



# DTP with Scribus MAKING PAGES

Linux needn't be the gooseberry at the desktop publishing party. As Frank Wieduwilt explains, Scribus is on its way to becoming a serious solution for print production under Linux

Until recently, it seemed as if there wasn't ever going to be a program for the production of high-quality print material for Linux. Adobe discontinued the development of FrameMaker for the penguin operating system some time ago and other companies didn't seem to be interested in a **DTP** program for this platform. Approximately a year ago however, Scribus came into existence. Since then, this has taken great strides toward becoming a program suitable for basic layout tasks. The most important functions for document organisation are already there and the program is sufficiently stable for non-professional purposes.

This article reviews the **Developer Version 0.5.7**. The older version 0.5.0 has the advantage of greater stability, however it does not possess all in the functions mentioned here. Development presses ahead and the next stable version will soon be available.

## Installation

Scribus is available on the program homepage as source text. First, download the file scribus-0.5.7.tar.gz or copy it from this month's coverdisc then unpack it with the command `tar -xzf scribus-0.5.7.tar.gz` or with a program such as ark. For translation, you will also need Qt (self-compiled or including the dev(el) package) in a version above 2.2 (but not Qt 3.x). If you have several installed Qt versions, do not forget to direct the variable QTDIR to the correct Qt directory with:

```
export QTDIR=/usr/lib/qt2
```

Change to the newly created scribus-0.5.7 directory, and enter the `.configure` and `make` commands in a

console to translate the program. For installation, use `su` to go to root and then enter the `make install` command. From now on, start Scribus by the typing the `scribus &` command in a console.

## Desktop Publishing

Desktop Publishing is the generic term for the production of publications on the computer. Instead of different people writing, arranging and setting a document, a graphic designer can do all these tasks alone with the help of a DTP program. Text and pictures can therefore be laid out exactly, to form a high quality document ready for print.

DTP programs allow the pixel-exact, typographically correct setting of text and the precise integration of graphics. These are capabilities that normal word processing programs do not usually have.

An important component of DTP is the WYSIWYG principle (What You See Is What You Get). This means that the product the designer creates on the screen is exactly the same as what it later looks like on paper.

DTP documents can be printed using different devices, from laser printers to professional typesetters. Lately, the PDF format has been added as a universal format for the production of publications. Documents in the **PDF** format can be both viewed on a computer screen as well as printed out in high quality.

DTP allows the economical production of print material of all shapes and sizes, from menus and flyers all the way up to magazines.

**DTP** Desktop Publishing means the production of print material from a computer (see box 1). You will also find an introduction to DTP on the Scribus Web page.

## Franz Schmid

**Franz Schmid, the author of Scribus, works as a commercial employee in a natural stone company in Eichstaett, Germany. Frank Wieduwilt and Patricia Jung ask Franz about the development of Scribus.**

**Linux Magazine** What was your motivation to develop a DTP program for Linux?

**Franz Schmid** I have worked with all kinds of computers for the last 19-20 years, firstly with various home computers, then Macintosh and now Linux. I enjoyed working on various DTP programs on my Mac, and then sorely missed these under Linux. StarOffice was the next best thing, but the problem is that it doesn't run on all platforms and is, in my opinion, too "fat" if you only want to do something quickly. The other alternative, KWord, was simply unusable a year ago when I started on Scribus. So I thought to myself, let's try and see if you can put something together. The real reason why I gave it a go was simply the fun I have with programming.

**LM** What is your target group with Scribus?

**FS** It ranges from ambitious normal users, who want to do their own layouts every now and then, all the way to professionals, who want to look over the garden fence and see what Linux looks like.

**LM** What are your role models, and where do

you want to go with Scribus?

**FS** My first point of orientation was QuarkXPress 3.32, but now I also try to integrate interesting and useful concepts from Pagemaker and Indesign. My final goal is to have the approximate functionality of Quark 4, naturally with appropriate modernisations.

**LM** Will it include functions such as import filters for word processing and automatically produced tables of contents? How about the possibility of allowing pre-selected text to be integrated with format template tags, so that it is automatically formatted?

**FS** Import filters will come with time – they are however rather time-consuming, particularly where binary formats are concerned. Things such as automatic tables of contents, however, will be built into one of the next versions – that I am sure of. I still have very many ideas that await realisation. Whereby... that formatting tags idea is very interesting and is something that I hadn't even thought of.

**LM** Projects such as the Gimp justify the lack of colour separation with patent problems.

How then does Scribus achieve this functionality?

**FS** The colour separation in Scribus is in principle quite primitive. Each of the four basic print colours simply has its own page. The procedure for this can be seen in the PostScript Reference Manual and in the PDF Reference Manual. The contents of these manuals were expressly intended and published for the creation of drivers. The separation found in Scribus can also be created with Gimp – the difference is that Scribus writes the result straight into a file. Patent problems only arise with special colour transfer curves and special colours (e.g. Pantone colours).

**LM** What are you working on at present?

**FS** At the moment, I am working to prepare Scribus for the next stable version 0.6, which means removing as many bugs as possible, fully programming all inserted features and bringing the translation up to date.

**LM** Could you use any help, and if so, how?

**FS** I can always use help, as I am the only programmer on the project. Any feedback is welcome, particularly from those who are proficient in HTML and building Web pages.

## Getting started

After starting for the first time, the program welcomes you with a large empty main window. To create a new document, select File/New... from the menu or click the button with the empty page in the tool bar. A dialog box appears, in which you can set up the basic properties of the new document (Figure 1).

You can specify the page size in the Page Size area. A range of different formats are pre-defined, but by selecting the Custom format, the user can define his or her own paper format.

Under Margin Guides, you can define the spacing at the sides of the page. Note that margins in a DTP program are more functional than mere guideline assistance, i.e. all objects can also be externally

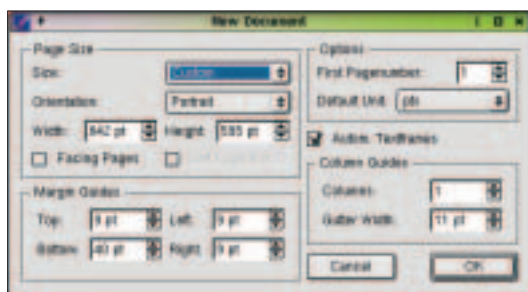


Figure 1: Creating a new document

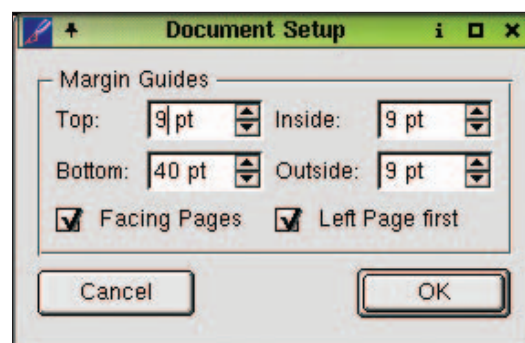


Figure 2: Setting page margins

positioned. With the Facing Pages option, Scribus automatically creates left and right pages, in which the margins of the left and right pages are mirrored.

Selecting the Autom. Textframes Box option produces frames for the viewing of text, which lie exactly within the page margins. In the Column Guides area, you can specify the number of and distance between columns. A text frame can then be created for each column.

The page margins can be adjusted and reset at any time. To do this, simply select File/Document Setup... from the menu. In the pop-up dialog box, you can now set the margins to what you want (Figure 2).

**Context menu** A pop-up menu that offers commands, which are useful in connection with the selected object.

Context menus are normally opened by right-clicking an object.



**PDF** Portable Document Format, developed by the company Adobe, is a file format for the exchange of formatted text independent of operating system.

### Easy operation

Scribus can be operated completely with the mouse. All program functions can be reached by means of the menu or tool windows. The most important tools are shown in Figure 3 next to the program window. They can be positioned on the screen independent of this window and be faded in and out individually using the Tools menu. Most important program functions can also be reached through the **context menus** of the individual layout objects. The most important tool is the measurements palette (as seen in Figure 3 at the bottom left-hand corner). This is used to format the frames and contents thereof, and it contains two tabs: Frames will show you the co-ordinates and the position

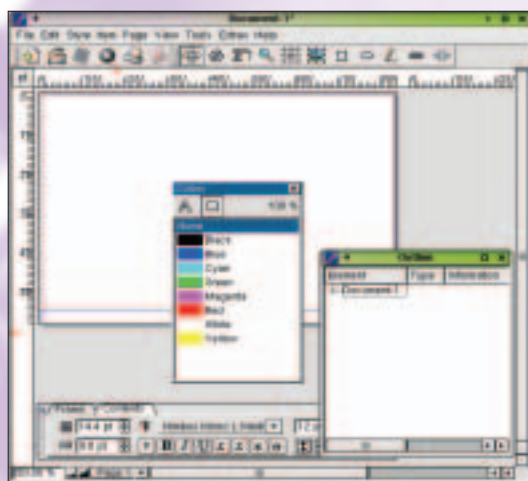


Figure 3: The set of tools Scribus offers

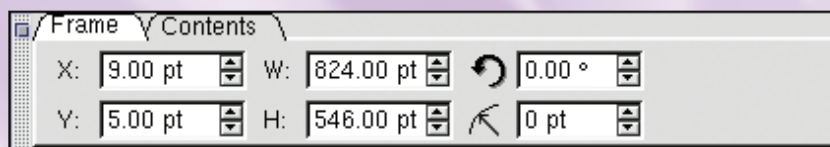


Figure 4: The measurements palette – Frame format

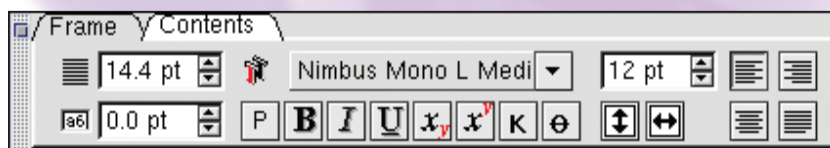


Figure 5: The measurements palette – Content format

## Table 1: Important key combinations

Function	Key combination	Function	Key combination
Create new file	Ctrl+N	Group objects	Ctrl+G
Open file	Ctrl+O	Ungroup objects	Ctrl+U
Close file	Ctrl+W	Zoom: Whole page	Ctrl+0
Save file	Ctrl+S	Zoom: Original size	Ctrl+1
File information	Ctrl+I	Soft separation	Ctrl+-
Print file	Ctrl+P	Paragraph left justified	Ctrl+L
Quit program	Ctrl+Q	Paragraph right justified	Ctrl+R
Select all	Ctrl+A	Paragraph centred	Ctrl+E
Modifies object	Ctrl+M	Insert page number	Alt+#
Duplicate object	Ctrl+D		

of the selected frame (Figure 4); Contents will indicate all text formatting options (Figure 5).

Nearly all commands can also be executed by keyboard shortcuts, so that the program can be also operated by the keyboard. The pre-set key combinations can be found in table 1. To change these, select Edit / Preferences... from the menu. In the Preferences dialog box, go to General and click Keyboard Shortcuts.... This will put you in a new dialogue box, the top part of which lists nearly all program functions. Click the User Defined Key button in the bottom part and type the desired key combination for the selected function. Clicking OK will save the new setting.

### Everything is framed

All elements of a document are arranged in frames, which you can arbitrary position on the page. These are represented on the screen with a dotted edge; which is red for a selected element (Figure 6). Each frame has a tab (or a small square) on all four corners, which can be held and dragged with the mouse to change the size of the frame.

One way of making the exact positioning of elements easier is to make the help lines magnetic with the View/Snap to Guides command – this means that the edges of the element will automatically “snap” onto the help lines. The space of these guides can be changed in the program options, reached by means of the Edit/Preferences... menu command. Behind the Guides tab, you will find the necessary options. You can create a rough grid with Major Grid Spacing, and then a fine grid with Minor Grid Spacing. Furthermore, you can also specify whether the help lines are to be shown in front of or behind the elements.

### Text

So how does the text get into the frames? There are two possibilities: The first is to click on the Edit Contents of Frame icon and enter the text in the desired frames. That is somewhat laborious with longer texts. It is therefore advisable to enter the text into a text editor or word processor first and then to load this into the frame. To do this, select the appropriate text

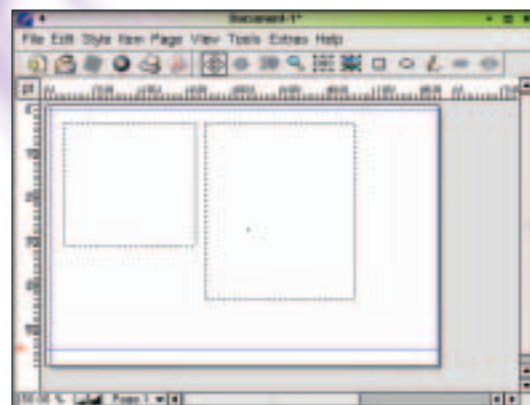


Figure 6: A frame is selected for editing

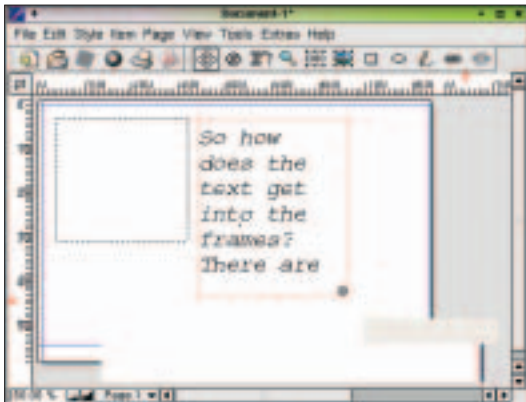


Figure 7: The text frame is too small

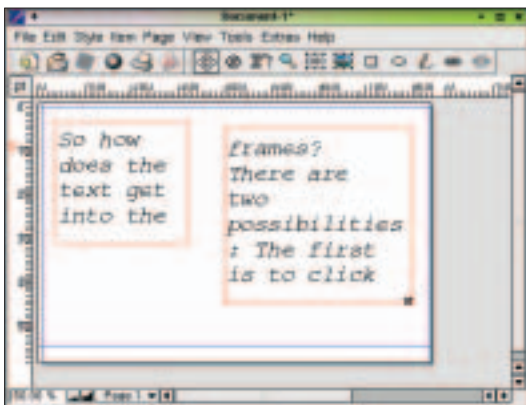


Figure 8: The text flows from one box to the other

frame in the Select Items mode, right-click the frame and then select Get Text... in the context menu. Scribus can only import unformatted text; if you use a word processing program (such as Abiword or KWord) for the creation of the text, you must pay attention to save the text with no formatting information.

If the text is too long for a frame, Scribus indicates this with a small box with an x through it, at the bottom right of the frame (Figure 7). To create more space, you do not necessarily have to increase the frame size – it can also be connected with another frame. To this end, mark the current frame, select the Create Textchains tool from the tool bar and click on the second frame. A continuous red line will now surround both frames and the text will flow from the first frame into the second, as shown in (Figure 8).

The formatting of paragraphs, as well as the type and size of fonts, is either done through the Style menu or by using the measurements palette (Figure 5).

If you intend to write the document as a PDF, Scribus can provide a kind of table of contents, which can be read in Acrobat reader. "Bookmarking" a frame will make the first line of this frame come up as a heading in the PDF table of contents. Simply right-click the desired frames and select Is Pdf-Bookmark from the context menu.

## Pictures

Scribus can import pictures in the PNG, JPEG, TIFF, XPM and EPS formats; other formats must be converted with

an image conversion process before the appropriate picture can be inserted in the document. You will first require a frame, which is inserted by clicking the Insert Picture button on the toolbar and then dragging the mouse on the page. Right clicking the empty element (marked with an X) will pop-up a context menu, in which you can click Get Picture... and then select the appropriate image file. A preview window integrated into the appropriate dialog box helps the finding and selecting of the correct graphic.

To change the size of a picture that has been imported, select the Modify... entry in the picture frame's context menu. The Horizontal Scaling and Vertical Scaling text fields allow the entry of specific scaling percentages (Figure 9). If you click the chain symbol next to these, the aspect ratio of the picture frame is maintained. In the Horizontal Offset and Vertical Offset fields, you can specify the distance between the picture and the upper left-hand corner of the frame.

## Editing frames

Once created, the frames are stacked one above the other in the order of their appearance; in each case the upper frame covers the lower. Only text frames have a default transparent background, so that the text of underlying frames can be seen through overlying text frames (Figure 10).

The frame sequence can be changed through the context menu – the background can also be coloured. For this purpose, select the Modify... entry from the

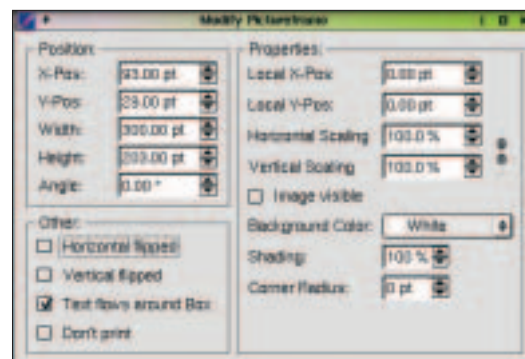


Figure 9: Editing picture frames

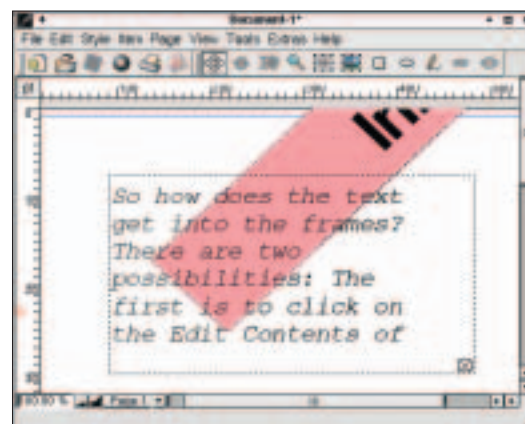


Figure 10: Transparent text frames

**Developer Version** There are frequently two versions of Linux programs: a stable version for the end user and a developer version, which integrates new functions that have yet to be fully tested.



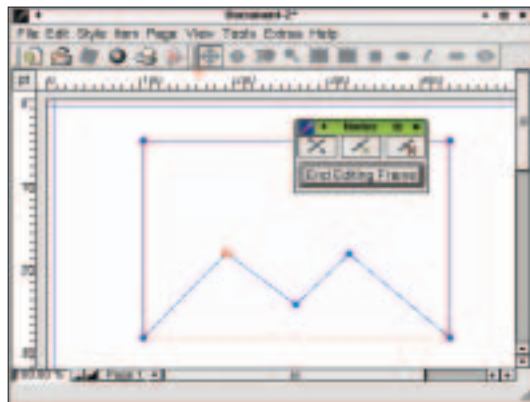


Figure 11: Changing the shape of a frame

context menu of the appropriate frame. Next, select a suitable colour from the Background Colour list in the dialog box. For text frames, the None choice means transparent. You can also determine and set the Shading as a percentage value. An example of this can be seen in Figure 12, where the background is yellow with a shading of 15 per cent.

A frame does not have to be rectangular, and by using the Item/Shape command from the menu, you can specify whether the marked frames are to be rectangular or oval. You can individually change the shape of a frame using Item/Shape/Edit Frame, which changes the active frame to dark blue with four marked corner points. A new tool bar offers three buttons, from left to right: Move Point, Insert Point and Delete Point (Figure 11).

Frames of any shape or size can therefore be produced. Select Insert Point and click to the place where you want a new corner point (in red) to appear. To move a corner point, click the appropriate button and drag the point concerned to the desired position. This feature is of particular importance where text is to flow around figures etc.

To create a frame with round corners, select the Modify... entry from the context menu. You will then

have to specify the radius of the corner in the Corner Radius text field of the Modify Textframe dialog box (Figure 12).

## Lines, ellipses and rectangles

Besides text frames and pictures, you can also draw lines, rectangles and ellipses. The buttons for these functions can be found in the tool bar. Each object can have any selected line and fill colour (Figure 13). The geometrical shapes are edited and arranged in exactly the same way as picture and text frames.

## Templates

Designers who lay out magazines and books don't want to have to manually repeat formatting procedures every time. Scribus therefore allows format templates for pages and sections in the same way as professional DTP programs. They are called page templates and are created by selecting Edit/Templates... from the menu. Clicking on New opens a dialog box, in which you can set the properties.

First, assign an appropriate name for the new page in the Name text field. For double-paged layouts, you can then select whether you want a right or left page from the list below.

As long as the Edit Template dialog box is open, you will be able to see the sample page in the work area. You can then add all the elements that repeatedly appear (e.g. header or footer lines). Automatic page numbers are inserted by pressing the Alt+# key combination in a text frame (for two digit numbers, press Alt+# twice).

Clicking the Exit button in the style page dialog box will automatically save the template together with the document. All elements that have been added to the sample page are protected against changes when working on a document that has been formatted in this way.

Using the Page/Insert... menu command, you will arrive at a dialog box, in which you can insert the pages (that are based on the style pages) into the document using the Left Page Based and/or Right Page Based lists. Changing the sample pages at a later time will also change all the existing pages based on that sample page. In order to assign another sample page to an existing page, select Page/Use Style Page... from the menu. You can then select the sample page for the current page in the pop-up dialog box.

Style Templates store positioning and spacing information for sections of text, not however font, size or colour. These formatting tasks must be carried out each time, using the commands in the Style menu or in the measurements palette. To get an overview of the existing style templates, select Tools/Show Style Templates from the menu. At first, none will be present. You can create such a template by double clicking the No Style entry. You can then define and set your own style templates in the ensuing dialog box



Figure 12: Frame with round corners

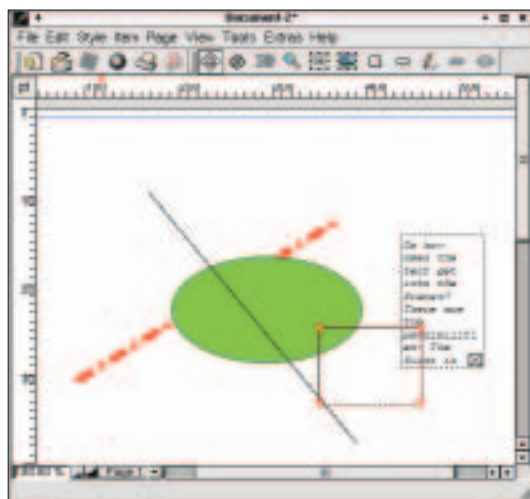


Figure 13: Drawing

Clicking New opens a window, which allows the entry of specifications for the appearance of the style. The style name is entered into the Name field, and after this the Vertical Spacing, Indent and Alignment fields are used to define the appearance of the section to be formatted. Clicking OK will bring you back to the style template overview. Save then stores the new template and closes the overview.

To use a template, simply select the desired paragraph or section and click the template name in the template list.

## Output

The author was not content with the PostScript printer driver provided with Qt, and as such developed a completely new PostScript driver. The File/Print... command will open a dialog box, in which you can set the appropriate print options (Figure 14).

In the Print Destination list, you can either select a printer or specify that the document is to be output to a file. If you decide for the latter, you must enter a file name in the File: text field. Range allows you to specify which pages and how many copies are to be printed.

The type of file to be printed is defined in the Options field. If you want to give the document to a printer, the Print Separations option will be of interest. This option causes the program to print the document in four parts – one for each of the colours: Cyan, Magenta, Yellow and Black.

To output files in PDF format, you'll be happy to know that you don't need any auxiliary programmes. Selecting File/Export.../Save as PDF... from the menu will bring up the Create PDF-File dialog box as seen in Figure 15.

Enter the name of the new PDF file in the Output to File field. Specify the output format and the resolution in the File Options area. 300 dpi is a good resolution for documents that are to be printed, but you can reduce this a lot (thereby making a smaller file), if the

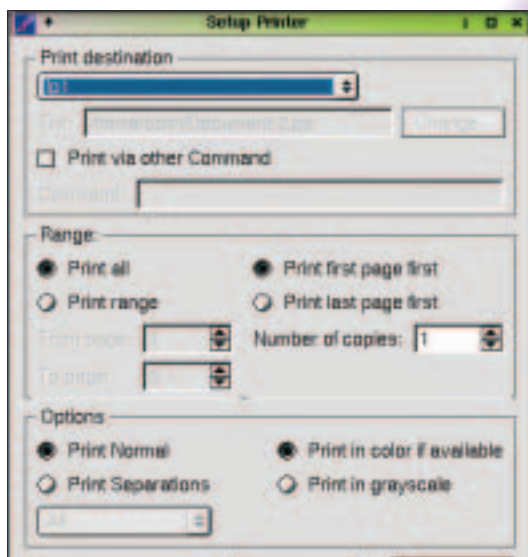


Figure 14: The print dialog box

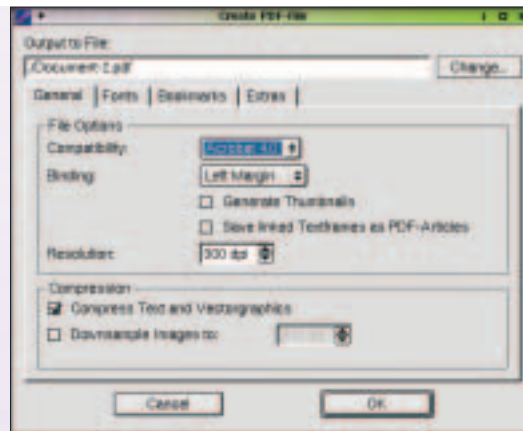


Figure 15: Creating a PDF file

document is only to be read on the screen.

Choose the Compression option you if you want to reduce the document's file size to save memory space. As data compression takes time, particularly with large files, you should only select this option when the document is complete.

On the Fonts page, you can specify which fonts are to be embedded in the document. These fonts will therefore also be available on systems that do not have them installed. Finally, the Bookmarks option allows you to specify whether the file is to be outputted with bookmarks. Some PDF-display programs list these as a table of contents, thereby helping the reader navigate within the text. The Bookmarks list displays all the bookmarks defined in the text.

On the Extras page, you can specify whether, in the PDF display program, the transition from one page to the next is done with effects such as fading or rolling.

## Help!

Scribus has an online tutorial, which explains the most important functions of the program. This manual can be accessed through Help/Manual... in the menu and introduces the main functions of the program. Use the tool bar at the upper edge of window to navigate within the help pages.

## Why Scribus?

Scribus, in its current form, is already suitable for the layout of newsletters, menus, brochures, building manuals and school newspapers. Larger catalogues, professional magazines, books or other elaborate projects are however (at this stage) too much for the program.

The program still occasionally crashes, so that saving before new actions is a must. The quality of the PDF export is good, meaning that documents can be passed on with ease. Owing to its ability to separate colours, Scribus is one of the first Linux print layout programs whose path has not been blocked from the start. So in conclusion, Scribus fills a large hole in Linux's software palette and we are looking forward to its continuing development

## Info

The Scribus Web page  
<http://web2.altmuehlnet.de/fschmid/>