Use GIMP to Resize an Image

All About Images: Use GIMP to Resize an Image
This comprehensive guide focuses on many common image questions in regards to image resolutions, resizing images, file types, vector and raster images, scanning, saving and more.

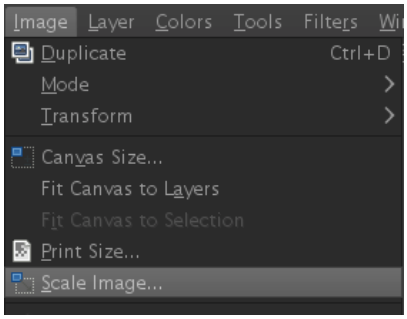
- How to Enlarge an Image Using GIMP

Image editing programs like GIMP are ideal when resizing images. Enlargements can be done in GIMP, however it is recommended to keep enlargements minimal since quality can be easily lost. For example, enlargements would be made for situations such as one needing a document to print with a larger document size or need the image to have a higher resolution (while retaining document size).

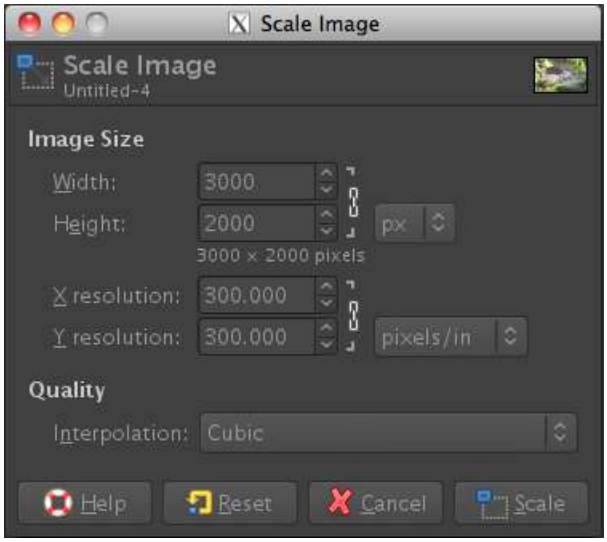
1. With GIMP open, go to File > Open and select an image
You may right-click and save the tiger image below to use it as a practice image.
Note: When enlarging images, it is recommended to clean up dust and scratches or any noise before enlarging because these items may be magnified in your enlarged image.

(Follow along by right-clicking on the tiger image above and saving it!)

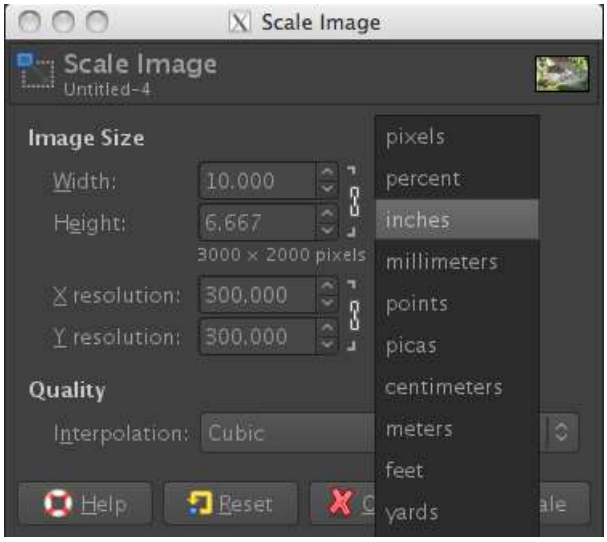
2. Go to Image > Scale Image



3. A Scale Image dialog box will appear like the one pictured below

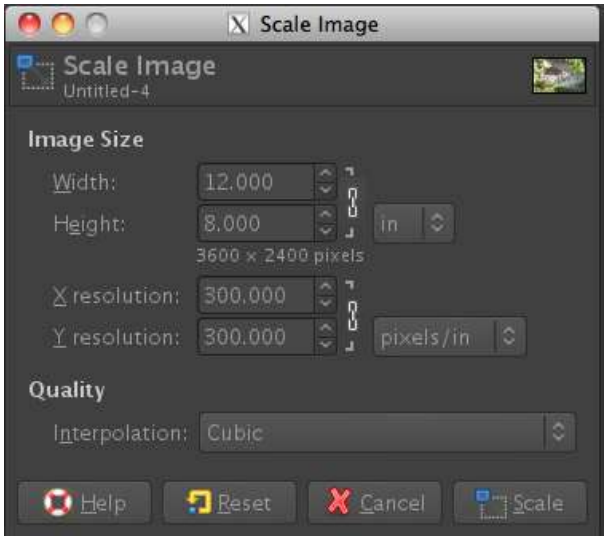


4. To see the Image Size in inches or a value other than pixels, use the drop down beside the values



5. Enter new Image Size or Resolution values

The original image was 10" x 6.667". Lets say we wanted to enlarge this image to a 12" x 8" so that it can easily be printed and framed. We want to keep the 300 resolution, so all we need to do is type in image size dimensions. In this example, we increased the document width from 10" to 12" and the height from 6.667" to 8".



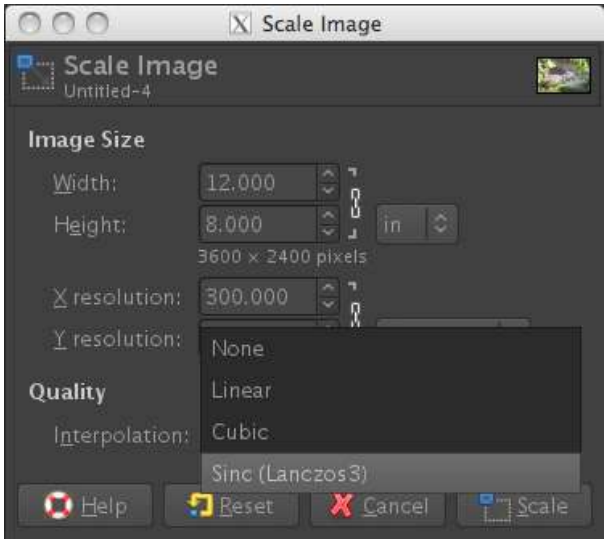
6. Select Interpolation method

What does this mean? Basically, GIMP will have to create new pixel information in order to enlarge the image.

Cubic - The color of each pixel is computed as the average color of the eight closest pixels in the original image. This usually gives the best result, but it naturally takes more time. Sometimes this method is called “Bicubic”.

Sinc (Lanczos3) - The Lanczos3 method uses the Sinc mathematical function and performs a high quality interpolation.

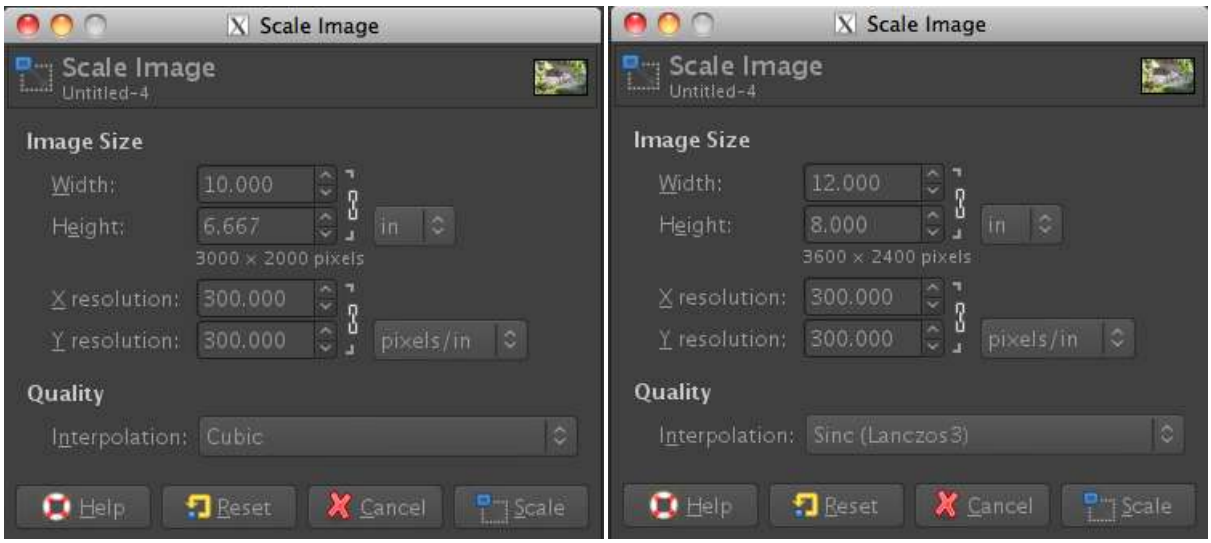
(Interpolation definitions from http://docs.gimp.org/)



7. Click Scale to accept the changes

Congratulations! You have successfully enlarged an image!

In this example, we enlarged our image by increasing the image size from 10" x 6.667" to 12" x 8".

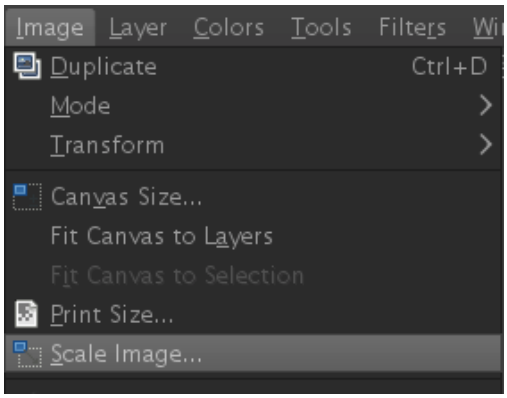


How to Reduce the Size of an Image Using GIMP

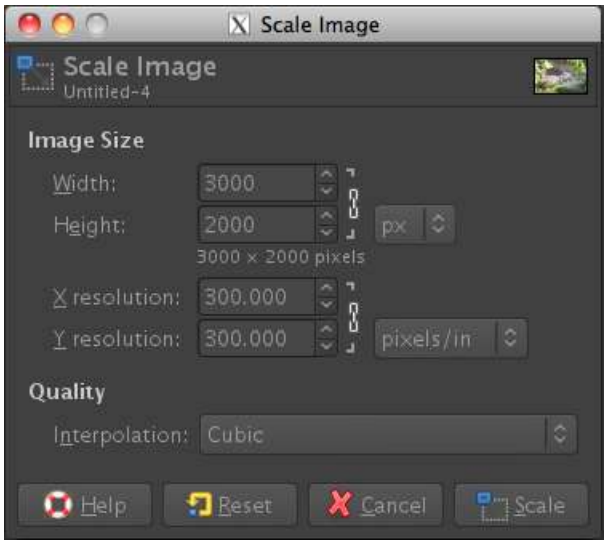
The process of reducing the size of an image in GIMP is only slightly different than when enlarging. One may need to reduce the size of an image because the resolution is too high for web, the file size is too large to e-mail, or only a small image is required for a printed piece.

1. With GIMP open, go to File > Open and select an image

2. Go to Image > Scale Image

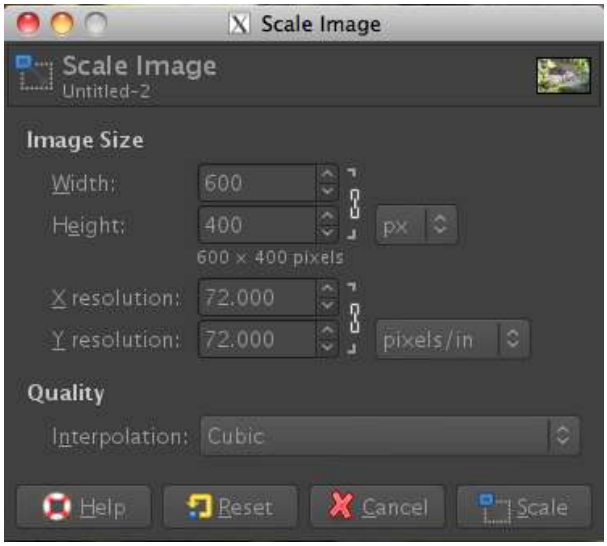


3. A Scale Image dialog box will appear like the one pictured below



4. Enter new Image Size and Resolution values

The original image is at 300ppi. Let's say that we want to put this image on our website, so we want it to be only 600 x 400 pixels and with a resolution of 72ppi. First, we can change the resolution by typing in 72 and then, we can change the pixel dimensions by entering 600 x 400 as the width and height.



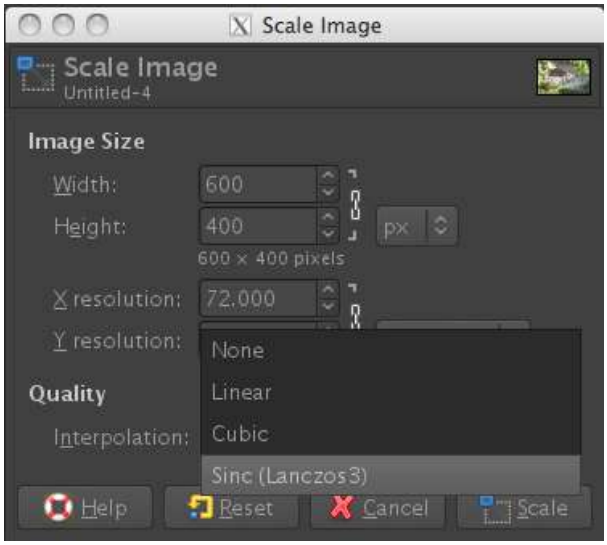
5. Select Interpolation method

Before we finish, we will want to select our resampling method. What does this mean? Basically, GIMP will discard any unused pixels in order to reduce the image.

Cubic - The color of each pixel is computed as the average color of the eight closest pixels in the original image. This usually gives the best result, but it naturally takes more time. Sometimes this method is called “Bicubic”.

Sinc (Lanczos3) - The Lanczos3 method uses the Sinc mathematical function and performs a high quality interpolation.

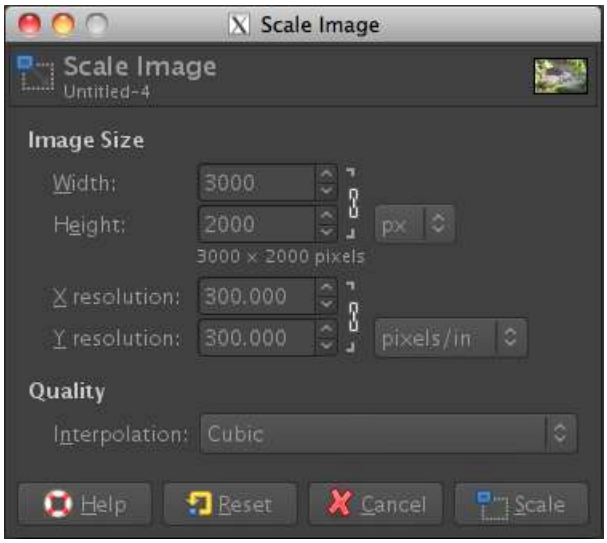
(Interpolation definitions from http://docs.gimp.org/)

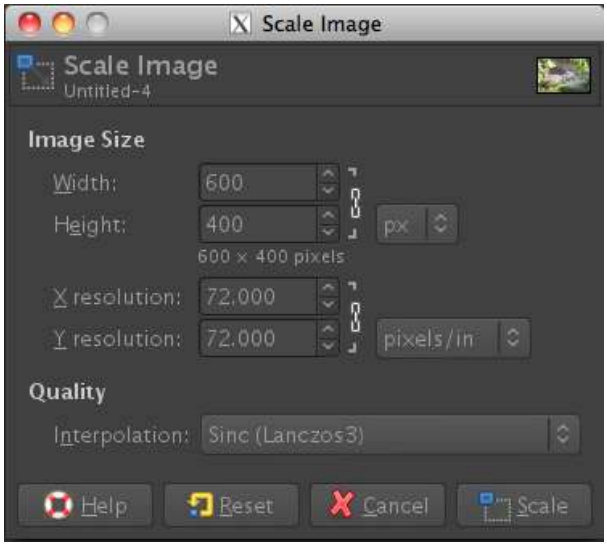


6. Click OK to accept the changes

Congratulations! You have now successfully changed the size of your image!

In this example, we reduced our image size by changing the resolution from 300 to 72ppi and changing the pixel dimensions from 3000 x 2000 to 600 x 400px.





PPI and DPI

What are PPI & DPI?

These two acronyms are often used interchangeably although they do have different meanings.

- **PPI (Pixels Per Inch)** refers display resolution, or, how many individual pixels are displayed in one inch of a digital image.
- **DPI (Dots Per Inch)** refers to printer resolution, or, the number of dots of ink on a printed image.

This guide will use only PPI (Pixels Per Inch) to describe resolution.

Screen/Web Resolution

Images for Web

Web images work differently than printed images. With printed images, we must pay close attention to resolution to ensure we get a high-quality print.

For web images, we must focus on the pixel dimensions. Look at the two images below - one is 300ppi and the other is 72ppi.

(Pixel Dimensions 300 x 200; Resolution 300ppi)

(Pixel Dimensions 300 x 200; Resolution 72ppi)

Both of these images display at the exact same size even though their resolution varies. This is because the pixel dimensions are what really matter when working with web images. Notice that the pixel dimensions of each image are the same and therefore both images will display at the same size even though they have differing resolutions.

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