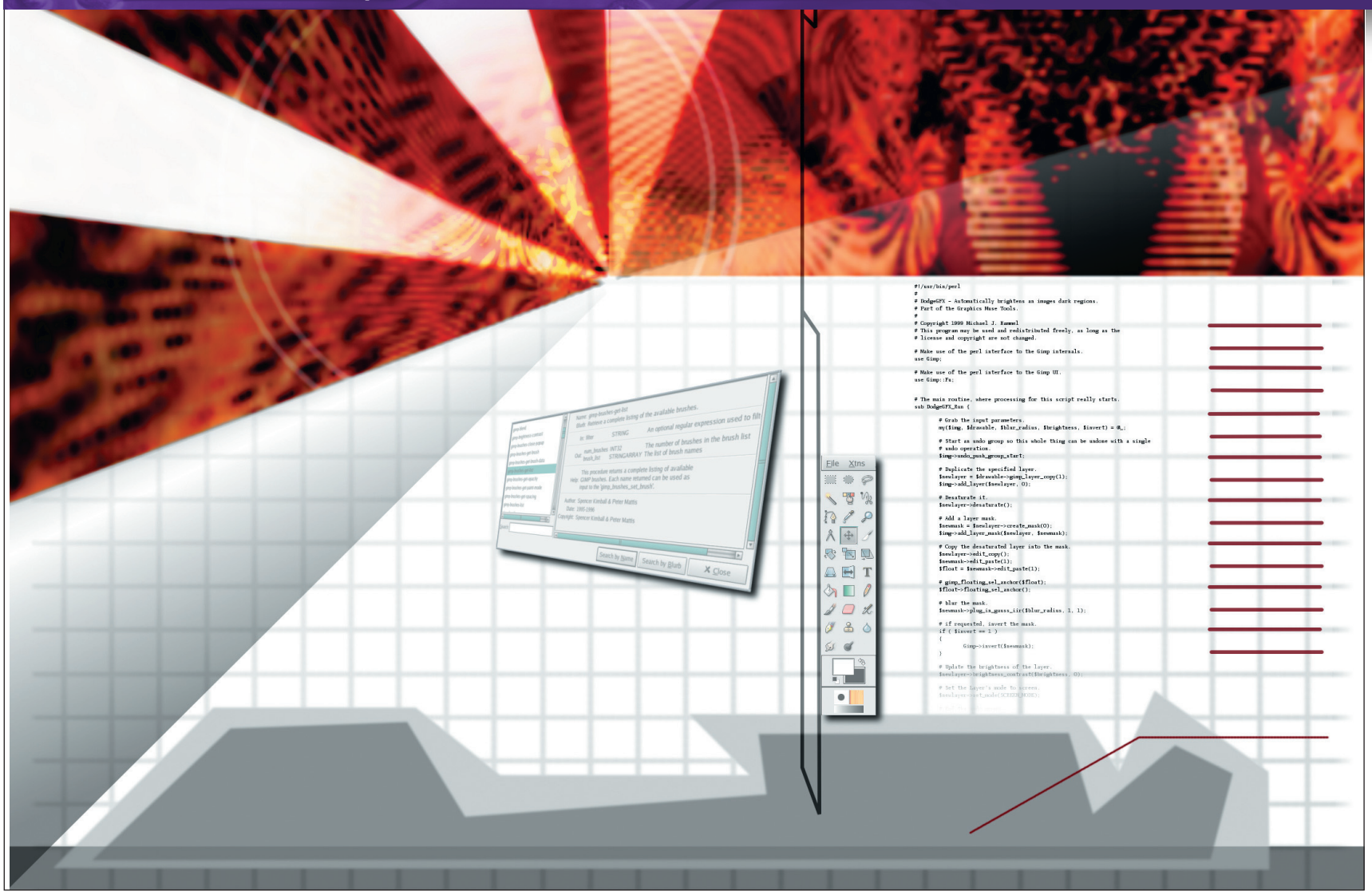


LAYOUT AND ILLUSTRATION

Inkspace Greetings

While *The GIMP* does wonders with image processing and photo touchup, it doesn't make a very good stab at page layout, and only moderately handles illustration. Michael J Hammel introduces a new tool that is starting to fill these gaps in the Linux graphics toolchest by designing a business card.

IMPORTANT LINKS

Inkscape
www.inkscape.org/
DAG repository
http://dag.wieers.com/home-made/apt/
What are bowls and counters?
www.philsfonts.com/character.html

No tool is an island unto itself – at least not when it comes to a graphic artist's ocean of oft-conflicting needs. Any graphic artist would tell you that you can't expect to stay glued to one tool if you expect to make a living at your trade; photo retouching can only pay part of the bills! You need to become familiar with a plethora of varied tools to meet the needs of a wide variety of clients.

Page layout tools allow you to produce artwork filled with text sculpted around images. Those images could be raster images you created and/or polished in the *The GIMP*. They may also be vector art – the type of graphics typically created in *Illustrator* – that scale up and down easily without losing detail. Using vector art is the preferred option when dealing with logo design, because the logo can be made large enough for banners and small enough for letterhead with a single piece of artwork.

In the professional world, artists turn their attention to tools like *Adobe InDesign* for page layout tasks. They work with *Adobe Illustrator*, *Corel Draw* or Deneba's *Canvas* for vector art design. In the Linux world, we're not so fortunate to have so many choices – at least not yet. For now, we need to focus on the best tools available for page layout and vector design. For page layout, we can look to *Scribus*. For vector design, we look to *Inkspace*. The good news is that – if our needs are not too complex – *Inkspace* can also do limited page layout for us as well.

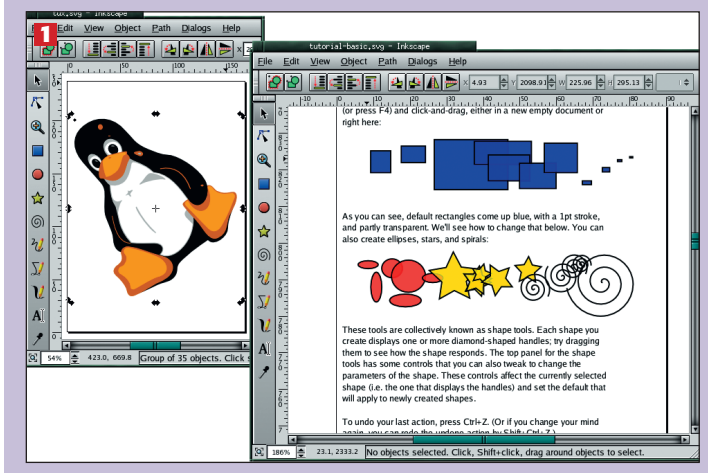
In these tutorials we'll look briefly at *Inkspace* itself, then use the program to design a simple business card. The design of the card will be less clever than is otherwise possible with this sophisticated tool, but it will introduce important concepts you'll want to know as you begin to explore *Inkspace* for yourself.

Before starting, grab a copy of *Inkspace* from the website. You may also want to grab a copy of the *libsigc++* package on which *Inkspace* is dependent. The latter is available for Red Hat 9 systems from the DAG repository. Inkspace is available in multiple package formats from Sourceforge; see left for the URLs.

INKSPACE: THE USER INTERFACE

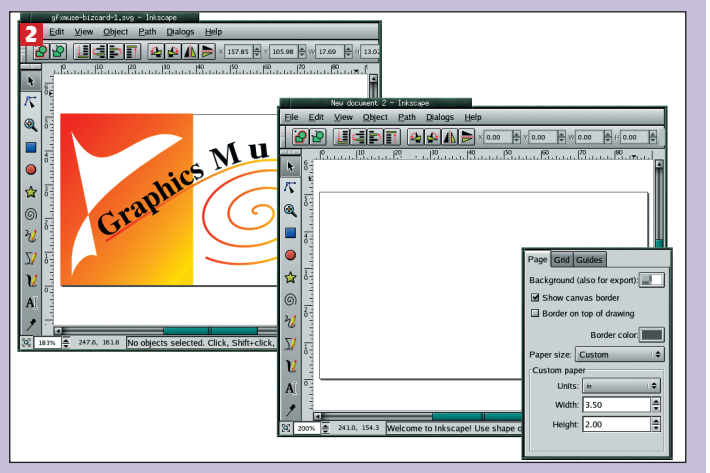
Intuitive operation – experiment for yourself!

Inkspace uses a standard design for its windows, with a menu bar across the top, a toolbar along the side and a workspace, or canvas, connected to both. More importantly, it comes with a built-in tutorial system – that, incidentally, was created using *Inkspace* – which is interactive and displays directly on an *Inkspace* canvas!



A different view

1 *Inkspace* looks much like any traditional desktop application and the menu system is fairly intuitive. More importantly, the help system is outstanding. It's not often that you find a tool in such early stages of development with such extensive tutorials. The best feature of the tutorials is that they are SVG files displayed directly within an *Inkspace* canvas, so you can edit examples as you read. Here we see Tux rotated – a feat that would blur him in *The GIMP* but leaves him crisp in *Inkspace*. We also see the Advanced tutorial on the right of the screen.



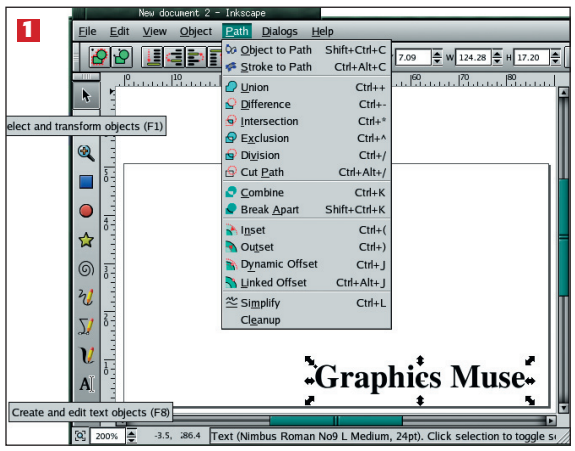
Bizcard and initial page

2 To show how simple to use and yet how powerful Inkspace is, we'll design a simple business card. What the design lacks in artistic taste, it makes up for by showing important *Inkspace* features that you'll find yourself using again and again over the course of daily use: Converting Text to paths, object editing, curves, predefined shapes, gradients and boolean operations. To start we'll create a business card sized page. Open the Dialog >Document Options. In the Page tab, set the Units to 'in', the width to 3.5 and the height to 2.

Text along a curve

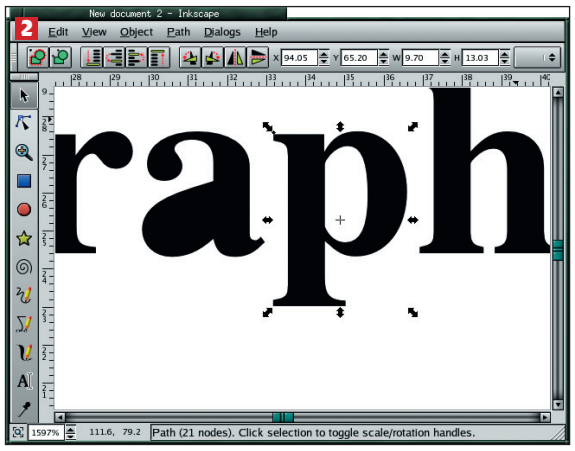
This design will use text modified to fit along a curve. The text is rotated letter-by-letter and manually positioned. While this isn't as simple as, say, *Illustrator*, it is far simpler to work with rotated and scaled text in Inkspace than in *The GIMP*. That makes aligning text along an arbitrary curve much easier, and with the text always in vector format, we loose no clarity to the lettering no matter what transformations we apply to them.

»



Manipulate letters

1 I'll start with simple text. Select the text tool and then click anywhere in the canvas. Type the text then click on the selection tool to make the text into a single object. To manipulate letters individually, you must first convert them to paths (Path>Object to Path) and then break the path apart (Path>Break Apart). Both operations are done while the text is selected. Be sure to set your font properties (size and font name) using the Text and Font dialog before you convert it to a path. Once converted you can't change these properties of the text.



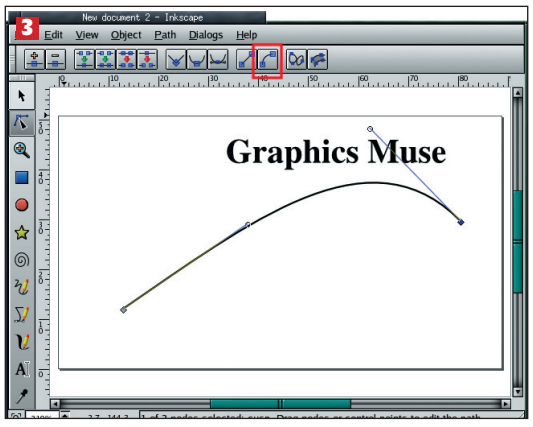
Cutting out

2 Now Ungroup the object (Object>Ungroup). Doing this separates the bowls (the round parts of the 'a' and 'p' letters) from the counters (the inside of those round parts), placing the counters below the rest of the letter. To fix this click on the letter to select it, choose Object>Lower, then select both counter and letter by dragging a selection box around both. Select Path>Difference, then Object>Group. Now you have your counter cut out from the letter and both are a single object once again. The image shows that the letter 'a' has its counter below the letter. The 'p' has had the letter lowered, the two objects differenced and the object grouped again.

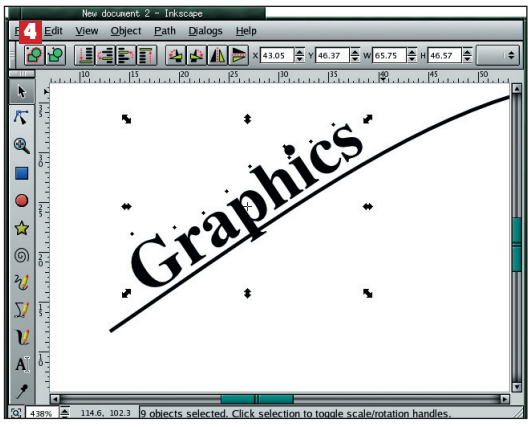
NEXT MONTH

We're continuing our examination of more additional tools that help you add more functionality to *The GIMP*'s feature-set.

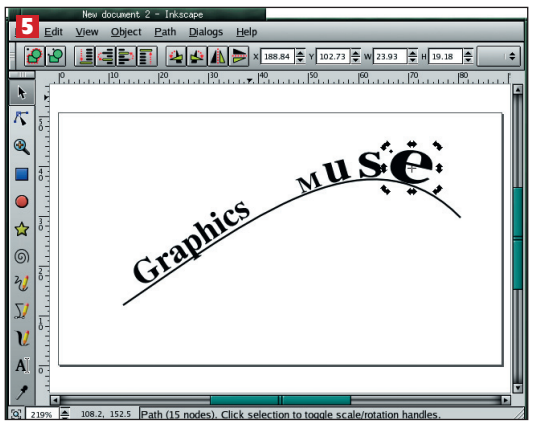
Adding a curve
3 Drawing is done with the Bezier curve tool. An icon bar is presented below the main menu bar. Initially, the Bezier tool will draw straight lines. Click to drop the first end point, then click in another location to drop the second end point. To edit the shape of the line, hold the shift key down and click on the small boxes on each end point. This makes both end points selected. Click on the third icon from the right in the icon bar. This creates two control points – unfilled circles at the end of lines connected to the end points. Click and drag the control points (and/or endpoints) to edit your curve. In the image, the box outlined in red is the icon to click when you want to add the control points.



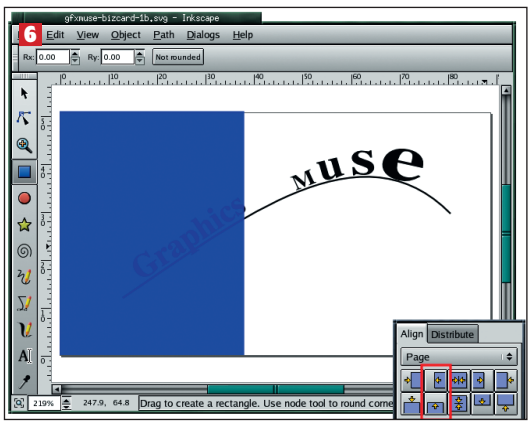
Control movement
4 Draw a box around all the letters of the first word using the select tool. This makes them a single object temporarily. Drag the selected letters and rotate them – click a second time on the selection and the selection arrows change to curved arrows for rotation. Rotation occurs around the small cross at the centre of a selection. You can click and drag this cross anywhere to change the location of the centre of rotation for that object. Zooming the image allows a little finer grain control of the movement and rotations. Align this group of letters along the straight edge of the curve.



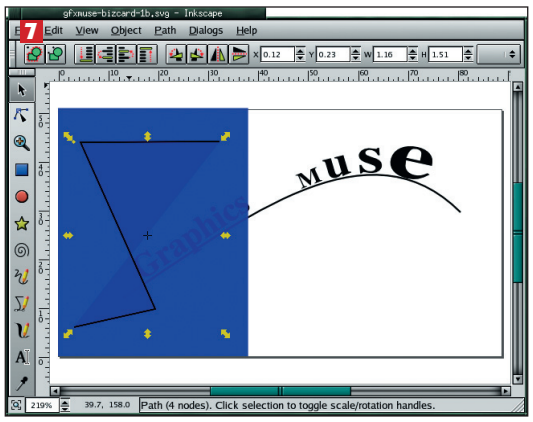
Rotated and scaled letters
5 Select each letter of the second word, one at a time, and move and rotate to match a portion of the curve. When the letters are aligned to your satisfaction, draw a selection box around all the letters to group them temporarily and move the block of objects so their distance from the curve closely matches that of the letters in the first word. Make final adjustments to each letter as needed. In this image all the letters were stretched to show that text objects can have their shape changed just like any other object.



Alignment
6 Creating the shape on the left requires two objects combined by differencing their paths. Select the rectangular object from the shape tools on the left side icon bar. Click and drag to create a rectangle, then choose the Select tool. Turn off the objects outside stroke in the Fill and Stroke dialog by clicking on the 'X' button in the 'Stroke Paint' tab. Below the menu bar is an options bar. There are fields for setting the width and height of the current object. Make the object 2" tall and 1.5" wide. Open the Align and Distribute dialog. Under the 'Align' tab, set the option menu to 'Page', then click on the 'align to top' and 'align to left edge' buttons. In this image, these two buttons are outlined in red.



Curve tweaking
7 Use the Bezier tool to make a "Z" shape inside the rectangle. In the Fill and Stroke dialog, set the fill to solid (the button just to the right of the X) in the Fill tab. Next, select the Edit Nodes tool from the left side toolbar. With the shift key down, click on each node in the Z (there are four of them). Then click on the 'Make selected segments curves' button, just as you did for the original curve. Move the control points to edit the curve. You may want to join the two endpoints using the 'join path at selected nodes with new segment' button. When you're done editing, hold the shift key down and click on the curve and the box to select them both, then select Path>Difference.



Finishing touches
8 Select the rectangle by itself. Open the Fill and Stroke dialog. Choose a linear gradient and adjust the colour. Select the original curve and apply the same gradient. Select the spiral tool and add the gradient to this object. Rotate and scale the object as desired. The final product differs from the original only in the shape of the text, which was exaggerated for this tutorial's sake. LXF