

The KolourPaint Handbook

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The KolourPaint Handbook

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Abstract

KolourPaint is a free, easy-to-use paint program for KDE.

Chapter 1

Introduction

KolourPaint is a free, easy-to-use paint program for KDE. It's perfect for everyday tasks such as:

- Painting - drawing diagrams and 'finger painting'
- Image Manipulation - editing screenshots and photos; applying effects
- Icon Editing - drawing clipart and logos with transparency

Chapter 2

Using KolourPaint

Click on the following links to explore KolourPaint's capabilities:

- [Tools](#)
- [Working with Color](#)
- [View Options](#)
- [Image Effects](#)

Chapter 3

Tools

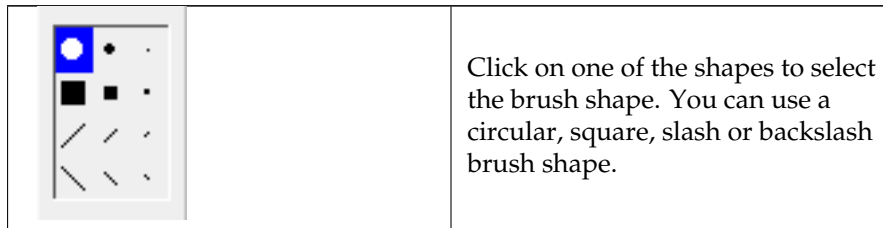
3.1 Tool Reference

A quick way to select a tool in KolourPaint is to press the single key shortcut associated with it, documented below and in the Tool Box tooltips. You can also hold Alt+Shift while pressing the key, which is necessary when you are writing text (as the single key shortcuts will be disabled). For example, to select the brush, press Alt+Shift+B or just B (when not writing text).

- Brush (B)
- Color Eraser (O)
- Color Picker (C)
- Connected Lines (N)
- Curve (V)
- Ellipse (E)
- Eraser (A)
- Flood Fill (F)
- Line (L)
- Pen (P)
- Polygon (G)
- Rectangle (R)
- Rounded Rectangle (U)
- Selection (Elliptical) (I)
- Selection (Free-Form) (M)
- Selection (Rectangular) (S)
- Spraycan (Y)
- Text (T)

3.2 Brush

Click or click and drag with the brush to draw.



The left mouse button draws in the foreground color. The right mouse button draws in the background color.

3.3 Color Picker

To set the foreground color, left click on a pixel. To set the background color, right click on a pixel. KolourPaint will then return to the previously selected tool.

3.4 Connected Lines and Polygon

Click and drag to draw connected lines. The polygon tool is used in the same way, however, the start and end points are automatically connected to form a polygon.

The left mouse button draws in the foreground color. The right mouse button draws in the background color, and will also reverse the fill color for polygons.

You can [set the line width](#). For polygons, you can also [set the fill style](#).

3.5 Curve

Click and drag to draw a line - this sets the start and end points. You can set up to two control points by dragging. To finish the curve without using both or any control points, click the other mouse button. The curve tool draws a Cubic Bezier.

The left mouse button draws in the foreground color. The right mouse button draws in the background color.

You can also [set the line width](#).

3.6 Ellipse

Click and drag to draw an ellipse.

The left mouse button draws in the foreground color. The right mouse button draws in the background color, and will reverse the fill color.

You can also [set the line width and fill style](#).

For additional functionality, use the modifier keys:

- Hold **Shift** and drag to draw a circle.
- To draw an ellipse with a center point of your choice, hold **Ctrl**, click on the center point, and drag until the ellipse is the correct size and shape.
- To draw a circle with a center point of your choice, hold **Ctrl** and **Shift**, click on the center point, and drag until the circle is the correct size.

3.7 Erasers

3.7.1 Eraser

Click and drag with the eraser to rub out mistakes.

NOTE

Unlike other tools, the erasers draw in the background color. To draw in the foreground color, use the right mouse button.

The eraser only has [square shapes](#). To draw with other shapes such as circles use the [Brush](#) and the right mouse button.

TIP

Double-click on the Eraser icon to clear the entire image. This is equivalent to using the [Clear](#) option on the Image menu.

3.7.2 Color Eraser

Click and drag to replace pixels of the foreground color with the background color. To replace all pixels similar (but not necessarily exactly equal) to the foreground color, such as in dithered images and photos, use a [Color Similarity](#) setting other than Exact.

NOTE

Unlike other tools, the erasers draw in the background color. To replace pixels of the background color with the foreground color, use the right mouse button.

You can configure the [eraser size](#).

TIP

Double-click on the Color Eraser icon to apply it to the entire image.

3.8 Flood Fill

Click to fill a region. To fill a dithered region, use a [Color Similarity](#) setting other than Exact.

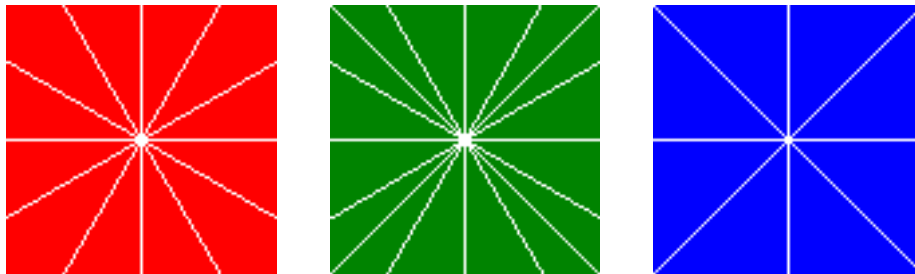
The left mouse button fills in the foreground color. The right mouse button fills in the background color.

3.9 Line

Click and drag to draw a line.

The left mouse button draws in the foreground color. The right mouse button draws in the background color.

You can also [set the line width](#).



- Hold **Ctrl** to draw lines angled at the nearest multiple of 30 degrees - these are the lines in the red diagram.
- Hold **Shift** to draw lines angled at the nearest multiple of 45 degrees - these are the lines in the blue diagram.
- Hold **Ctrl** and **Shift** to draw lines angled at the nearest multiple of 30 or 45 degrees - these are the lines in the green diagram.

3.10 Pen

Click to draw a dot or click and drag to draw a freehand line.

The left mouse button draws in the foreground color. The right mouse button draws in the background color.

3.11 Rectangles

Click and drag to draw a rectangle. The Rounded Rectangle is a Rectangle with rounded corners.

The left mouse button draws in the foreground color. The right mouse button draws in the background color, and will reverse the fill color.

You can also [set the line width and fill style](#).

For additional functionality, use the modifier keys:

- Hold **Shift** and drag to draw a square.
- To draw a rectangle with a center point of your choice, hold **Ctrl**, click on the center point, and drag until the rectangle is the correct size and shape.
- To draw a square with a center point of your choice, hold **Ctrl** and **Shift**, click on the center point, and drag until the square is the correct size.

3.12 Selections

Use the selection tools to draw out the boundary of a selection.


To move the selection, click and drag on it. The main view will scroll as required to allow you to move the selection to part of the image that is not currently displayed.

You can free-form [Resize](#) the entire image or [Smooth Scale](#) the selection using the corresponding handles. Hold **Shift** while free-form scaling the selection to maintain aspect ratio. The right mouse button invokes a context menu with common Edit commands and [Image Effects](#).

TIP

You can use the cursor keys while drawing out the boundary of the selection or while moving it.


If you hold **Ctrl** before moving the selection, then you will move a copy of it. The selection will be smeared when moving it while **Shift** is held.

 The image shows two icons for selection modes. The top icon is labeled 'Opaque' and shows a selection with a solid background. The bottom icon is labeled 'Transparent' and shows a selection with a dashed border and a transparent background.	<p>There are two selection modes: Opaque (default) and Transparent. If you use the Transparent selection mode, all pixels of the background color will be transparent (background subtraction). This allows you to paste a selection without the background. To perform background subtraction on a dithered image, use a Color Similarity setting other than Exact.</p>
--	--

You can apply Image Effects to a selection - see the [Image Effects](#) section for more information.

3.13 Spraycan

Click and drag to spray graffiti. Hold down the mouse button for a more concentrated spray.

 The image shows the Spraycan tool icon. It features a blue square with a white spray pattern, a black circle with a white spray pattern, and a larger black circle with a white spray pattern.	<p>Click on one of the shapes to select the spray size. You can select from spray sizes of 9x9, 17x17 and 29x29.</p>
--	--

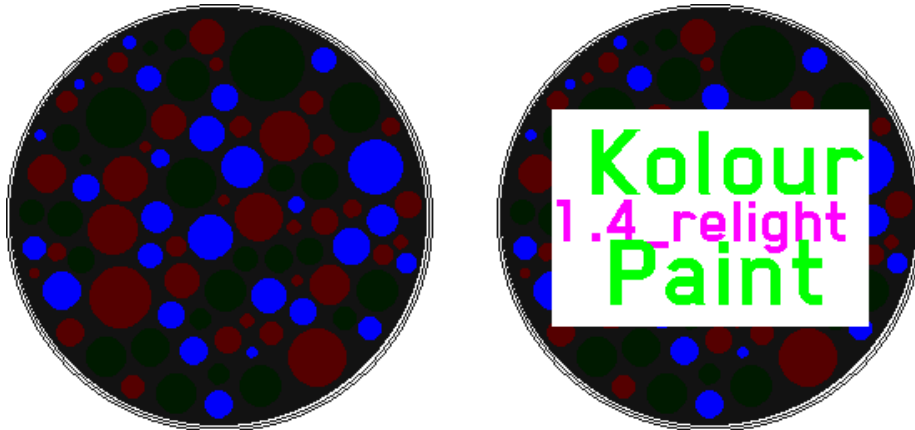
The left mouse button draws in the foreground color. The right mouse button draws in the background color.

3.14 Text

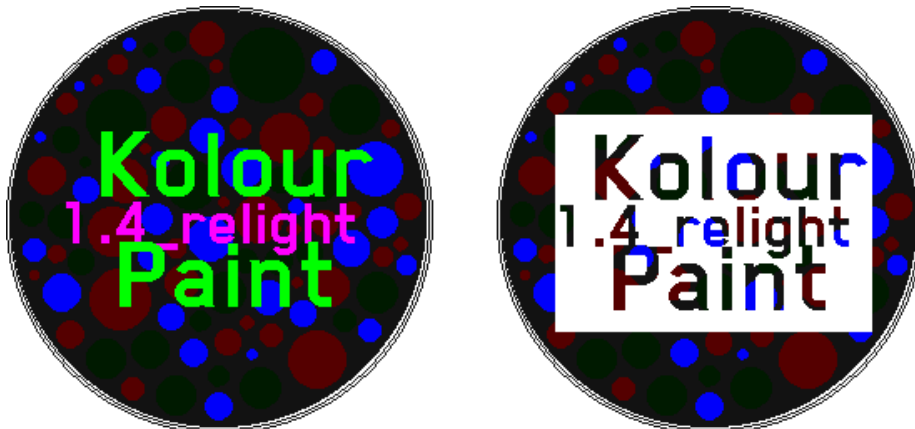
Click and drag an area in which to write text. Click and drag on the border to move it. You can resize the text box by dragging on the handles or by using the [Resize](#) dialog.

TIP
If you have deselected a text box you can use Undo to edit the text again.

3.14.1 Using the Transparent Color



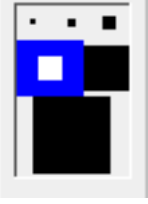

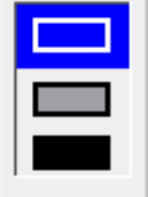
The left picture shows the example image. The right picture shows the addition of text with opaque foreground and background colors.



The left picture shows the addition of text with opaque foreground colors and a transparent background color. The right picture shows the addition of text with a transparent foreground color and opaque background color.

3.15 Common Tool Options

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 A vertical panel with a grey background. At the top, there are three small black squares. Below them is a larger blue square with a white square inside it, indicating the selected eraser size. At the bottom is a large black square.		<p>Click on one of the squares to select the eraser size. You can select from squares of side length 2, 3, 5, 9, 17 and 29 pixels. The eraser size setting affects the Erasers.</p>
 A vertical panel with a grey background. It contains five horizontal lines of varying thicknesses. The top line is blue and highlighted, indicating the selected line width. The other lines are black.		<p>Click on one of the lines to select the line width. You can select from line widths of 1, 2, 3, 5 and 8 pixel(s). The line width setting affects the Connected Lines, Curve, Ellipse, Line, Polygon, Rectangle and Rounded Rectangle tools.</p>
 A vertical panel with a grey background. It contains three rectangular options. The top one is a blue rectangle with a white border, indicating the selected fill style. The middle one is a grey rectangle, and the bottom one is a black rectangle.		<p>Click on one of the rectangles to select the fill style. You can select from No Fill, Fill with Background Color and Fill with Foreground Color. The fill style setting affects the Ellipse, Polygon, Rectangle and Rounded Rectangle tools.</p>

Chapter 4

Working with Color

4.1 The Color Box



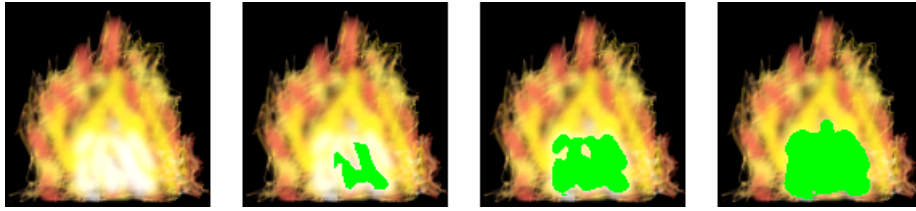
The Color Box has 3 main sections: the Color Tablet, the Color Palette and the Color Similarity Selector.

The Color Tablet shows the current foreground color as a square on top of another square representing the current background color. When drawing with the left mouse button, the foreground color is used, and when drawing with the right mouse button the background color is used (except for the [Erasers](#)). You can click on the double-ended arrow to swap the foreground and background colors.

The Color Palette shows a selection of colors for you to choose from. The translucent pyramid represents the transparent color. Left-click on a color to set the foreground color and right-click on a color to set the background color. You can also drag and drop any opaque color into the Color Tablet squares. To edit a color in the Color Tablet or Palette, double-click on it. The [Color Picker](#) tool allows you to select a color from the image.

Color Similarity allows you to work more effectively with dithered images and photos, in a comparable manner to the 'Magic Wand' feature of other paint programs. It applies to transparent selections, as well as the [Flood Fill](#), [Color Eraser](#) and [Autocrop / Remove Internal Border](#) tools. Double-click on the Color Similarity Selector to choose how similar colors must be to be considered identical. When using selections in Transparent mode, any color in the selection that is similar to the background color will also be made transparent.

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The left picture shows the example image. The right pictures demonstrate the use of a flood fill, with Color Similarity settings of 5%, 15% and 30%. In this example, with a Color Similarity setting of Exact, a flood fill at (80, 100) would only fill one pixel, as the surrounding pixels are similar but not identical. As Color Similarity is increased, more pixels that are similar in color are considered identical, hence the fill extends further.

Chapter 5

View Options

5.1 View Options Reference

[Zoom incorporating the Grid](#)

[Thumbnail](#)

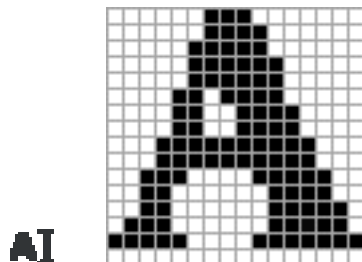
5.2 Zoom incorporating the Grid

Increase the zoom level to edit images with more precision, or reduce it to see more of the image.

IMPORTANT

At zoom levels that aren't multiples of 100%, parts of the image may appear to move when the user interacts with it. Other minor redraw glitches may also occur at such zoom levels.

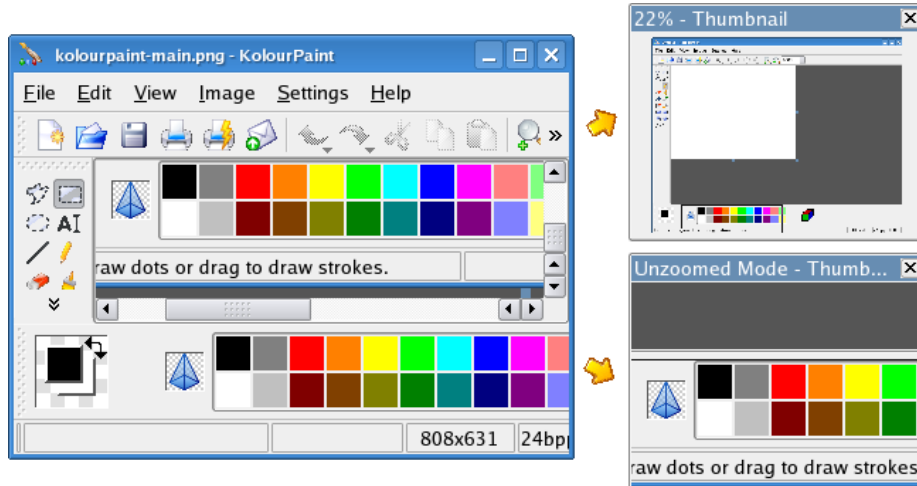
At zoom levels of 600% or greater that are also multiples of 100%, you can Show Grid to more accurately edit individual pixels.



The first picture shows the [Text](#) tool icon, while the latter shows it at 600% zoom with the grid on.

TIP
Another way of zooming when not drawing is to scroll the wheel while holding **Ctrl**.

5.3 Thumbnail



If Zoomed Thumbnail Mode is selected, the entire image is displayed, scaled as required to fit the thumbnail window (top-right picture).

Otherwise, the thumbnail displays as much of the image as possible, starting from the top-left of the main view (bottom-right picture).

Chapter 6

Image Effects

6.1 Image Effects Reference

[Autocrop / Remove Internal Border](#)

[Balance](#)

[Clear](#)

[Emboss](#)

[Flatten](#)

[Flip](#)

[Invert](#)

[Reduce Colors](#)

[Reduce to Grayscale](#)

[Reduce to Monochrome \(Dithered\)](#)

[Resize / Scale](#)

[Rotate](#)

[Set as Image \(Crop\)](#)

[Skew](#)

[Soften & Sharpen](#)

[More Effects](#)

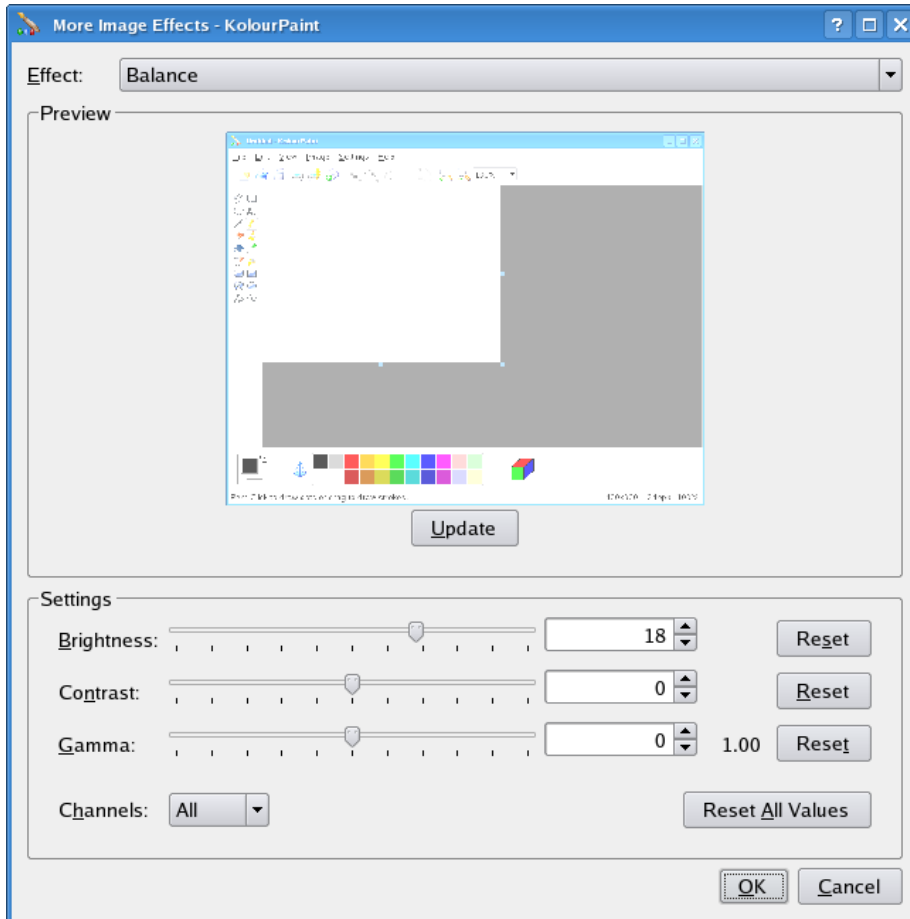
[Notes](#)

6.2 Autocrop / Remove Internal Border

This automatically removes the border of an image or selection. Use Autocrop if you have a figure that does not fill the entire image or selection and you wish to remove the excess whitespace. To use this feature with a dithered image border, you will also need to use [Color Similarity](#).

6.3 Balance

This feature is accessible from the [More Effects](#) dialog.



This allows you to set the brightness, contrast and gamma of the image or selection.

NOTE

The more common measure of gamma (a decimal from 0.10 to 10.00) is located between the Gamma spinbox and the Reset button.

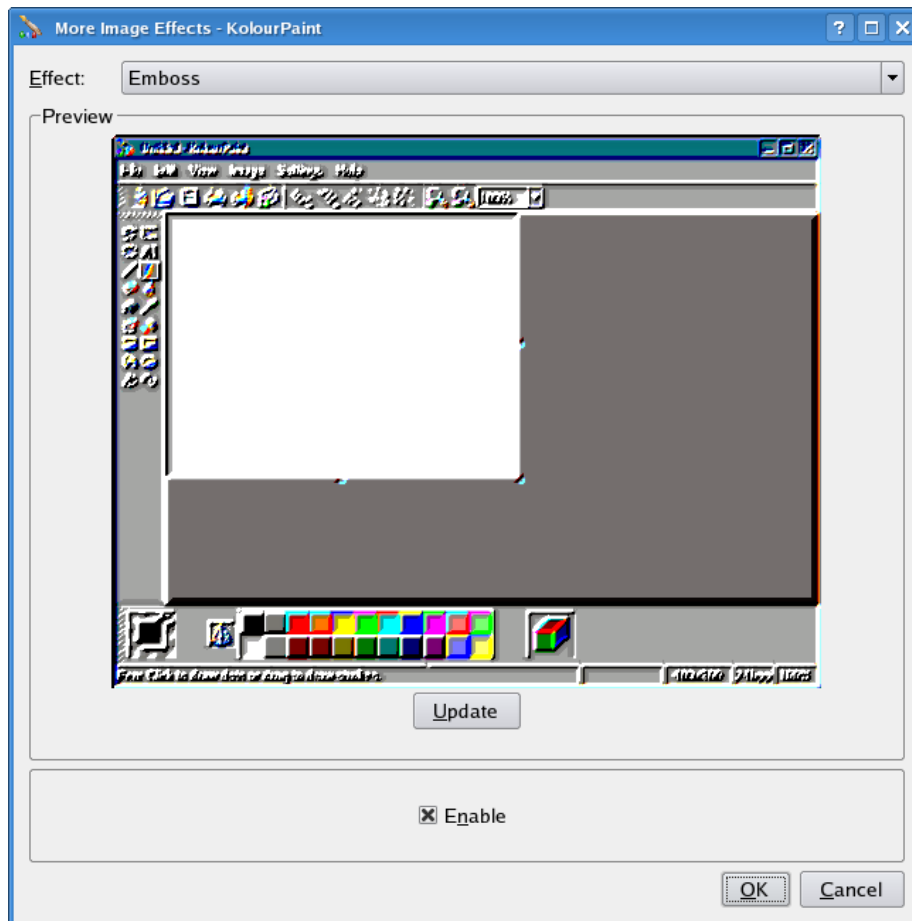
6.4 Clear

This fills the entire image or selection with the background color.

TIP
Double-click on the [Eraser](#) icon to clear the entire image.

6.5 Emboss

This feature is accessible from the [More Effects](#) dialog.

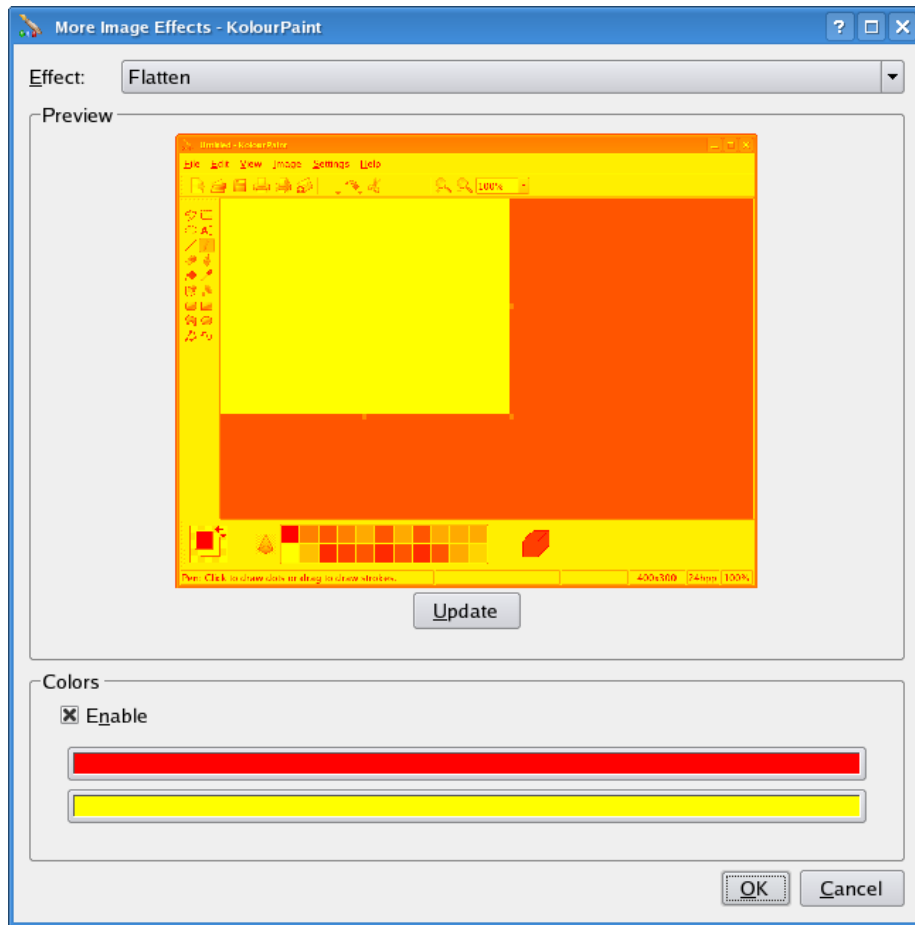


Check Enable to apply the Emboss effect. This emphasises the edges and gives the image or selection an "engraved look".

6.6 Flatten

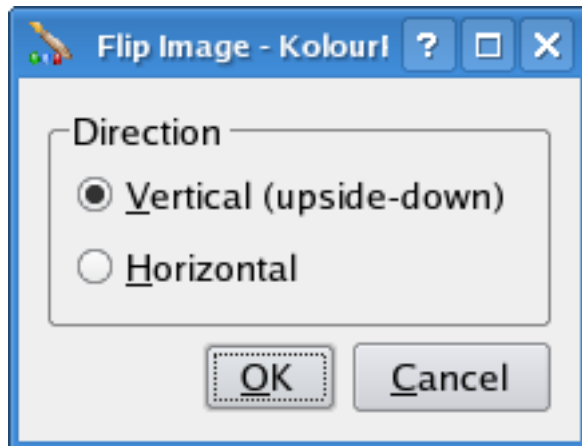
This feature is accessible from the [More Effects](#) dialog.

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This recolors the image with varying shades of the two selected colors.

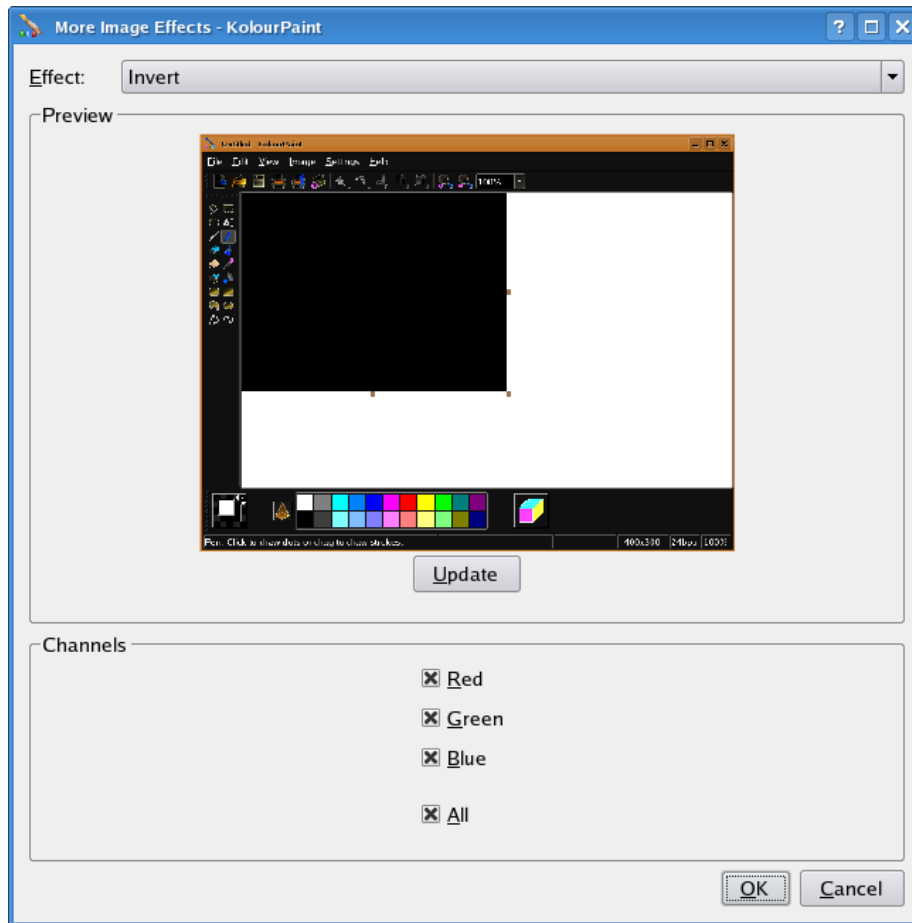
6.7 Flip



This flips the entire image or selection horizontally or vertically.

6.8 Invert

This feature is accessible from the [More Effects](#) dialog.



This allows you to invert one or more RGB channels in the image or selection. Select All to change a photo into a negative and vice versa. This generally looks quite funny.

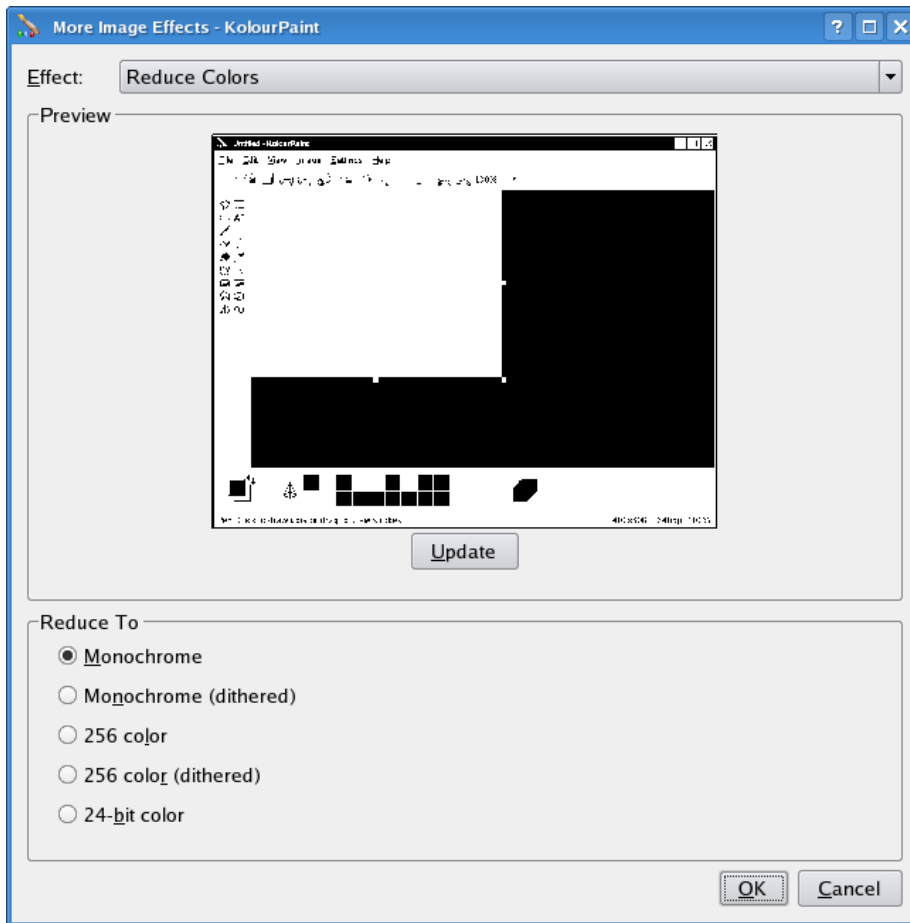
TIP

To quickly invert all channels, you do not need to use this dialog. You can instead access the Invert Colors item in the Image or Selection menu.

6.9 Reduce Colors

This feature is accessible from the [More Effects](#) dialog.

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This reduces the number of colors used by the image or selection, with or without dithering.

Dithering generally provides better quality results, however, you may wish to disable it for artistic effects; e.g. using Monochrome instead of Monochrome (Dithered) gives a silhouette effect.

Another important distinction is that while Monochrome (Dithered) will always reduce the entire image or selection to black and white, Monochrome will do this only if the image or selection contains more than 2 colors.

TIP

For a quick, dithered monochrome image or selection, use the [Reduce to Monochrome \(Dithered\)](#) item of the Image or Selection menu.

NOTE

Changing the number of colors here has no effect on the color depth of the file format. If you want to change the color depth, you should select it in the file saving dialogs. Note that, confusingly, changing the color depth also changes the number of colors.

6.10 Reduce to Grayscale

This reduces the entire image or selection to grayscale.

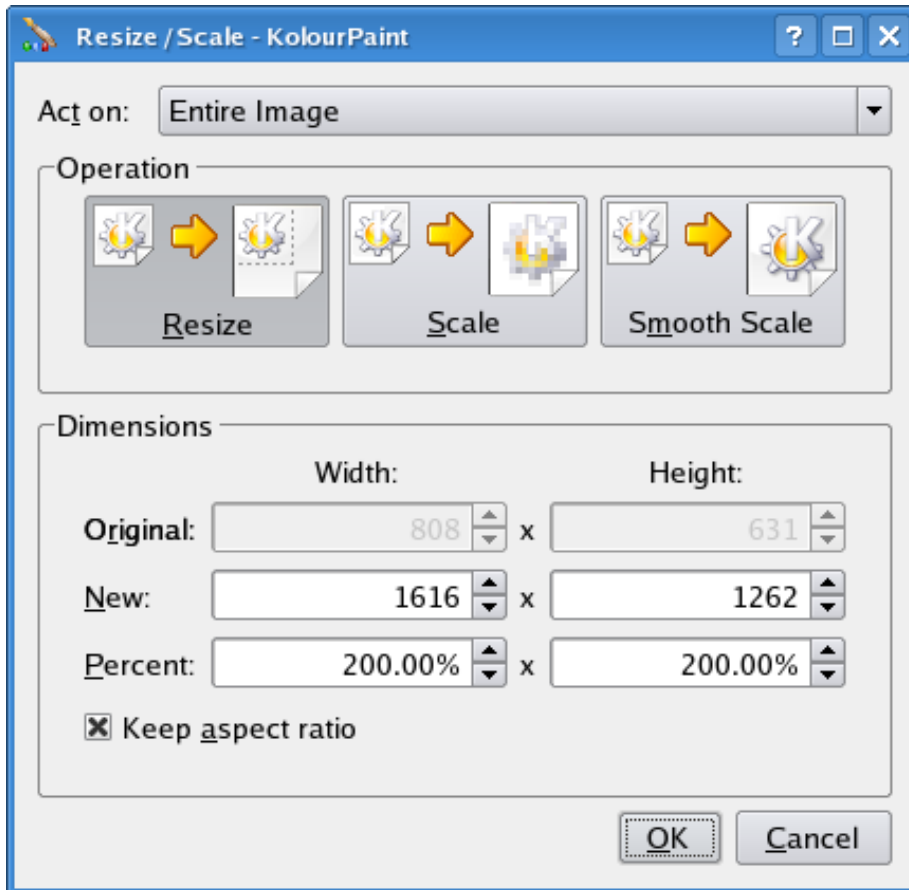
6.11 Reduce to Monochrome (Dithered)

This reduces the entire image or selection to black and white.

TIP

If you do not want the image or selection to be dithered, use the [Reduce Colors](#) dialog.

6.12 Resize / Scale



Resizing the image changes the dimensions of the image without applying a transformation to the existing contents. Scaling the image will stretch the existing contents to the new dimensions. Smooth Scale generally provides better quality results than Scaling, by blending neighbouring colors.

You can express the new dimensions in pixels, or as a percentage of the original size. If you select Keep aspect ratio, the width and height will be scaled by the same percentage.

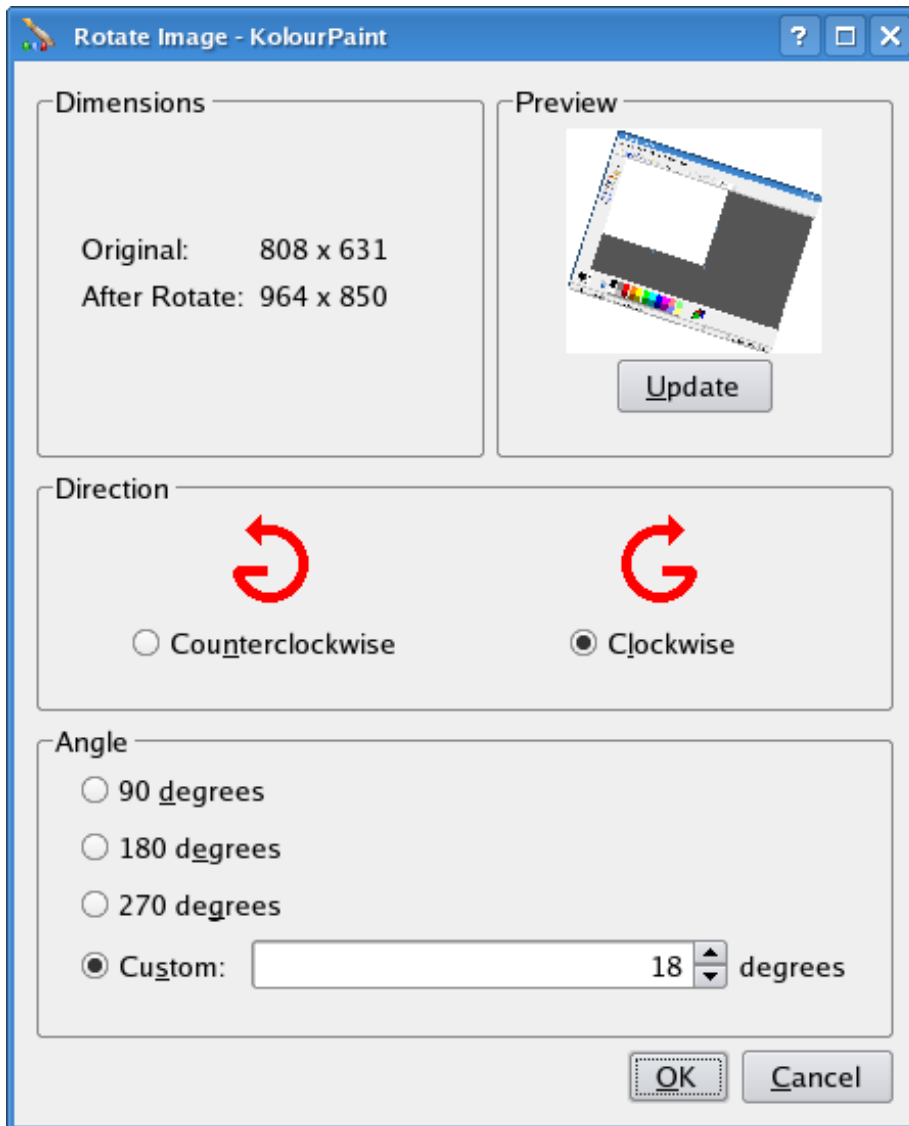
TIP

You can free-form Resize the entire image or Smooth Scale the selection using the corresponding handles.

NOTE

Only scaling is supported for selections, and only resizing is supported for text boxes. See [Notes](#) for additional details about applying these effects.

6.13 Rotate



This rotates the image. You can specify the angle and direction of rotation.

TIP

You can reverse the direction of rotation by specifying a negative custom angle.

NOTE

See [Notes](#) for details about applying this effect to a selection.

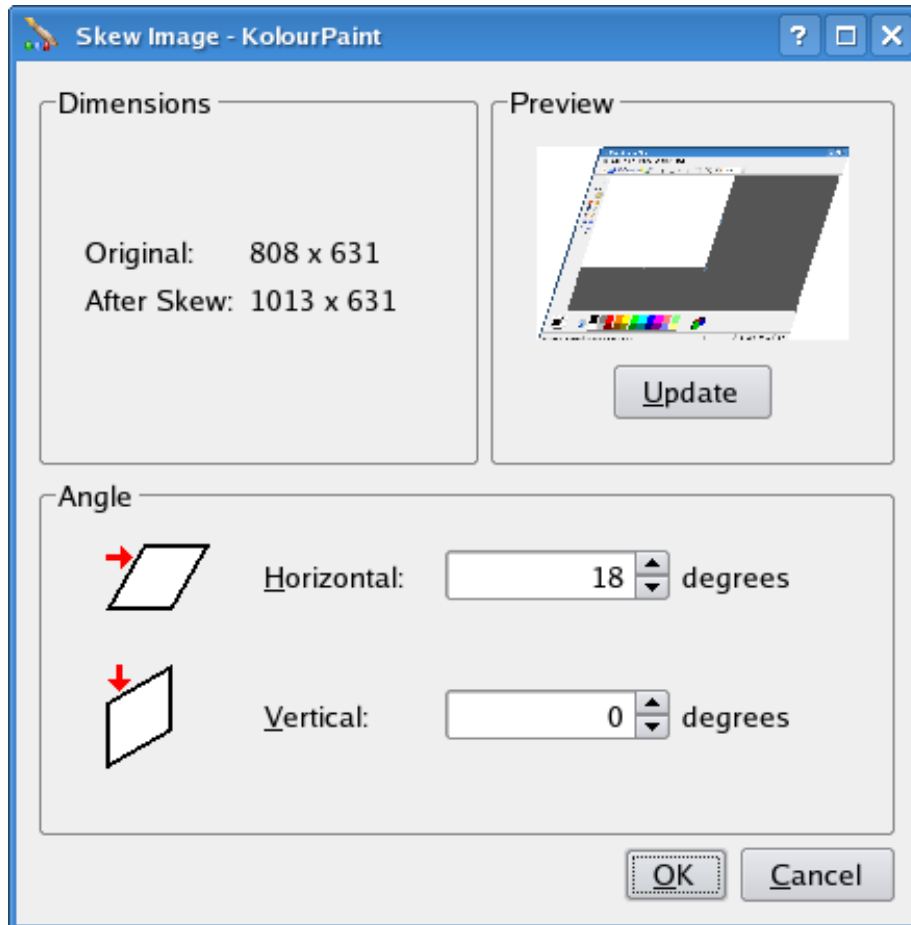
6.14 Set as Image (Crop)

This will set the selection as the image.

NOTE

This is only available when you have an active selection.

6.15 Skew



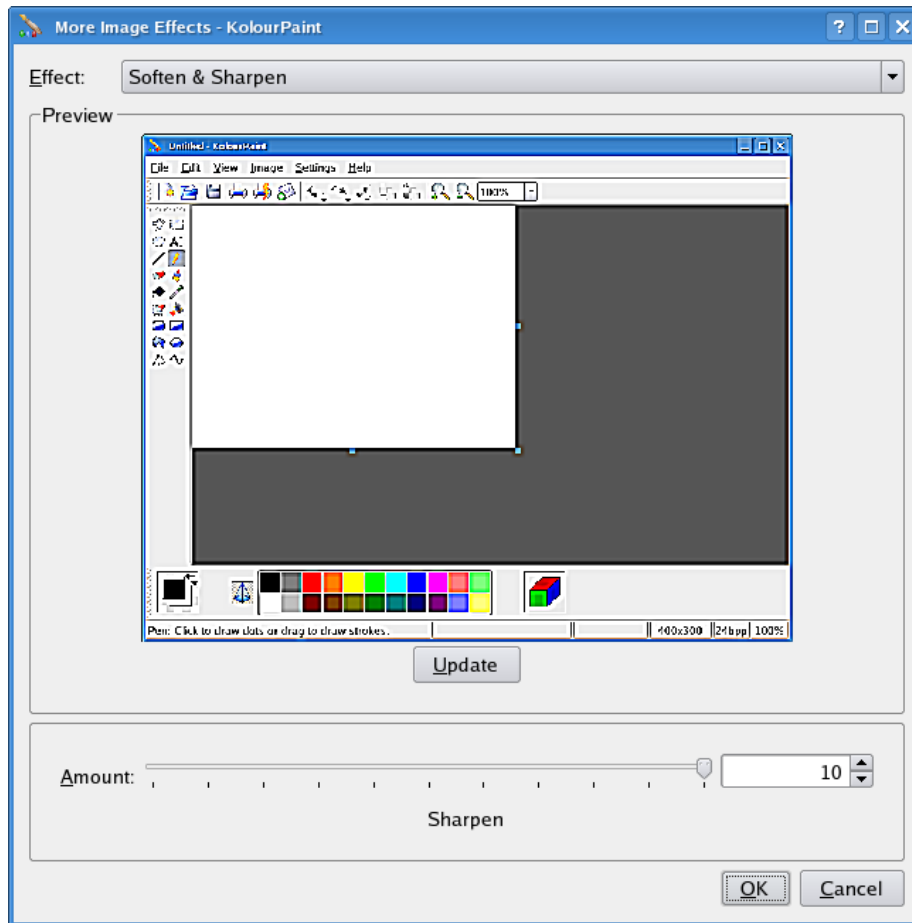
This skews the entire image or selection horizontally and/or vertically.

NOTE

See [Notes](#) for details about applying this effect to a selection.

6.16 Soften & Sharpen

This feature is accessible from the [More Effects](#) dialog.



Use this effect to soften or sharpen the image.

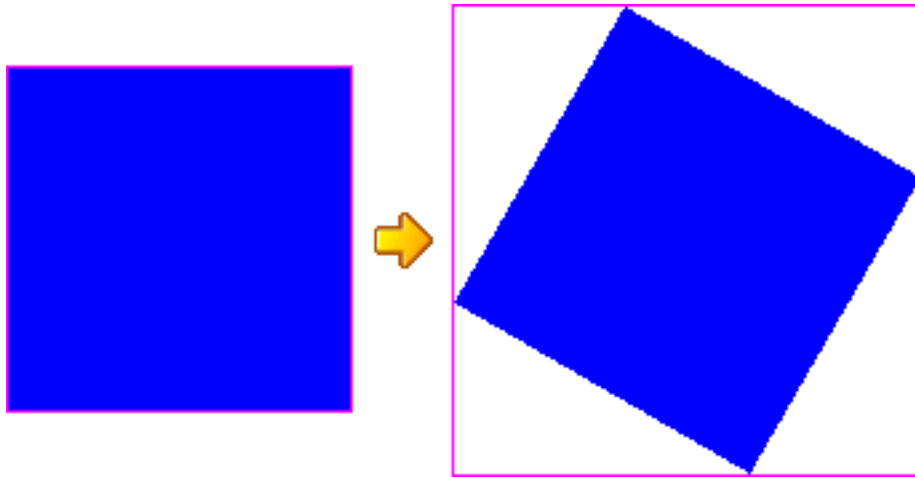
6.17 More Effects

This dialog contains the [Balance](#), [Emboss](#), [Flatten](#), [Invert](#), [Reduce Colors](#) and [Soften & Sharpen](#) features.

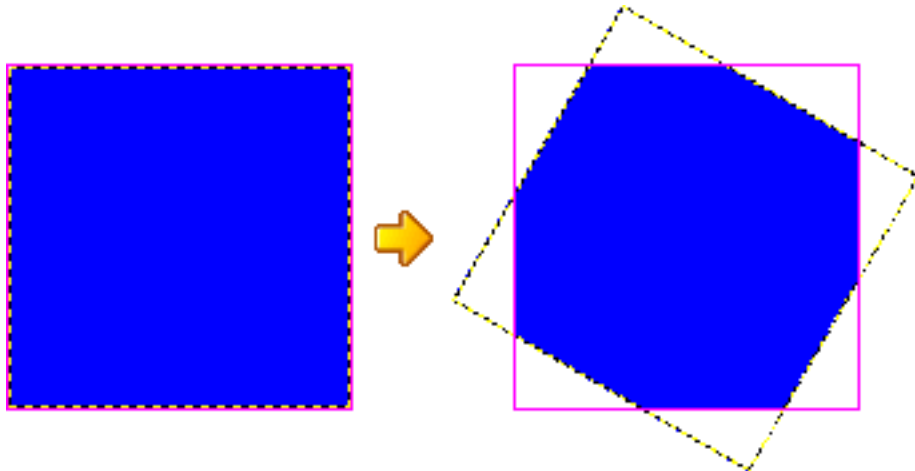
6.18 Notes

[Resizing / Scaling](#), [Rotating](#) and [Skewing](#) may change the dimensions of the image. You can view the new dimensions in the dialog.

If you apply these effects to an image, the image will be resized if necessary. However, if you apply these effects to a selection, the image will not be resized, even if the transformed selection does not fit.



The left image has been rotated 30 degrees clockwise to form the right image. KolourPaint has automatically enlarged the image to accommodate the larger contents.



The left *selection* has been rotated 30 degrees clockwise to form the right selection. The image size has remained the same, hence parts of the selection will not be visible without [Resizing](#) the *image*.

Chapter 7

Credits and License

It might not be concise documentation; it might not be complete documentation; but it is honest documentation.

—Carl Tucker

KolourPaint

Program Copyright (c) 2003, 2004, 2005 Clarence Dang dang@kde.org

KolourPaint-specific icons Copyright (c) 2004, 2005 Kristof Borrey borrey@kde.org,
Nuno Pinheiro nf.pinheiro@gmail.com, Danny Allen dannya40uk@yahoo.co.uk

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Thurston Dang thurston_dang@users.sourceforge.net

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Appendix A

Installation

A.1 How to obtain KolourPaint

KolourPaint is part of the KDE project <http://www.kde.org/> .

KolourPaint can be found in the kdegraphics package on <ftp://ftp.kde.org/pub/kde/> , the main FTP site of the KDE project.

More frequent releases with support for previous versions of KDE are available at <http://kolourpaint.sourceforge.net/> .

A.2 Requirements

KolourPaint 1.4_relight requires KDE 3.5.

A.3 Compilation and Installation

NOTE

If you are reading this help in the KHelpCenter, then KolourPaint has already been installed on this system and you do not need to follow these generic instructions.

In order to compile and install KolourPaint on your system, type the following in the base directory of the KolourPaint distribution:

```
% ./configure
% make
% make install
```

Since KolourPaint uses **autoconf** and **automake** you should have no trouble compiling it. Should you run into problems please report them to the KDE mailing lists.

A.4 Configuration

KolourPaint should run without any additional configuration.