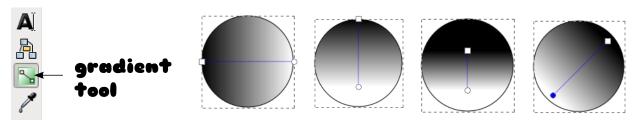




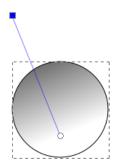
PATTERN FILL

### FINE-TUNING GRADIENT POSITION

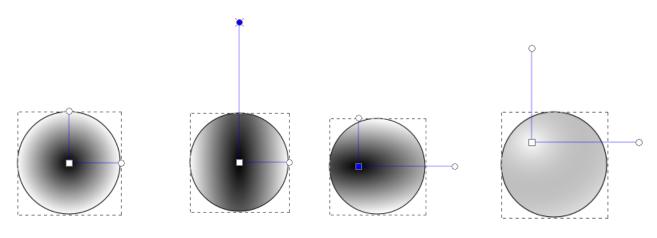
Go ahead and click back on the 'linear gradient' button. We're going to work with a linear gradient on your circle for a while. First, select the 'gradient' tool from the left toolbar, then click on your circle. You'll see a bar representing the gradient. Click on that bar and drag it around – you can change how the gradient is aligned to the shape by dragging the points on the bar. You can hold down the 'Ctrl' key while dragging the bar to snap it to various angles:



You can even drag the different ends of the bar so that they are outside of the shape:



You can similarly control the position, angle, and length of radial gradients. With your circle shape selected, go ahead and click on the 'radial gradient' button in the Fill & Stroke dialog, then click on the circle using the gradient tool. You'll see two handles rather than a single bar – and they control the gradient very similarly to the linear gradient bar. You can click on and drag the center point between the bars to change where the center of the gradient starts:



This is what a linear gradient looks like by default – a center node and two handle end nodes aligned to the edge of the shape.

The center node is in the center of the shape still, but the vertical handle has been dragged out to be longer.

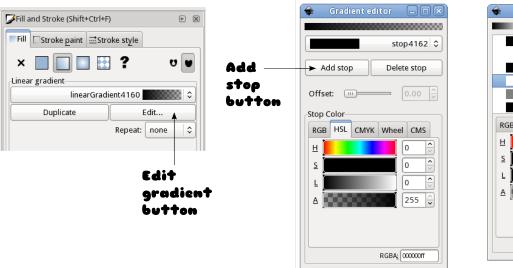
The center node has been dragged to the left of the center, and the horizontal handle has been dragged out.

The center node is now white, and it has been dragged to the upper right corner giving the circle a 3D look.

### ADDING MORE POINTS TO A GRADIENT

Go ahead and click back on the 'linear gradient' button. Click on your circle to make sure it's selected, then look carefully at the 'Fill and Stroke' dialog on the right. The dialog gives the gradient a name (in the screenshot below it's called 'linearGradient4160' but it probably has a different name on your computer.) Beneath and to the right of the gradient name, you'll see an 'Edit' button. Click on that button to open up the gradient editor dialog.

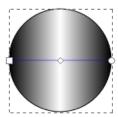
To add additional points, also called 'stops,' to your gradient, click the 'Add stop' button in the Gradient editor. Each stop will have a color associated with it. You can change the colors of each of the stops by selecting them in the stop dropdown and picking a color using the palette controls below.

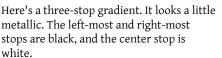


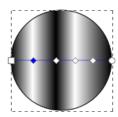


You can make rainbow gradients with multi-color stops! You can also make gradients that simulate the shininess of metal by mixing very dark, very light, and-medium shades of a color. By the way, you can also assign colors to the different stops of your gradient by clicking on a stop with the gradient tool, then selecting the color you'd like to assign it. This can be simpler and faster than working with the gradient editor dialog.

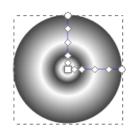
Of course, you can add multiple stops to radial gradients as well! You can also re-position the spaces between different stops along a gradient by clicking the stops with the gradient tool and dragging them around.







Here's a three-stop gradient. It looks a little Here's a six-stop gradient! The stop colors alternate between black and white, and there is also a grey stop thrown in there as well. It also has a metallic shine to it.



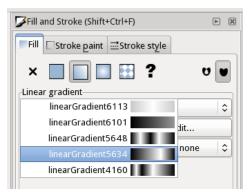
This is a six-stop radial gradient – it has an interesting 3D-beveled look to it.

**INKSCAPE QUIRK:** Sometimes when you select an object on the canvas that has a gradient, the Fill and Stroke dialog will go into solid fill mode, rather than show the name of your gradient. If this happens, simply click on the linear gradient or radial gradient (whichever the object you're working with has) button in the Fill and Stroke dialog to see the gradient information for the object.

#### SELECTING DIFFERENT GRADIENTS

Every time you set an object to have a gradient fill, Inkscape will automatically give that gradient a name and save it for you when you save your file. Unfortunately, you can't control what names Inkscape gives the gradients. Once you've created a number of gradients, though, you switch which gradient any object is filled with:

- 1) Select the object you'd like to fill with a gradient you've already created.
- 2) Open up the Fill and Stroke dialog by selection the Object > Fill and Stroke menu item in the top Inkscape menu, or by hitting Shift + Ctrl + F.
- 3) If the Fill and Stroke dialog is not already in linear gradient or radial gradient mode, click the linear or radial gradient button.
- 4) Click the drop down where the selected gradient is shown you'll see a drop down menu of all the gradients available for you to choose from.



## **WORKING WITH PATTERNS**

Filling an object with a pattern is as simple as selecting the object and clicking on the 'pattern' button in the Fill and Stroke dialog – we did this earlier and it filled our circle with stripes. Similar to the method we just went over for selecting different gradients, you can select different patterns to fill objects with by clicking on the drop down that displays the name of the current pattern. Inkscape comes with a bunch of pre-made patterns you can choose from:

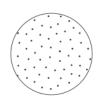








PACKED CIRCLES





By the way, you can create your own patterns! Make a drawing or create a shape that you'd like to make into a pattern, select it with the selection tool, then select the Objects > Pattern > Object to Pattern item in the main Inkscape menu. You should see your new pattern appear in the pattern selection drop down!