Adobe Photoshop: How to Change the Resolution of a Raster Image

It's easy to change the resolution of your raster image in Photoshop. To determine what the resolution of your image is, click and hold the gray status bar below the image:



This image is 72 ppi (pixels per inch).



In Photoshop, the resolution can be increased or decreased. Go to menu Image and choose Image Size...



You will see a few options, as well as the current resolution of the image (655 pixels wide by 655 pixels high).



Adobe Photoshop: How to Change the Resolution of an Image

The thing to keep in mind here is that the image consists of a finite number of pixels. If you wish to decrease the resolution of the image, you will be throwing away pixels (and reducing the dimensions of the file); conversely, to increase the resolution you will have to add new pixels in to the image, which increases the file size. Photoshop does this by resampling the image, which means it uses various options for deciding which pixels to throw away or add back in. The options are shown in this dropdown menu:

1	Width: 9.097 Inches	114
	Height: 9.097 inches	
0	Resolution: 72 pixels/inch ©	100
Ø.	Scale Styles	
T.	Nearest Neighbor (preserve hard edges) Bilinear	-
	✓ Bicubic (best for smooth gradients)	1.
8	Bicubic Smoother (best for enlargement) Bicubic Sharper (best for reduction)	
30		See.

You can play around with the options or go with the default (Bicubic). Just type the desired resolution in the Resolution box; in this case we'll increase the resolution to 300:

A Leignc 9007 inches	
Resolution: 300 pixels/inch	
2. Scale Styles	
T. Constrain Proportions	
Bicubic (best for smooth gradients)	

Then click OK.



The result will be a much closer view of the image with the additional pixels added. (You will have to zoom out to see the full image.). If you zoom way in you will see that the image has become less pixellated:



Adobe Photoshop: How to Change the Resolution of an Image

The process works the same way to decrease resolution; this time we will choose to reduce the resolution to 35 ppi:



This results in a more pixellated image:

