**New image dialog**



Using the “Create a New Image” dialog, you can create a new empty image and set its properties.

**Template**

Rather than entering all the values by hand, you can select some predefined values for your image from a menu of templates, which represent image types that are somewhat commonly useful. The templates set values for the size, resolution, comments, etc.

**Image Size**

Here you set the Width and Height of the new image. The default units are pixels, but you can zAchoose a different unit if you prefer, using the adjoining menu.

**Portrait/Landscape buttons**

There are two buttons which toggle between Portrait and Landscape mode. What they actually do is to exchange the values for Width and Height. (If the Width and Height are the same, these buttons are not activated.) If the X and Y resolutions are not the same (which you can set in Advanced Options), then these values are also exchanged. On the right of the dialog, image size, screen resolution and color space are displayed.

**X and Y resolution**

The values in the X resolution and Y resolution fields relate mainly to printing: they do not affect the size of the image in pixels, but they may determine its physical size when it is printed. The X and Y resolution values can determine how pixels are translated into other measurement units, such as millimeters or inches.

**Colorspace**

You can create the new image in different [color modes](https://docs.gimp.org/2.10/en/gimp-image-mode.html), as either an [RGB](https://docs.gimp.org/2.10/en/glossary.html) image or a grayscale image.

**Precision**

A huge step for GIMP: 16-32 bits per channel support is at last available. You are now able to work with a lot more color information and detail in your pictures. This support basically gives you the ability to create super-smooth color transitions on your picture.

**Gamma**

Here you can choose the [channel encoding](https://docs.gimp.org/2.10/en/glossary.html) for your image. Choices are Perceptual gamma (sRGB) and Linear light. For 8-bit integer precision the default is Perceptual gamma, and for 32-bit floating point precision it is Linear light.

**Color profile**

Here you can choose a color profile to be used for your image. The default is GIMP's standard color profile based on Color space, Precision, and Gamma.

**Fill with**

Here, you specify the background color that is used for your new image. It is certainly possible to change the background of an image later, too. You can find more information about doing that in the [Layer dialog](https://docs.gimp.org/2.10/en/gimp-dialogs-structure.html).

There are several choices:

* Fill the image with the current Foreground color, shown in the Toolbox.

Note that you can change the foreground color while the “New Image” dialog window is open.

* Fill the image with the current Background color, shown in the Toolbox. (You can change the background color too, while the dialog window is open.)
* Fill the image with White.
* Fill the image with Transparency. If you choose this option, the image is created with an [alpha channel](https://docs.gimp.org/2.10/en/glossary.html) and the background is transparent. The transparent parts of the image are then displayed with a checkered pattern, to indicate the transparency.
* Fill the image with a Pattern. If you choose this option, the image is filled with the currently active pattern (which you can change while this dialog is open).

**Comment**

You can write a descriptive comment here. The text is attached to the image as a [parasite](https://docs.gimp.org/2.10/en/glossary.html), and is saved with the image by some file formats (PNG, JPEG, GIF).

**Open image dialog box**



The Open… command activates a dialog that lets you load an existing image from your hard-drive or an external medium.

This browser looks like other browsers and it is mostly self-explanatory. It has some particular features nevertheless.

* The button Type a file name toggles between add and remove the Location text box. The Ctrl+L key combination has the same action as this button.
* In the Location text box you can type a path to an image file. If you don't type any path, the name of the selected file will be displayed. You can also type the first letters of the name: it will be auto-completed and a list of file names beginning with these letters will be displayed. When you search for a file or directory using the Search feature (see below, item 4), the label changes to Search and you can enter the name in this text box.
* The path to the current folder is displayed. You can navigate along this path by clicking on an element.
* With Search you can look for a file (or directory), even if you don't know the exact name of that file. Click on Search, type a file name or just a part of a file name in the text box above, and press Enter. Then the central frame (7) will list all files and directories of your home directory with names containing the text you typed in. Unfortunately, you can't restrict the results to files of a specified type (10).
* Recently used is self-explanatory.
* Here, you can access to your main folders and to your store devices. Here, you can add bookmarks to folders, by using the Add or the Add to Bookmarks option you get by right-clicking a folder in the central panel, and also remove them.
* The contents of the selected folder is displayed here. Change your current folder by double left clicking on a folder in this panel. Select a file with a single left click. You can then open the file you have selected by clicking on the Open button. A double left click opens the file directly. Please note that you can open image files only.
* The selected image is displayed in the Preview window. If it is an image created by GIMP, file size, resolution and image composition are displayed below the preview window.
* By clicking the Add button, you add the selected folder to bookmarks. By clicking the Remove, you remove the selected bookmark from the list.
* You will generally prefer to display the names of All images. You can also select All files. You can also limit yourself to a particular type of image (GIF, JPG, PNG ...).
* Select File Type: In most cases you don't need to pay any attention to this, because GIMP can determine the file type automatically. In a few rare situations, neither the file extension nor internal information in the file are enough to tell GIMP the file type. If this happens, you can set it by selecting it from the list.

**Layers dialog box**



The “Layers” dialog is the main interface to edit, modify and manage your layers.

**Overview**

Every layer appears in the dialog in the form of a thumbnail. When an image has multiple layers as components, they appear as a list. The upper layer in the list is the first one visible, and the lowest layer the last visible, the background.

**Layer attributes**

Every layer is shown in the list along with its attributes:



*Layer visibility*

In front of the thumbnail is an icon showing an eye. By clicking on the eye, you toggle whether the layer is visible or not. (**Shift**-clicking on the eye causes all *other* to be hidden.*Chain layers*

Another icon, showing a chain, allows you to group layers for operations on more than one layer at a time (for example with the Move tool).

*Layer thumbnail*

The layer content is represented in a thumbnail. Maintaining left-click for a second on this thumbnail makes it larger. When the layer is active, the thumbnail has a white border. The border is black if the layer is inactive. When the layer has a mask, the inactive element takes a black border.

*Layer name*

The main attribute is the name of the layer. You can edit this by a double-click on the name of the layer. You can also use the “Edit Layer Attributes” dialog you can find in the context menu that you get by through a right-click on the layer.

**Layers characteristics**

Above the layer list, it is possible to specify some properties for the active layer. The active layer is the one highlighted in blue. The properties are: “Layer mode”, “Opacity”, “Lock pixels” and “Lock Alpha channel”.

*Mode*

The layer mode determines how the layer interacts with the other layers. From the combo box you can access all the modes provided by GIMP.

*Opacity*

By moving the slider you give more or less opacity to the layer. With a 0 opacity value, the layer is transparent and completely invisible. Don't confuse this with a Layer Mask, which sets the transparency pixel by pixel.

*Lock*

You have three possibilities:

* **Lock pixels**: When the button is pressed down, you cannot use any brush-based tool (Paintbrush, Pencil, Eraser etc.), the Airbrush or the Ink tool on the currently selected layer. This may be necessary to protect them from unwanted changes.
* **Lock position and size**: This toggle button enables and disables protection of layers from moving them around or transforming them. When the button is pressed down, you cannot use any transform tool (Rotate, Shear, Perspective and others) or move it.
* **Lock alpha channel**: This toggle button controls the “Lock” setting for the transparency of the layer . If this is pressed down, then the alpha channel for the layer is locked, and no manipulation has any effect on it. In particular, nothing that you do to a transparent part of the layer will have any effect.

**Layer management**

Under the layer list a set of buttons allows you to perform some basic operations on the layer list.

*New Layer*

Here you can create a new layer. A dialog is opened, which is described in [New Layer](https://docs.gimp.org/en/gimp-layer-new.html).

Press the **Shift** key to open a new layer with last used values.

*New Layer Group*

Here you can create a new layer group. A new layer is created, where you can put layers down.

Layer groups are described in [Layer groups](https://docs.gimp.org/en/gimp-layer-groups.html).

*Raise layer*

Here you can move the layer up a level in the list. Press the **Shift** key to move the layer to the top of the list.

*Lower layer*

Here you can move the layer down a level in the list. Press the **Shift** key to move the layer to the bottom of the list.

*Duplicate layer*

Here you can create a copy of the active layer. Name of new layer is suffixed with a number.

*Merge layers**Anchor layer*

Before GIMP-2.10.18, this button was permanently for anchoring. Now, it becomes an anchor only when a floating selection is created (it anchors the floating selection to the previous active layer). Else, it is a ***Merge layers*** icon with several possibilities:

* Merge this layer with the first visible layer below it.
* Pressing **Shift**: merge the layer group's layers into one normal layer.
* Pressing **Ctrl**: merge all visible layers into one normal layer.
* Pressing **Shift**+**Ctrl**: merge all visible layers with last used values.

*Delete layer*

Here you can delete the active layer.

**Adding or subtracting selections**

Tools have options that you can configure. Each selection tool allows you to set the selection mode. The following selection modes are supported:

* Replace is the most used selection mode. In replace mode, a selection replaces any existing selection.
* Add mode, causes new selections to be added to any existing selection. Press and hold the **Shift** key while making a selection to temporarily enter add mode.
* Subtract mode, causes new selections to be removed from any existing selection. Press and hold the **Ctrl** key while making a selection to temporarily enter subtract mode.
* Intersect mode, causes areas in both the new and existing selection to become the new selection. Press and hold both the **Shift** and **Ctrl** key while making a selection to temporarily enter intersect mode.



The figure shows an existing rectangular selection. Select the Lasso. While pressing the **Shift** key, make a free hand selection that includes the existing selection. Release the mouse button and areas are included in the selection.

**Different ways to open file in gimp**

**Open**

The Open command activates a dialog that lets you load an existing image from your hard-drive or an external medium.

You can access the Open dialog from an image window through: File → Open.

You can also open the Dialog by using the keyboard shortcut Ctrl+O.

**Open as Layers**

The Open Image as layers dialog is identical to the Open Image dialog. The layers of the selected file are added to the current image as the top layers in the stack.

You can access to this command from the image menubar through File → Open as layers,

or by using the keyboard shortcut Ctrl+Alt+O.

**Open Location**

The Open Location dialog lets you load an image from a network location, specified by a URI, in any of the formats that GIMP supports.

You can access to this command from the Toolbox menubar or the image menubar through File → Open Location….

**Open Recent**

Selecting Open Recent displays a submenu with the names of the files that you have opened recently in GIMP. Simply click on a name to reopen it. See the Document History dialog at the bottom of the Open Recent submenu, if you cannot find your image.

You can access to this command from the image menubar through File → Open Recent

**Equalize**

The Equalize command automatically adjusts the brightness of colors across the active layer so that the histogram for the Value channel is as nearly flat as possible, that is, so that each possible brightness value appears at about the same number of pixels as every other value.

Activate the Command

You can access this command from the image menubar through Colors → Auto → Equalize





**Posterize**

This tool is designed to intelligently weigh the pixel colors of the selection or active layer and reduce the number of colors while maintaining a semblance of the original image characteristics.

Activating the filter

You can find this command through Colors → Posterize…



**Presets**

“Presets” are a common feature for several Colors commands. You can find its description in [Section 8.1.1, “Colors Common Features”](https://docs.gimp.org/2.10/en/gimp-colors-menu.html).

**Posterize Levels**

Here, “level” means “number of colors per channel ”.

This slider and the input boxes with arrowheads allow you to set the number of levels (2-256) in each RGB channel that the tool uses to describe the active layer. The maximum total number of colors is the combination of these levels. A level to 3 will give 33 = 27 colors.

**Blending Options, Preview and Split view**

These are common features described in [Section 8.1.1, “Colors Common Features”](https://docs.gimp.org/2.10/en/gimp-colors-menu.html).

**Text tool**

The Text tool adds text to your image in a new layer. Text can be edited directly on canvas. A text tool box, which shows up on top of the canvas above the text box, allows you to quickly change some of the text characteristics (for selected text or newly typed text only).

As soon as you type your text, it appears on the canvas in a rectangular frame. If you draw the rectangular frame first, the text is automatically adapted to the frame size. You can enlarge this frame as you do with rectangular selections.



Activating the Tool

You can access this tool in several ways:

In the image menu through Tools → Text,

by clicking the tool icon in Toolbox,

or by using the T keyboard shortcut.

**Options**



**Font**

Click on the fonts button ***Aα*** to open the font selector of this tool, which offers you a list of installed X fonts.

At the bottom of the font selector you find some icons which act as buttons for:

* resizing the font previews,
* selecting *list view* or *grid view*,
* opening the [font dialog](https://docs.gimp.org/2.10/en/gimp-font-dialog.html).

**Size**

This control sets the size of the font in any of several selectable units.

**Use editor**

Use an external editor window for text editing instead of direct-on-canvas editing.

**Antialiasing**

Antialiasing will render the text with much smoother edges and curves. This is achieved by slight blurring and merging of the edges. This option can radically improve the visual appearance of the rendered typeface. Caution should be exercised when using antialiasing on images that are not in RGB color space.

**Hinting**

Uses the index of adjustment of the font to modify characters in order to produce clear letters in small font sizes.

**Color**

Color of the text that will be drawn next. Defaults to black. Selectable from the color picker dialog box that opens when the current color sample is clicked.

**Justify**

Causes the text to be justified according to any of four rules selectable from the associated icons.

**Indent**

Controls the indent spacing from the left margin, for the first line.

**Adjust line spacing**

Controls the spacing between successive lines of text. This setting is interactive: it appears at the same time in image text. The number is not the space between lines itself, but how many pixels must be added to or subtracted from this space (the value can be negative).

**Adjust letter spacing**

Controls the spacing between letters. Also in this case the number is not the space itself between letters, but how many pixels must be added to or subtracted from this space (the value can be negative).

**Box**

Concerns the text box. The associated drop down list offers two options:

**Dynamic**: default option. The size of the text box increases as you type. Text may go out of the image. You have to press the Enter key to add a new line. The indent option indents all lines. If you increase the box size, the option turns to "Fixed".

**Fixed**: you must enlarge the text box first. Else, usual shortcuts are active! The text is limited by the right side of the box and continues on next line. This is not true new line: you must press the Enter key to add a real new line. The text may go out the lower border of the image. The indent option works on the first line only.

**Language**

The text language may have an effect on the way the text is rendered. The default language is “Caddo”, the language of several Southeastern Native American tribes. If you enter a letter in this field, you get the list of all available languages whose names begin by this letter:

**Text Editor**



**Load Text from file**

Text can be loaded from a text file by clicking the folder icon in the text editor. All the text in the file is loaded.

**From left to right**

This option causes text to be entered from left to right, as is the case with most Western languages and may Eastern languages.

**From right to left**

This option allows text to be entered from right to left, as is the case with some Eastern languages, such as Arabic (illustrated in the icon).

**Vertical, right to left (mixed orientation)**

Text is written top-to-bottom in columns, from right to left, and is rotated 90° clockwise.



**Vertical, right to left (upright orientation)**

Text is written top-to-bottom in columns, from right to left, upright.



**Vertical, left to right (mixed orientation)**

Text is written top-to-bottom in columns, from left to right, and is rotated 90° clockwise.



**Vertical, left to right (upright orientation)**

Text is written top-to-bottom in columns, from left to right, upright.



**Use selected font**

Default doesn't use the font you have selected in the Options dialog. If you want to use it, check this option.

**Gradient**

This tool fills the selected area with a gradient from the foreground and background colors by default, but there are many options. To make a gradient, drag the cursor in the direction you want the gradient to go and you release the mouse button when you feel you have the right position and size of your gradient.

There are different possibilities to activate the tool:

* From the image-menu: Tools → Paint Tools → Blend.
* By clicking the tool icon .
* By clicking on the **G** keyboard shortcut.

**Save file**

The Save command saves your image to disk in XCF format. For other image file formats you should use the Export command. If you try to save to a format other than XCF, you get an error message.

**Activate the Dialog**

You can access this command in the image menu bar through File → Save,

or from the keyboard by using the shortcut Ctrl+S.

Use Ctrl+Shift+S to save the opened image with a different name.

**Export File**

GIMP uses the Save command only for saving images in its native XCF format. When you need your image in a different file format, you can use the Export command.

You can access this command through menu File → Export As..., or from the keyboard by using the shortcut Ctrl+Shift+E.

**Color Balance tool**

The color balance tool modifies the color balance of the active selection or layer. Changes are not drastic. This tool is suitable to correct predominant colors in digital photos.

**Activating the Tool**

You can get to the Color balance through: Colors → Color Balance…



**Presets**

“Presets” are a common feature for several Colors commands. You can find its description in Section 8.1.1, “Colors Common Features”.

**Select range to adjust**

Selecting one of these options restricts the range of colors which are changed with the sliders or input boxes for Shadows (darkest pixels), Midtones (medium pixels) and Highlights (brightest pixels).

**Adjust color levels**

Sliders and range from the three RGB colors to their complementary colors (CMY). The zero position corresponds to the current level value of pixels in the original image. You can change the pixel color either towards Red or Cyan, Green or Magenta, Blue or Yellow.

**Reset Range**

This button sets color levels of the selected range back to the zero position (original values).

**Preserve Luminosity**

This option ensures that brightness of the active layer or selection is maintained. The Value of brightest pixels is not changed.

**Blending Options, Preview and Split view**

These are common features.

**Distort filters**

The distort filters transform your image in many different ways.



**Grids and Guides**

You will probably have it happen many times that you need to place something in an image very precisely, and find that it is not easy to do using a mouse. Often you can get better results by using the arrow keys on the keyboard (which move the affected object one pixel at a time, or 25 pixels if you hold down the Shift key), but GIMP also provides you with two other aids to make positioning easier: grids and guides.

Image Grid

Each image has a grid. It is always present, but by default it is not visible until you activate it by toggling View → Show Grid in the image menu.

The default grid appearance, set up when you install GIMP, consists of plus-shaped black crosshairs at the grid line intersections, with grid lines spaced every 10 pixels both vertically and horizontally.



**Guides**

In addition to the image grid, GIMP also gives you a more flexible type of positioning aid: *guides*. These are horizontal or vertical lines you can temporarily display on an image while you are working on it.

To create a guide, simply click on one of the rulers in the image window and pull out a guide, while holding the mouse Left Button pressed. The guide is then displayed as a blue, dashed line, which follows the pointer. As soon as you create a guide, the “Move” tool is activated and the mouse pointer changes to the Move icon.

You can also create a guide with the [New Guide](https://docs.gimp.org/2.10/en/script-fu-guide-new.html) command, which allows you to precisely place the guide on the image, the [New Guide (by Percent)](https://docs.gimp.org/2.10/en/script-fu-guide-new-percent.html) command, or the [New Guides from Selection](https://docs.gimp.org/2.10/en/script-fu-guides-from-selection.html) command.



**The QuickMask**



Image with QuickMask enabled

**Image with QuickMask enabled**

The usual selection tools involve tracing an outline around an area of interest, which does not work well for some complex selections. The QuickMask, however, allows you to paint a selection instead of just tracing its outline.

**Overview**

Normally, a selection in GIMP is represented by “marching ants” that trace the selection outline, but there may be more to a selection than the marching ants show. A GIMP selection is actually a full-fledged grayscale channel, covering the image, with pixel values ranging from 0 (unselected) to 255 (fully selected). The marching ants are drawn along a contour of half-selected pixels. Thus, what the marching ants show you as either inside or outside the boundary is really just a slice through a continuum.

The QuickMask is GIMP's way of showing the full structure of the selection. QuickMask also provides the ability to interact with the selection in new, and substantially more powerful, ways. Click the small outlined button at the lower left of the image window to toggle QuickMask on and off. The button switches between QuickMask mode, and marching ants mode. You can also use Select → Toggle QuickMask, or Shift+Q, to toggle between QuickMask and marching ants mode.