

Beginning with GIMP -- Starting Tutorial for new users

So you have just started with GIMP, and now you are completely lost as to what to do next? There are windows and buttons everywhere and nothing makes sense? If so, this is the tutorial for you.

The idea is for you to get going with a quick run-through of setting up a vanilla install of GIMP, followed by you doing your first little image in the program. From then on you can head on to more advanced tutorials, all of which often assumes you know the basics. Whereas this tutorial is mainly aimed at complete newbies in GIMP (and to computer graphics in general), also veteran users might find a useful tidbit or two.

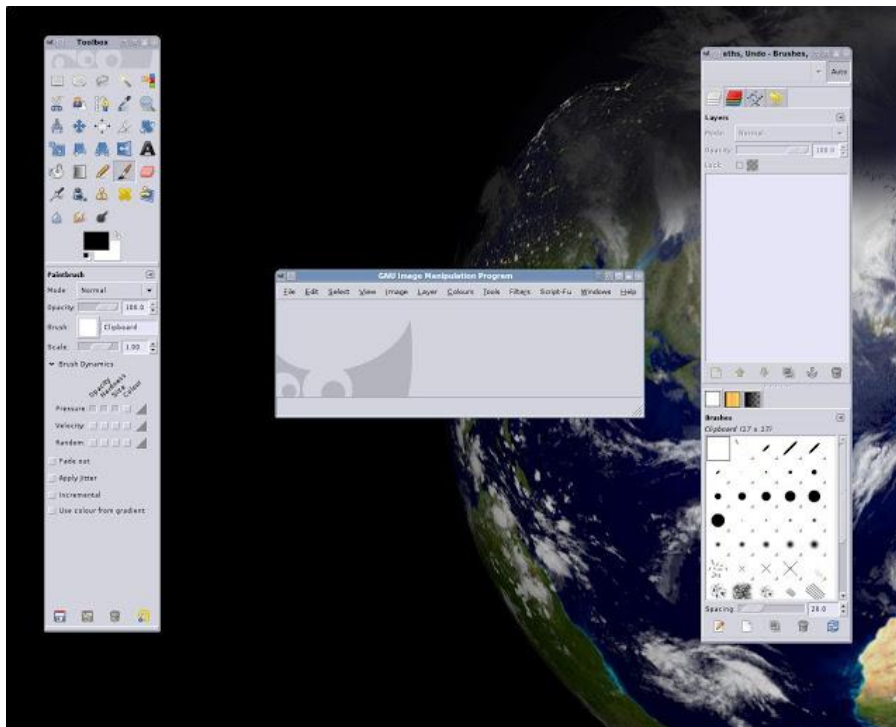
Installing GIMP

GIMP exists for many different computing platforms, including Linux, Windows and Mac. The current stable versions are 2.6.x and this tutorial will *not* be fully correct if you are using an older version than 2.6.0. Once GIMP is installed, you can see what version you have in the menu *Help->About* (to find the menu see below).

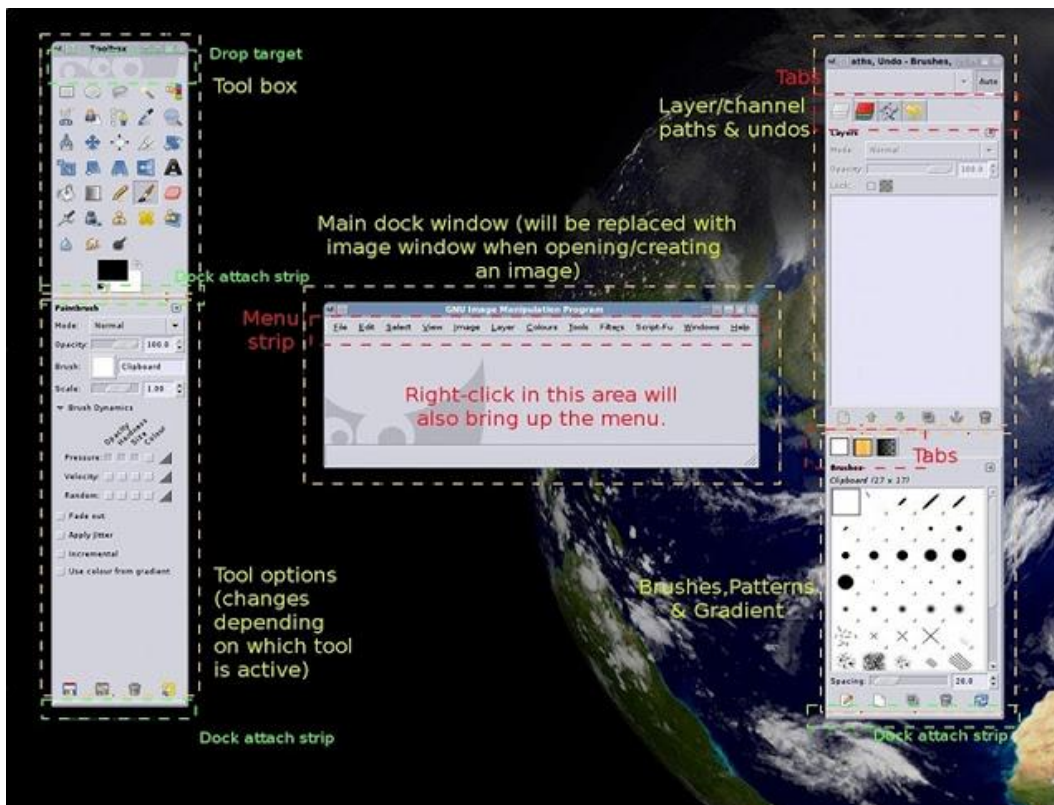
GIMP downloads can be found here: <http://www.gimp.org/downloads/>

This tutorial will not go through the installation, follow the instructions given for each operating system.

Starting GIMP for the first time -- a quick orientation



When you start GIMP for the very first time, something like this will greet you. This tutorial image is from GIMP version 2.6.1 which will be used for this tutorial. The operating system shown is Linux Debian, so the window decorations (window bars, close buttons etc) might not look familiar to Windows/Mac users, but the program should nevertheless work the same under all systems. Let us take a look at what we have.



First of all it should be remembered that GIMP's interface is extremely flexible. You can add and remove windows from it as you like. The areas marked in green as *Dock attach strip* are places where different windows can attach and merge with each other (we will try this below). The default setup is pretty reasonable, but we will tweak it a bit later to be even more convenient.

To the top left you have the *Tool box*. This contains the most commonly used functions of the program, quite literally the artist's box of utilities. These tools are in fact so often used that almost all of them also have default keyboard shortcuts for even faster access. You are wise to learn most of these by heart if you want to be effective.

Attached to the bottom of the tool box is the *Tool options* dock. This shows the settings for each tool and thus changes depending on which tool is currently active. In the image we see the tool options for the *paintbrush tool*.

To the far right we have a dock that contains several things in one. What we see at the moment is the empty *Layer list*

window. As we start creating a new image, this list will start to fill with layers. We will explain the use of layers a little later.

You also see that there are a bunch of tabs in the upper part of this window, clicking these will bring forth other functionality. All these are useful, but we will not delve into them too much in this tutorial.

Below the layer list, another dock is attached, containing the list of brushes usable by GIMP.

Brushes are, quite like their real-world counterpart, things you use to mark down things on the canvas. They can be used to emulate actual paint brushes, but also be used as "stamps" for creating nice effects, as well as be animated.

There are two more tabs in this dock, these show lists of patterns and gradients respectively (click them to see). Patterns create seamless mosaics of structure (you could for example use a pattern to paint a checker board). Gradients produce transitions between colours in various ways. All brushes, patterns and gradients can be modified and customized by the user.

In the center you find the main dock window (Formally this is actually called the *Empty Image window*). This is the main work area. It starts out small, but it will resize to hold your image when you create or load one. It also is also here you find the menu. To close GIMP you can either close this window or close the tool box (or use the menu *File->Quit*).

The tool box



gimpsetup002.jpg

We will not explain all the options for each tool, but you should at least know which one is which and roughly what it is for. For a much more detailed description of the tools, refer to the gimp manual's entry on the toolbox [\[here\]](#). Some of the default keyboard shortcuts are given as well.

The top of the tool box contains a *Drop target* area, you can drop images from other places on your harddrive to open them in GIMP.



gimpsetup003.jpg

(Rectangle select, Elliptical select, Freehand select (lasso), Magic wand select, colour select, intelligent scissors)

The first row of the toolbox solely deals solely with selecting various parts of your image in clever ways. Think of a selection as if you were placing a paper with a hole in it over your image. You can then only paint on that part of your image which is visible in the hole. By shaping the hole cleverly you can create all sorts of effects, and also not have to worry you will mess up other parts of your image.

The art of selecting is crucial for many tasks in GIMP, and many of GIMP's functions only works on selections. They are also the way to easily paint forms like squares, circles and polygons. We will try a few later.

A VERY common newbie problem is that you have create a selection somewhere and forgot about it -- you will then not be able to paint outside it at all and it looks like the paint tools does not work.

The menu option *Select->All* or *Select->None* will solve that for you. These two are so useful that you are wise to learn their keyboard shortcuts: *Shift+A* and *Shift+Ctrl+A*.

By holding Shift or Ctrl down, you can also add/remove from an existing selection. Use Esc to abandon a selection in progress, and Return to quickly finish it.

Rectangle select tool (R): Creates a square selection. When using this, you get the chance to pull handles to adjust it. Press Return or click inside it to finalize the selection.

Elliptical region select tool (E): Circular selection.

Freehand select tool (F): Despite the name this is actually a combination of a freehand- and polygon-select tool, first seen in version 2.6. Free-hand selection is done by holding the mouse button and dragging. If you instead click the mouse you will get to place nodes linked by straight lines. You can combine the two modes as you like as well as adjust the polygon nodes after you made them. Tie the ends together or press Return to finalize the selection. A very, very useful tool.

Continuous region select (Magic wand) (Z): Selects connected areas. Click and drag to include more areas.

Colour select (Shift + O): Selects areas of similar colour. Click and drag to include a wider range of colours.

Select Shape from image (Intelligent scissors) (I): Selects along an edge. Can be very useful to select and cut out parts of an image, the results can be a bit unpredictable though.



gimpsetup004.jpg

(foreground select, path tool, colour picker, zoom, measurer, move tool)

Foreground select tool: An advanced algorithm intended primarily for cutting out items and people from photos. Rather involved and not for newbies. Refer to the manual for how to use this.

Path tool (B): Creates "paths", mathematical objects possible to be perfectly adjusted and modified to any shape and form. The paths can be saved and also converted to selections, making this the most advanced but also most involved way to create a selection.

Colour picker (O): Picks colour from the image and makes it your active colour. This tool is often not accessed directly -- holding Ctrl when using a paint tool will temporarily switch to the colour picker. By default the picker only selects from the current layer, an often useful option for this tool is to set "Sample Merged", which means you pick the colour you "see", not just what is on the current layer (once you understand layers, that will make sense).

Zoom tool: This tool is very useful, so much so that it should mostly be used by keyboard shortcut. The default keys are + and -, we will learn how to change that and other keys later.

Measure tool: Measure pixel distances and angles on the canvas.

Move tool (M): Move layers and selections around. To avoid newbie frustration during this tutorial, it is recommended that you set this tool's option to "Move active layer".



gimpsetup005.jpg

(Align tool, Crop tool, Rotate, Rescale, Shear, Perspective)

Align tool: This is used for aligning or distributing layers relative to each other. Most useful for text, but can be used whenever things need to be distributed and placed neatly.

Crop tool (Shift + C): Used for cutting away unneeded parts of an image. Primarily a photo manipulation tool.

Rotate (Shift + R): Rotate a selected area or layer.

Scale (Shift + T): Scale a selected area or layer.

Shear (Shift + S): Skew a selected area or layer.

Perspective (Shift + P): Works as if you took a 2D-part of your image and "tipped" it down into the image.



gimpsetup006.jpg

(flip tool, Text tool, bucket fill, Gradient fill, Pencil tool, Paint brush)

Flip tool (Shift + F): Flips your selection from one side to the other.

Text tool (T): This allows you to place text in your image, using any fonts available to GIMP.

Bucket fill (Shift + B): Fill parts of the image with a colour or pattern. It can be used to replace particular colours or parts of the image.

Gradient fill (L): Fill parts of the image with a gradient.

Pencil tool (N): This is the first of the *Brush paint tools*, that is, tools that use brushes to paint on the canvas. The pencil creates "pixellated", jagged lines, that is, lines that are not smoothed. It is best used for create very small images where each pixel matters, like icons and smileys and similar.

Paint brush (P): This tool emulates a real paint brush by smoothing the edges of brush strokes to create smooth, "realistic" lines. This means that cannot place individual pixels as precisely as you can with the Pencil tool, but the result looks much nicer for larger works. This is the primary tool for digital painters.



gimpsetup007.jpg

(Eraser, airbrush, ink tool, clone tool, Healing tool, Perspective clone)

Eraser tool (Shift + E)/[size]: This, as expected, erases the colour from an image/layer. What it really does is "paint with transparency". Since GIMP has an Undo function (Ctrl+Z), this tool is less used to correct mistakes than a real-life eraser and just as often used to adjust minor details or as a paint tool in its own right.

Airbrush (A): This emulates an airbrush or paintbrush to create the a more fuzzy "sprayed" effect than the paintbrush does.

Ink tool (K): Emulates a fountain pen or steel nib; useful for comics, calligraphy and other situations when dynamic lines are important.

Clone tool (C): Allows to clone parts of an image (also from another layer or a completely different image) to where you want it. Ctrl-click sets the point which should be cloned, from there on, painting will cause that part of the image to appear (also different brushes can be used to apply it). Very useful for adding structure and for realistically modifying photos.

Healing tool (H): Specialized tool for removing small blemishes in photographs.

Perspective clone : Advanced tool for cloning parts of an image into a plane different to

the screen. Could for example be used to clone a face-on image of a window onto a wall seen from below.



gimpsetup008.jpg

(Blur/sharpen tool, smudge, burn/dodge tool)

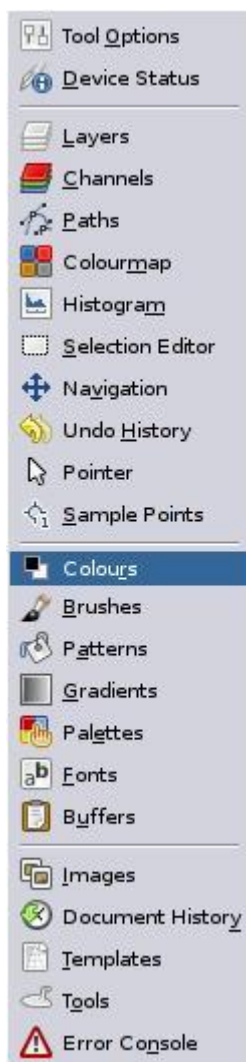
Blur tool (V): Used to soften or sharpen coloured edges and blend colours together.

Smudge tool (S): Mimics the effect of putting a finger in paint and pulling it away. A powerful tool for painting with faster effects than the blur tool, but dangerous for a newbie if not used with care since the image easily can be smeared and look messy.

Dodge/burn (Shift + D): Selectively darken or brighten the area you paint.

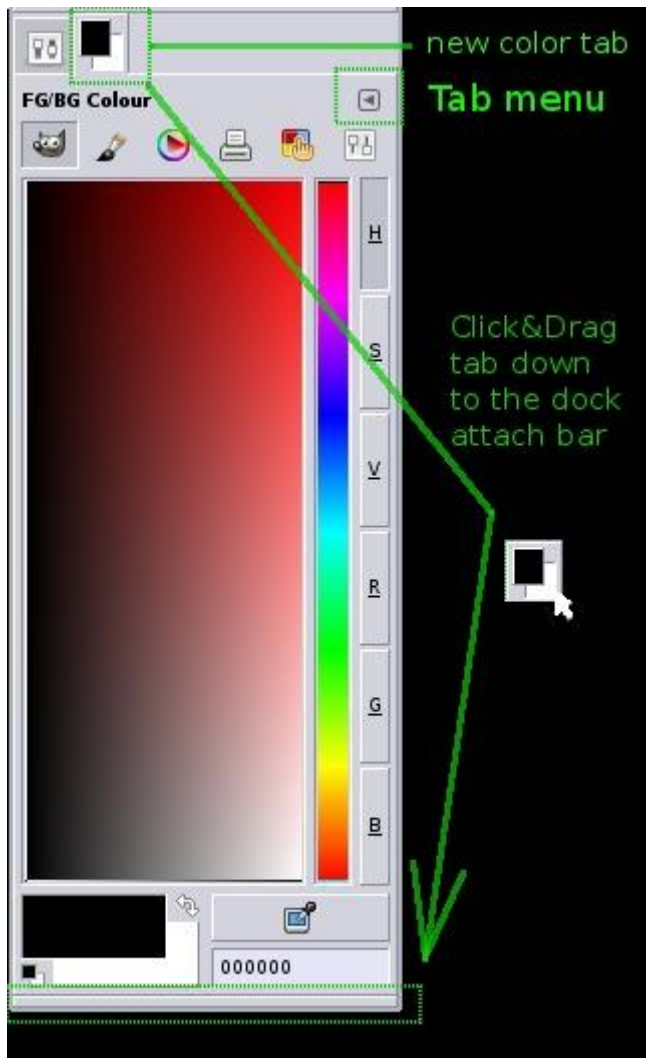
Customizing the interface

One thing the default setup might not have is an easy way to select colour. If yours do, you don't have to do this next step, but it's useful to know how to do it anyway. See that little arrow in a square to the right and just below the toolbox? That is the tab menu and all docks have them. Click it. From the small menu choose "Add a tab". The following menu appears:



gimpsetup009.jpg

Select *Colour* from the menu.



gimpsetup010.jpg

A new tab appears next to the tool options tab, containing the colour chooser. We don't want to have to click back and forth between this tab and the tool options though, so let's attach it as a separate dock below instead. As seen in the image, click and drag the tab down to the bottom of the dock and drop it on the horizontal bar. The two attaches, with the colour picker below the tool options, like seen in the next image:



gimpsetup011.jpg

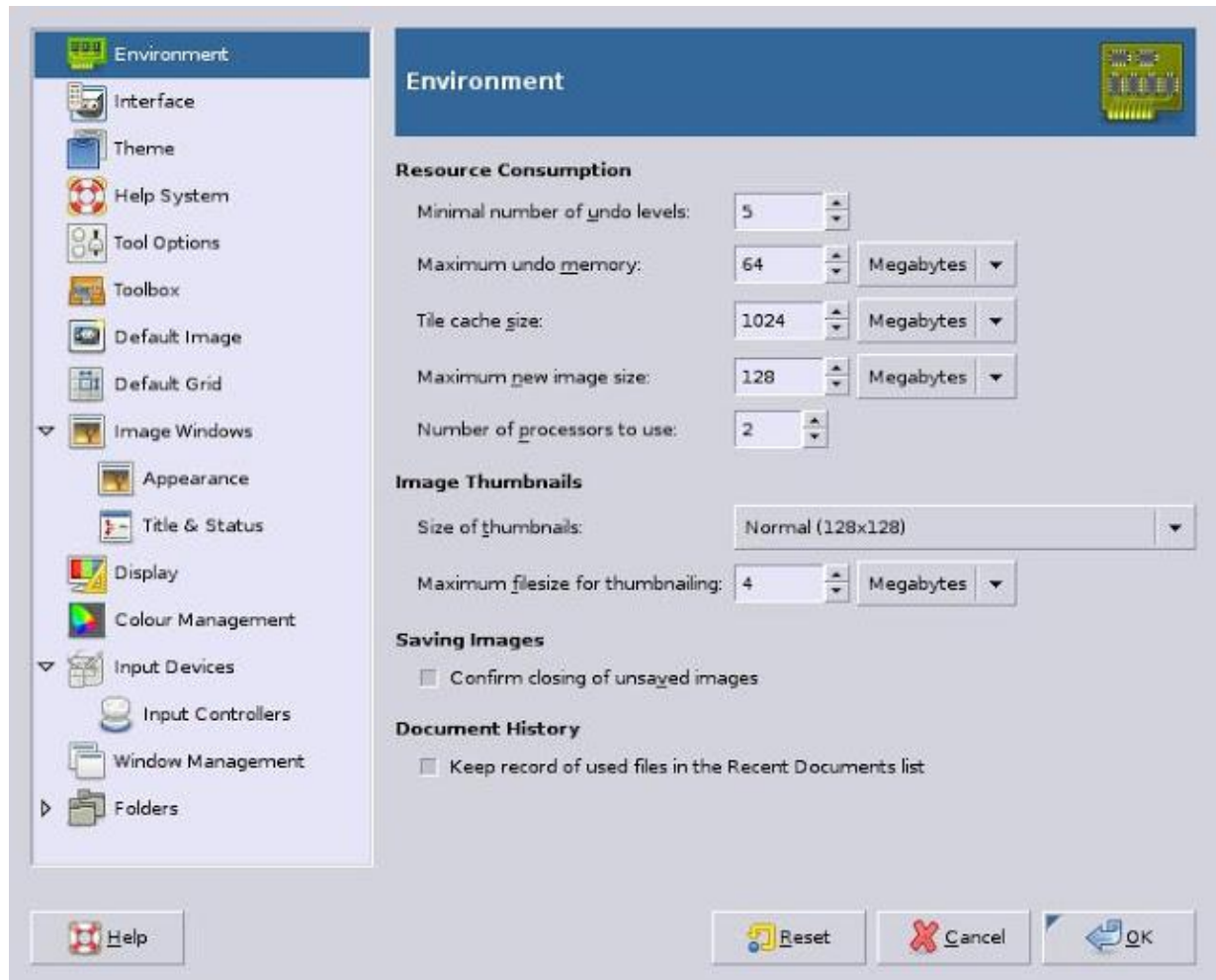
If you should "miss", the colour selector will appear in a separate window instead. If so, just click and drag from the area where the tabs would have been (next to the tab menu arrow), in the same way as before. [Here is an animated GIF](#) showing the basics of GIMP's drag&drop interface (courtesy of Saulgoode).

You can combine windows and docks in any way you want. For now, read on though, we will do some more of this further down.

Adjusting GIMP's preferences

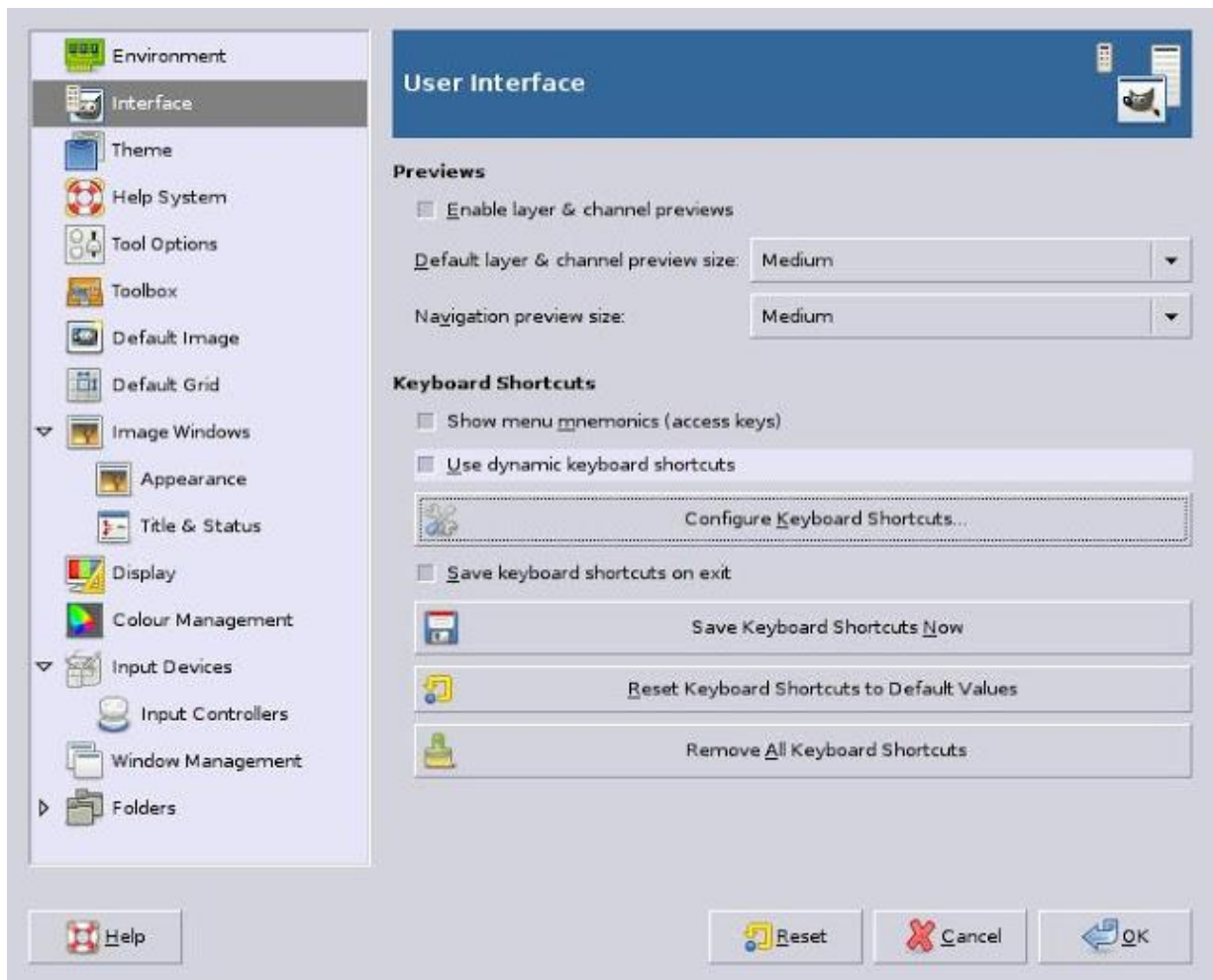
Before actually getting down to using the program (don't worry, it will come!), let's quickly check some basic things in GIMP's preferences to make things more useful. We will only do some basic things here, look in gimp's manual on preferences for more detailed info:

[http://docs.gimp.org/en/gimp-pimping.ht ... efs-dialog](http://docs.gimp.org/en/gimp-pimping.ht...efs-dialog). You access the Preferences through the menu *Edit->Preferences*.



gimpsetup012.jpg

The **Environment** setup regulates many performance hogs of GIMP. The "Tile Cache" is especially important, but what you set it to depends on how much RAM memory your computer has and how many programs you run next to GIMP. If you set it higher, GIMP will be able to work larger images without slowdown, but will hog more resources. The defaults are probably good to start with, but if GIMP is behaving sluggishly on your system, this is a good place to start looking.



gimpsetup013.jpg

In the **Interface** menu, you can customize how gimp behaves. You want to activate "Use Dynamic keyboard shortcuts". This allows you to quickly assign keyboard shortcuts to any menu item, simply by highlighting them in the menu and pressing the key(s) you want. Very useful. Also the "Save keyboard shortcuts on exit" is useful.

Click the button "*Configure Keyboard Shortcuts...*"