## by Paul Arnote PCLinuxOS Magazine Chief Editor

You've signed up to be a part of the PCLinuxOS Magazine staff. There are numerous ways to contribute. You can help edit articles. You can create artwork. You can write articles. You can be a "technical advisor," ensuring that the magazine articles are technically accurate. Or, you can help typeset the articles for the magazine. It's the latter that we will concentrate on.

### **Preliminary "Stuff"**

Before we can get started on learning how to lay out the magazine articles, we have to define the specifications that are used in laying out the magazine. Adherence to these specifications are important, so the magazine has a unified and congruent appearance from article to article.

The magazine is laid out using Scribus, the open source desktop publishing program that is in the PCLinuxOS repository. So, if you have not already done so, you will need to open Synaptic and install Scribus to your computer.

Next, you will want to have some templates. Thankfully, there are several templates for the magazine. While they vary in length, they are all based on the one page template, created by me and Meemaw. Archie Arevalo created the first template, and it was wonderful but we have changed to a new one. From the PCLinuxOS Magazine group on Google Groups, you can download the one page, four page, eight page, 12 page, and 20 page templates from the magazine's web site. All the templates are in the New-Mag-Layout-

Template.tar.gz file. The only one you are required to use is the one page template. However, all the work has been done for you on the other templates, and they make your life a lot easier when having to lay out articles longer than one page. Obviously, you will want to use the longer templates for longer articles. I have yet to have an article submitted that wouldn't fit within one of these templates. Using your favorite archive manger (Ark, File Rolle, Squeeze, etc.), un-compress the templates to the ~/.scribus/Templates directory. Bear in mind that the .scribus directory is a hidden directory in your /home directory, so you will need to enable "View Hidden Files" in your file manager software (Konqueror, Dolphin, Nautalis, or Thunar).

When you start to lay out a new article, simply open one of these template files as an existing document. Before you do anything else, re-save the file with the name you will call the new article layout. This will prevent you from potentially corrupting your "clean" templates. Don't worry if you corrupt them, as they are readily available for download from the

magazine's web site whenever you want. Alternatively, you can mark your "clean" templates as "read only" files, preventing you from accidentally overwriting them and their contents.

#### Let's Get Started

When you open Scribus, you should have your work area set up like in the screen shot below. I

will explain why and how you can set your work area up similarly. In the example below, the one page template is loaded, and you are seeing a "naked" magazine page.

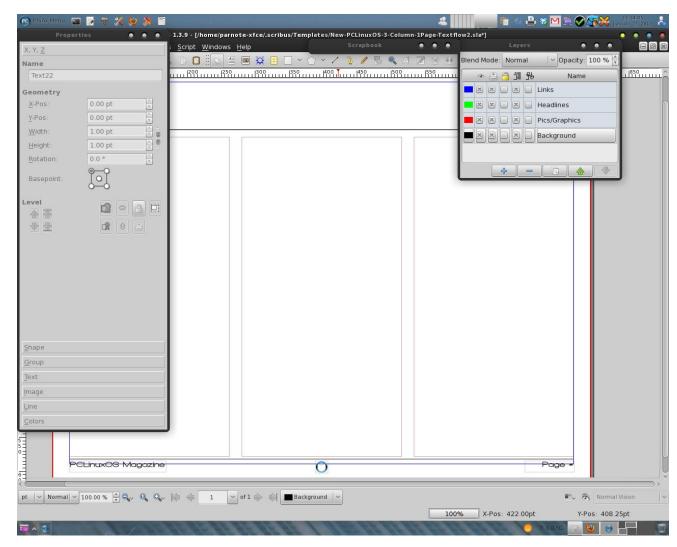
At the far left side of the work area is the **Properties** dialog box. This is where you will do a lot of work, customizing the elements of the layout components (text, graphics, photos, etc.). Here, you will control the positioning of the various elements on an X (horizontal) and Y (vertical) axis, the shape of objects (and whether text flows around those objects or not), the style and color of the text, the scaling of graphics and photos, the style of line used, and colors of various objects. I point this one out first, because it is one of the most heavily used dialog boxes in Scribus. This dialog box can be easily displayed by either right clicking on a page element and selecting Properites from the pop-up context menu, simply by just pressing F2, or by choosing the Scribus menu Windows > Properties.

If you so choose, you can display the **Alignment & Distribution** dialog box. We can use the tools in it to help us align objects. You can display this dialog box easiest by choosing the Scribus menu Windows > Align & Distribute.

At the upper right corner is the Layers dialog box. Certainly, we can create the layout all in one layer and not have to worry about layers. My first few attempts at laying out the magazine articles was done that way. And, without any doubt, it can work just fine that way. But, the more you use layers, the more you appreciate them. Typically, you will have the text in the layer that is usually labeled "Background." I then create a

separate layer for the article headline and page sub headings, another for photos and graphics, another for links, etc. I think you see the pattern. This helps you focus on one element of the layout at a time. It





also has the added benefit of protecting your work from "accidental" slips of the mouse cursor. This dialog box is displayed by either selecting the Scribus menu Windows > Layers, or simply by selecting F6. The way the Layers dialog box appears (in the graphic on the previous page) is how I always set up my layers when I am laying out the articles for the magazine.

At the center of the window is where most of your work will occur. At the top, where it is blank is where the article headline goes. The larger grey boxes below the headline is where the body of the text for the article go, as well as any graphics that accompany it. The magazine name appears at the lower left corner, the page number at the lower right, and the PCLinuxOS blue ring is at the bottom center. These three items appear at the bottom of every magazine page, except the cover page.

One thing that you might notice early on, is that the units of measure with the magazine templates defaults to points, abbreviated pts. Points is the standard measurement in the publishing world for defining the size of type. So, before we can go much further, we need to know what the "standard" magazine measurements are in the template.

Under the X, Y, Z tab of the Properties dialog box, we will find the sizes of the following elements.

Main Headline (1st page of article):

X-Pos: 30.00 pt Y-Pos: 45.00 pt Width: 732.00 pt Height: 40.00 pt Rotation: 0.00

Left Column Text Box:

X-Pos: 25.00 pt

Y-Pos: 106.00 pt 1st page, 54 pt subsequent page

Width: 235.00 pt

Height: 470.00 pt 1st page, 522 pt subsequent page

Rotation: 0.00

Center Column Text Box:

X-Pos: 278.50 pt

Y-Pos: 106.00 pt 1st page, 54 pt subsequent page

Width: 235.00 pt

Height: 470.00 pt 1st page, 522 pt subsequent page

Rotation: 0.00

Right Column Text Box:

X-Pos: 532.00 pt

Y-Pos: 106.00 pt 1st page, 54 pt subsequent page

Width: 235.00 pt

Height: 470.00 pt 1st page, 522 pt subsequent page

Rotation: 0.00

Multi-Column Widths:

1 Column: 235.00 pt 2 Column: 488.50 pt 3 Column: 742.00 pt

Under the Text tab of the Properties dialog box, we can further define the attributes of the text placed in their respective places on the page.

Headline:

Font: Bitstream Vera Sans

Style: Bold Oblique

Size: 30.0 pt

Line Spacing: Automatic

Scaling Width of Characters: 100.0% Offset to Baseline of Characters: 0.0%

Manual Tracking: 0%

Scaling Height of Characters: 100.0%

Color of Font: Black Align Text: Center NO Shadowed Text

Page Sub Heads:

Font: Liberation Sans

Style: Bold Size: 14.0 pt

Line Spacing: Automatic

Scaling Width of Characters: 100.0% Offset to Baseline of Characters: 0.0%

Manual Tracking: 0%

Scaling Height of Characters: 100.0%

Color of Font: Black Align Text: Right NO Shadowed Text

Body Text:

Font: Liberation Sans

Style: Regular Size: 10.0 pt

Line Spacing: Automatic

Scaling Width of Characters: 100.0%

Offset to Baseline of Characters: 0.0%

Manual Tracking: 0.0%

Scaling Height of Characters: 100%

Color of Font: Black Align Text: Justified

Are you feeling overwhelmed? DON'T! You most likely won't have to mess with many of these settings. However, to insure that the magazine has a uniform and coherent appearance, we need to list the specifications. And, nearly all of the articles in the magazine will need to adhere to these specifications. On occasion, there will be some deviation from these specifications, but that will be decided on a case-by-case basis by the magazine's chief editor.

Often, the headline font size will vary, and will be adjusted (downward only in size ... we don't want SCREAMING headlines) to allow a desired headline to fit.

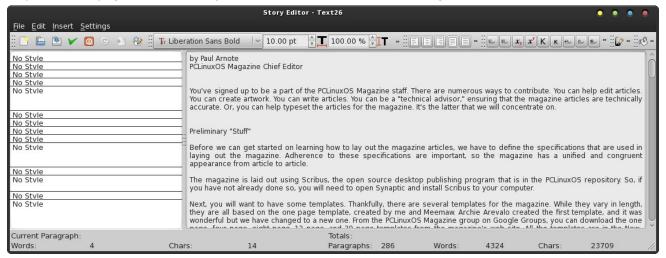
On another note about the headline, did you notice the last item under the definitions that appear in the Text tab of the Properties dialog? It says "NO Shadowed Text." I need to explain why. While it may be tempting to allow Scribus to create the shadowed text, problems arise whenever the end user attempts to print out a page with most any PDF viewer. It

SEVERELY slows down the print rendering, often to the point of locking up a user's computer. So, it's best to avoid its use. If needed, we can easily create a "faux" text shadowing that is much easier to render, and that does not lock up a user's computer. The magazine's old layout made extensive use of the "faux" text shadowing. This new layout shys away from its use, both to streamline the layout process and to save ink for those readers who may wish to print out articles from the magazine.

Instead of going into an indepth explanation of how to do something that the magazine is no longer doing, I'll urge you to instead contact a member of the magazine staff who has done it. Trust me ... it's easier than the step-by-step instructions indicate.

### **Placing the Text**

Now this part is very easy. Simply left click within the first column (the left column) on the first page, and select "Get Text" from the context menu that pops up. This will allow you to select text from a file on your computer. By far, the best results come from using plain, ordinary text (\*.txt) files. While you can import the text from an LibreOffice Writer file, you end up adding an additional layer of complexity due to the formatting in the LibreOffice Writer file, which



Scribus also imports. My motto, when I was teaching, was KISS ... Keep It Super Simple. Using plain text files is the most simple way, and works exceptionally well.

Since the templates have the text flow from text frame to text frame predefined for you, the text should flow from one text frame to the next, seamlessly.

Once you have the text placed in the text frames, it is possible to edit that text and change its appearance. While you can perform minor edits within the text frame itself (such as misspellings, punctuation, etc.), it's often much easier to perform the text edits en-masse. Such edits as changing the style of portions of the text are much more easily done by right clicking on a text frame and selecting "Edit Text" from the context menu that pops up.

This will open up an Edit Text dialog box, with the text preloaded into it. Now, simply highlight the text in the dialog box that you want to change the style of (say you want to make the byline of an article bold), and change the font to Liberation Sans Bold. The exact same thing applies if you want some text to appear as italics, only you would choose Liberation Sans Italic as the font to use to display the highlighted text with. You can do a similar thing with color, although colored text must be used sparingly. The default color of the text for the body of the magazine articles is black, and for the most part, should remain black to maintain and increase readability. One such example is maintaining readability for those readers who may experience color blindness.

## Graphics, Screenshots, Quotes and Photos

Endless pages of text is, in a word, boring. Just take a look at any technical or scientific article. Page after page of nothing but text makes the pages appear very gray, and lack visual appeal. Without anything to break up the grayish appearance of the text, there's nothing to anchor the eye and people tend to lose their place much more easily, making reading more difficult and decreasing comprehension. Typically, it takes a very disciplined mind to be able to read page after page of grayish text and maintain a high level of comprehension. This is why, in other publications (like magazines and textbooks), frequent use is made of other graphical elements like charts, graphs, screenshots, and photographs. Plus, the old adage "a picture is worth a 1,000 words" is true, as adding other graphical elements help improve comprehension.

Some articles don't lend themselves well to graphics, especially if you are attempting to present a concept or idea. Often, concepts or ideas are just that — conceptual, and don't have any physical representation, or at least are difficult to represent with any kind of physical representation. In those cases, it's possible to break up the grayness of the text by pulling out quotes from the article to display as an extra graphical element, displayed in a larger font size in a complimentary font face.

In any case, whether we are adding graphics, screenshots, photos, or quotes, the method is the same. We want to add the visual element and have the text flow around it. (Don't forget that we are adding things in layers, so you will place these visual elements in their own layer.) This is also where knowing the template measurements is important. So the X-Pos, Y-Pos, and column width measurements (in the X, Y, Z tab of the Properties dialog box) take on some added importance.

For example, if we want to place a photo or screenshot in the upper left column, we will want the object placed so its X-Pos is 25, its Y-Pos is 54, and (if the photo or screenshot is to only be one column wide) the width of that object is 235 pts. The easiest way to achieve this is to manually adjust the values in the Properties box. Simply select the image tool from the Scribus toolbar, and click and drag to the object's approximate size. Use the values in the Properties dialog box to refine the measurements.

You should now see a marker on the screen for the new object. If it's an image, right click on it and select "Get Image" from the context menu. Point to the file you want to use and double click it (you may have to change to the directory where you've stored your images). Go to the Image tab in the Properties dialog and select "Scale To Frame Size." The image will be automatically scaled to fit into the space you've defined. By default, the image will be scaled proportionally, so that the image doesn't appear to be distorted. You may need to make some slight adjustments in the image frame (typically, either lenghen or shorten the height) to fill the space you have in mind for the image. Right click on the image frame, and select "Adjust Frame to Image" from the context menu that pops up. Next, click on the Shape tab in the Properties dialog, and select "Text Flows Around Frame." Magically, you will see the text shift and adjust to flow around the new image frame.

Were you to do this with a quote, you would select the text frame tool from the Scribus toolbar, and you would see a text frame, instead of an image frame. You would still select the Shape tab in the Properties dialog box, and select "Text Flows Around Frame" to get a similar effect. You would then specify the text to display, along with the font size, font face, and font style in the Text tab in the Properties dialog box, instead of the image tab. As a shortcut, after defining the text frame, right click on it and select "Edit Text" from the pop-up context menu, and simply enter the text there, making all the changes there at once. This is the same method that I use when creating captions for images.

## Page Sub-Heads

If the article you are typesetting (yes, that's what you are doing) is longer than 1 page – and most articles are – each subsequent page will need what I term a page sub-head. This is a smaller sized headline in the upper right corner of the page, with the same text as the main article headline, in most cases. The page sub-head should be 14 pt size, using the

Liberation Sans font, boldface, black in color, and right aligned. Again, do NOT use Scribus' shadow text setting. In fact, the page sub-heads have no shadowing whatsoever. The page sub-head exists to help keep the reader oriented as to what article they are currently reading. This new set of layout templates already has them in place for you, preformatted. All you have to do is fill in the text.

The Y-Pos will always be 25 pt. The X-Pos, along with the width, may alter on a case by case basis, varying with how long the text is. The preformatted page sub-head sets the X-Pos at 364 pts, right aligned, with 14 pt bold Liberation Sans text. There may be a rare occasion when you will need to adjust the X-Pos value to accommodate longer headlines. However, that should be the exception and not the rule. I have made the page sub-head wide enough that it should accommodate the length of most headlines that appear in the magazine. Typically, all you have to do is type in the text and move on.

If you have a rather long article and don't care much for typing the same headline in multiple times, here's a shortcut that I use whenever I'm laying out the magazine pages. First, type the text into the first page sub-head. Next, click out of it, then reselect it. Right click and select "Copy" from the context menu. Move to the next page, and select "Paste." As long as you keep the page sub-head locked, it will be pasted into each subsequent page with precisely the same coordinates.

### **Finishing Up**

By this point, you should be pretty much done with the layout of the magazine article. Now, it's time to package everything up for the final assembly of the magazine, which will be done either by the chief editor or someone he designates. That person will not only proof read the article again, but will also pay close attention to insure that all the style rules for the magazine layout are followed. Then, they will assemble the individual articles into the one,

common PDF file that you have come to expect for the PCLinuxOS Magazine.

First, we need to make sure all the files you used in the page layout are available to be delivered to the final assembler. To do this, from the Scribus menu, select File > Collect For Output. You will be prompted to pick a directory to place the output files into. I recommend creating a separate directory for each magazine article. Once you click on OK, you Scribus will place a copy of each of the page elements into that one directory.

Next, it's time to create a PDF of your layout. Select the PDF icon on the Scribus toolbar, and you will be presented with the PDF Export dialog box. We will be creating the PDF file to be compatible with PDF version 1.4 (right side of the dialog box, about 1/3 of the way down). Towards the bottom of the General tab, we need to change Compression from Maximum, to High. Believe it or not, Maximum compression actually creates larger file sizes than High does. While using compression may make the PDF file load a bit slower in the PDF viewer, it's a trade-off between page load speed and file size.

Under the Fonts tab, we want to embed all the fonts used in the article to create the PDF file. This insures that readers viewing this on computers that may not have all the included fonts installed on are able to view the document as it was intended to be viewed. Like it or not, there will be users who will be viewing the magazine on a Windows computer (possibly while at work), and Windows will not have the free open source fonts installed; hence, it's difficult to predict the results the reader will get on a "foreign" computer.

Finally, change the directory where the PDF file is stored to the same directory used for the Collect For Output step. Then select Save.

Once you have the PDF file created in the Collect For Output directory, compress the entire contents of the directory into a tar.gz file. Then, attach the tar.gz

file to an email to the magazine's mailing list on Google. The maximum allowed file size for email file attachments is reported by Google Groups to be four MiB, but our past experiences have shown the limit to be just under three MiB. If your tar.gz file is rejected by Google's inaccurate file size calculations, you will need to split your tar.gz file in to two (or more) smaller files. Be sure to clearly label your tar.gz files if this happens to you. Remarkably, the file siize attachment limit for regular Gmail is 10 MiB, so go figure.

There you have it. A step by step guide to how to layout articles for the magazine.

### **Hints & Tips**

Make liberal use of layers.

After you have elements placed on the screen, lock them in place by right clicking on the item and choosing "Is Locked" from the pop-up context menu.

Group related objects together.

Don't try to position things precisely with the mouse. Instead, use the X, Y, Z tab of the Properties dialog box. It's much easier.

Copy items you use repeatedly to the Scrapbook. Then, you can just drag them into your document each time, rather than re-inventing the wheel every time.

Screenshot Showcase Layout:

1) Copy the header from the page, and fit it PRECISELY (width-wise) in the remaining two columns.

- 2) Make the "header" deeper, to precisely fill the column height (two column should be 488.50 pt wide, 438.00 pt high, XPos = 278.50 pt, YPos = 95.00 pt)
- 3) Place headline (max 30 pt) at top of two column block, just as we do for the main headlines, using Bitstream Vera Sans Roman Oblique. Duplicate the headline, re-do the positioning, and create your headline shadow.
- 4) Place a 2 pt line under the headline, after you have created the headline shadow.
- 5) Position an image frame within the colored block so that (initially) there is a 5 pt "margin" on both sides (L and R).
- 6) Right click on the image frame, and select "Get Image." Choose your image (should have already been resized, either with Kim or GIMP to 480 px wide).
- 7) If necessary, re-center the image within the color block.
- 8) Add text frame under image, same width as image. Use Liberation Serif, 10 pt, Bold Italic, right aligned with the right edge of the image. Place posters name, date, and desktop environment/version. You have probably noticed that I have all that info in the file name of the images.

## **Creating hyperlinks in Scribus:**

- 1) You need to change the text color to blue yourself, because Scribus won't do it automagically.
- 2) On the Scribus PDF toolbar, there is an icon with two "shoe-prints" on it. Click on it, and draw a tight rectangle around your blue text.

If the PDF Toolbar isn't visible, click on Windows in the menu bar, and at the bottom make sure PDF Tools has a check mark in front of it. Mine shows up to the right of the page I'm working on. You might also have another window over it.

- 3) Double click the rectangle you just drew on the screen.
- 4) At the top of the dialog box that appears, select "Link To External Web Site."

5) Then, enter the URL in the entry box in the middle of the dialog box. Then click OK.

Updated February 1, 2012 by Paul Arnote PCLinuxOS Magazine Chief Editor

# Layout Matrix Quick Reference Guide

Headline:

X-Pos: 30.00 pt

Y-Pos: 45.00 pt (28.00 pt for two-line headline)

Width: 732.00 pt

Height: 40.00 pt (66.00 pt for two line headline)

Rotation: 0.00

Left Column Text Box: Multi-Column Widths: X-Pos: 25.00 pt 1 Col: 235.00 pt 2 Col: 488.50 pt 3 Col: 742.00 pt

Center Column Text Box:

X-Pos: 278.50 pt

Right Column Text Box:

X-Pos: 532.00 pt

Common Text Box Measurements: Y-Pos: 106.00 pt (1st page of article)

54.00 pt (subsequent article pages)

Width: 235.00 pt

Height: 470.00 pt (1st page of article)

522.00 pt (subsequent article pages)

Rotation: 0.00

Headline:

Font: Bitstream Vera Sans

Style: Bold Oblique Size: 30.0 pt

Line Spacing: Automatic

Scaling Width of Characters: 100.0% Offset to Baseline of Characters: 0.0%

Manual Tracking: 0%

Scaling Height of Characters: 100.0%

Color of Font: Black

Align Text: Center NO Shadowed Text

Page Sub Heads: Font: Liberation Sans

Style: Bold Size: 14.0 pt

Line Spacing: Automatic

Scaling Width of Characters: 100.0% Offset to Baseline of Characters: 0.0%

Manual Tracking: 0%

Scaling Height of Characters: 100.0%

Color of Font: Black

Align Text: Right NO Shadowed Text

Y-Pos: 25.00 pt

Body Text:

Font: Liberation Sans

Style: Regular Size: 10.0 pt

Line Spacing: Automatic

Scaling Width of Characters: 100.0% Offset to Baseline of Characters: 0.0%

Manual Tracking: 0.0%

Scaling Height of Characters: 100%

Color of Font: Black Align Text: Justified