

A GIMP TUTORIAL

2 Edit

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In the previous chapter, Introduction, we saw how to rotate, crop and sharpen an image. Now we see how to resize an image, how to remove blemishes, and how to capture a screen display.

We shall assume that you already know how to save an image in XCF format before starting editing, to sharpen the image if necessary, and then to save it in your chosen format when finished.

2.1 Resolution

A pixel is a picture element. Many pixels together form an image. The resolution of an image is the number of pixels it contains. An image with a resolution of 900 by 600 pixels has a rectangular grid of pixels 900 wide by 600 high.

A typical computer monitor has a screen resolution of 1024 by 768 pixels. So an image of 900 by 600 pixels could nearly fill the screen. An image of about 250 pixels for the longest side is used by website designers for small images.

Print (or output or document) resolution is not the same thing. An image with dimensions of 1200 pixels by 1800 pixels on a printer with a requested resolution of 300 points per inch (similar to pixels per inch) would print to 4 by 6 inches, since $1200 / 300 = 4$, and $1800 / 300 = 6$.

2.2 Resize

You can resize an image to a smaller resolution without losing quality. But to resize an image to a larger resolution results in loss of quality since additional pixels would need to be included and the software has to determine what colours they should be. So it makes sense to scan or take digital camera images at the highest possible resolution before editing starts.

Website writers use small images on their pages so that they load quickly. We see how to reduce an image's size from 700 by 700 pixels to 250 by 250 pixels.

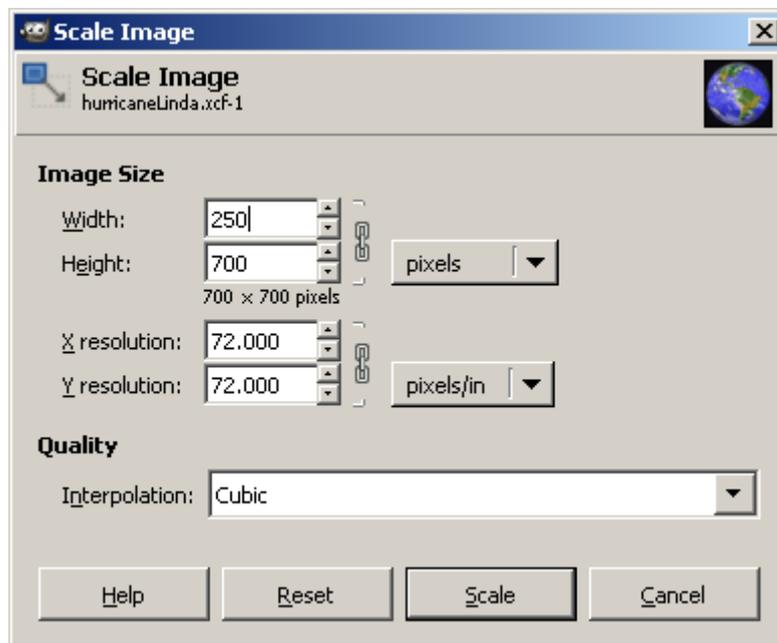
from this



to this



1. choose Image, Scale image
2. check dimensions are in pixels and the chain linking width and height is closed - click on it if is open
3. enter 250 for Width. The closed chain linking Width and Height ensures an appropriate figure is automatically filled in for Height. Press enter key on the keyboard.
4. note that both the X resolution and Y resolution are 72 pixels/inch
5. set Interpolation to Cubic (for best results)
6. click Scale
7. sharpen if required and save in JPEG format



2.3 Image View Size

GIMP opens an image at a logical size for viewing - not necessarily the same as the image size itself. To change the displayed size in GIMP, right click on the image and choose View, Zoom.

2.4 Touch Up

You have probably heard of models having their images airbrushed to remove imperfections before printing; we shall see how this may be done.

We remove the pole and the barbed wire on top of the wall from the image of an alsation jumping through a hurdle.

from this



to this

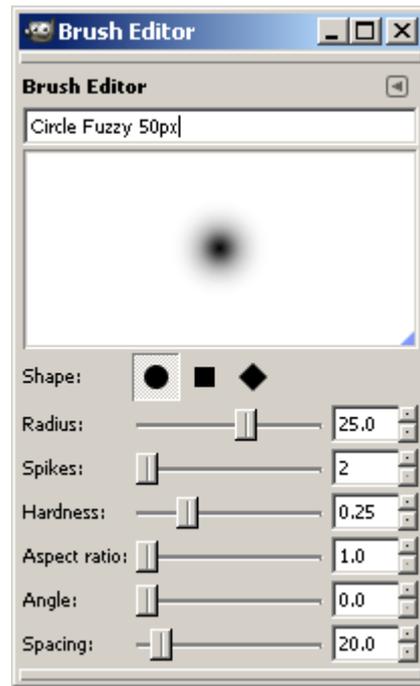
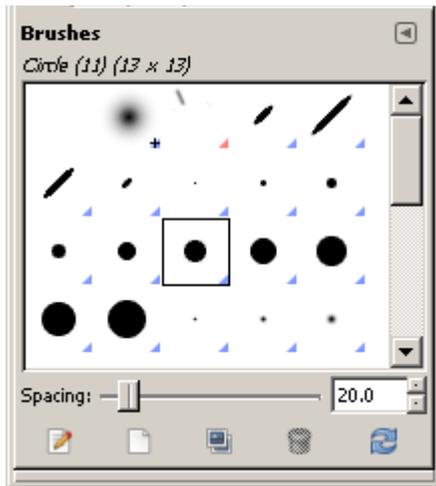


But first we see how to create a new brush with a fuzzy edge about 50px diameter; we shall use it to remove most of the pole.

2.4.1 Create a New Brush

We create a new, circular brush with a fuzzy edge and a diameter of about 50px. Fuzzy or soft-edged brushes help to merge new paint with the background.

1. in the Brushes window, which is below the layers, Channels, Paths, ... window, click the New Brush button (at the bottom of the Brushes window).
2. select a shape: circle
3. set Radius = 25, Hardness = 0.25, and title to Circle Fuzzy 50px. Leave other parameters as they are. Hardness is what sets the degree of fuzziness; the smaller the value the softer the edges.
4. close the Brush Editor window and see your new brush in the Brushes window.



2.4.2 Remove Blemishes

We clone a good piece of the image and paste it over the blemish.

1. in the Brushes window select the Circle Fuzzy 50px brush you have just created
2. choose Tools, Paint Tools, Clone
3. position the mouse pointer where you want to copy from - just to the side of where you want to copy to is usually about right
4. hold the Ctrl key down, click the mouse button, release the Ctrl key
5. position the mouse pointer to where you want to copy to, and click to stamp out a bit of your blemish. Repeat step 5 as required.
6. repeat steps 3, 4 and 5, avoiding hard edges e.g. where the pole meets the edge of the image
7. change the brush to one with hard edges e.g. Circle (11). Repeat steps 3, 4 and 5 to make a neat job at the edges
8. sharpen if required and save in JPEG format

2.5 Screen Capture

Capture a window or the whole screen.

1. Choose File, Create, Screen Shot ...
2. choose either Grab a single window or Grab the whole screen
3. if a single window is chosen, move the cross hair to select the chosen window
4. the chosen window appears in the GIMP image window ready for editing

Exercises

1. Create four new brushes with soft edges and diameters 25, 75, 100 and 200 pixels.
2. Using appropriate images, demonstrate how to:
 - a. resize an image for use on the Internet
 - b. touch up an image

Bibliography

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