

Fast office package for the KDE desktop

OFFICE HELP



The latest KOffice suite offers many new features – and even some new applications. We'll show you what we found when we tried out KOffice 1.4. **BY MARCEL HILZINGER**

If you're a Linux user who needs to exchange data with Word and Excel, you may not have a good alternative to OpenOffice. But if you mainly create office documents for your own use, the new KDE office package KOffice is worth considering. KOffice is quick and reliable, and it has some features you won't find in other office environments.

Family Members

Besides the word processor KWord, the spreadsheet application KSpread, and the presentation software KPresenter, KOffice comprises programs such as:

- Kivio flowchart planner
- Karbon14 vector drawing program
- Kugar report generator
- KChart chart drawing tool
- KFormula formula editor

New with version 1.4 are the database component Kexi and the Krita image manipulation tool. In total, the KDE Office Suite includes no less than ten components (see Table 1).

Major Changes

The latest version of KOffice includes improved support for the OASIS document format, OpenDocument. This is an extension of the XML document format by OpenOffice.org. It also forms the basis for future OpenOffice 2.0 documents. Files created with the new KOffice are thus mostly compatible with

OpenOffice 2.0 files. For example, KWord can read text documents created with the OpenOffice 2.0 beta version that comes with Suse Linux 9.3. If you store documents in OpenDocument format with KWord or KSpread, the

Table 1: Family Members

Program	Command	Component
KWord	kword	Word processor
Kspread	kspread	Spreadsheet
KPresenter	kpresenter	Presentations
Kivio	kivio	Flow chart planner
Karbon14	karbon	Vector drawing program
Krita	krita	Image manipulation program
Kugar	kugar	Report generator
Kexi	kexi	Database component
KChart	kchart	Chart drawing tool
KFormula	kformula	Formula editor

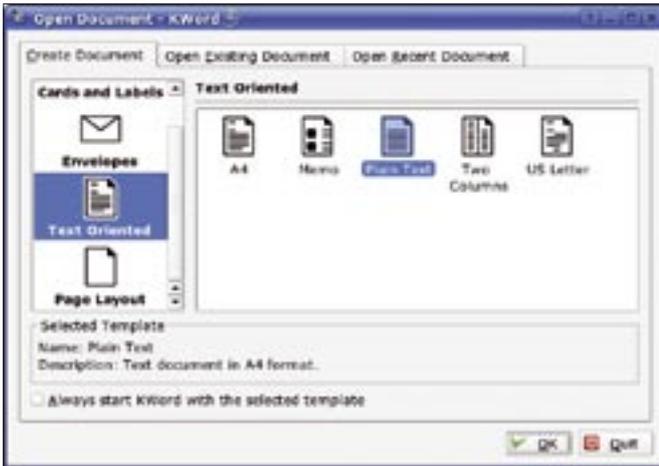


Figure 1: When you launch one of the KOffice applications, a selection dialog for the major document types appears.

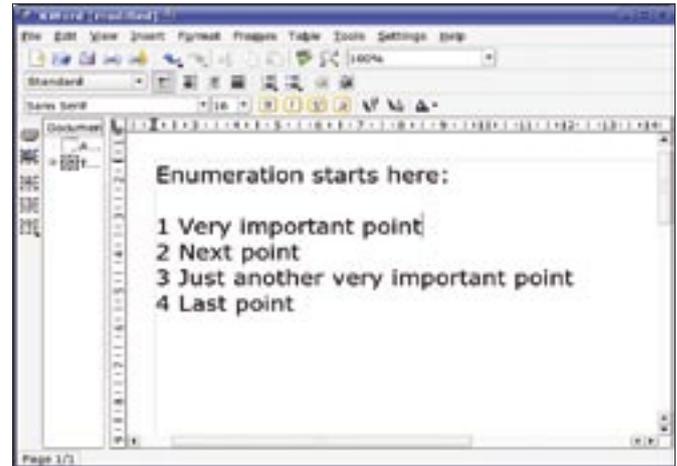


Figure 2: Attention to detail: the default setting does not insert a period after the number in enumerated lists.

OpenOffice version with Suse 9.3 should – theoretically – be able to open them.

In reality, there are still major obstacles preventing seamless exchanges between KOffice and OpenOffice. For example, although we had no trouble importing or exporting simple text files, the results were typically unusable if the files included images or charts. The word processors import tables of contents as text content. And we were unable to store a spreadsheet with charts created with KSpread in OpenDocument format. This said, OpenDocument will not become the default format until the next release. Version 1.4 still uses proprietary KOffice formats.

An OpenDocument file is a normal ZIP archive that can be unpacked at the command line using *unzip filename* or the GUI-based *ark* tool. The archive itself comprises multiple XML files, a PNG-formatted thumbnail, and possibly a number of multimedia files, assuming that the document includes multimedia elements. Table 2 gives you a typical example of an OpenDocument text file.

One new aspect of KOffice is that KOffice applications have multiple view modes. This allows users to view different parts of a document at the same time. The office programs either open the new view within the current document or in a new program window. The window can be tiled vertically or horizontally. Theoretically, these individual views can again be tiled, but further tiling prevents efficient use of the program. Check the *View* menu for these features.

Interesting KWord

Whenever you launch a KOffice application, the first thing to appear on the screen is a file browser dialog. You can then choose whether to create a new document based on an existing template, or to edit an existing or recently edited document (Figure 1). KWord stores the templates offered to the user below */opt/kde3/share/apps/kword/templates*. If you prefer not to see the dialog in the future, you can check *Always start KWord with the selected template* and click on *OK*.

This tells the program to launch into an

empty text document. Version 1.4 allows you to customize the icons for the various templates.

The biggest benefit that KWord has in comparison with OpenOffice is speed. Whereas OpenOffice takes a few seconds to load, even on state-of-the-art hardware, KWord launches quickly even on older hardware. This said, the default font size of 8 point is far too small for many users. To change this to a more easily readable 12 points, select *Format | Style Manager*. In the dialog that then appears, click on *Font* and select the new font size.

Bullets and Numbers

Using the word processor should not prove too much of a challenge for most people, although there are one or two minor exceptions. Take bullets and numbered lists, for example. Whereas most office programs allow users to select a text passage and then click on the enumeration symbol, KWord presents you with a dropdown list when you do so. You can then select the enumeration or bullet type you need, and KWord will apply your selection. Although this removes the need to access the menu to switch between various enumeration or bullet styles, it is impractical, as users are unlikely to choose different enumeration styles within a single document.

KOffice newcomers also tend to trip up over another KOffice enumeration feature. If you select an enumerated list and then select *Arabic numbers* in the dropdown, KWord does not add a period after the number (Figure 2). To change this setting, select *Format | Paragraph*,

Table 2: Contents of an OpenDocument Text File

File	Function
content.xml	XML file with the actual file contents. KOffice can open XML files directly.
meta.xml	Details about the author, company, and author's email address, as well as information on the program used to create the document.
settings.xml	Information on the document status, such as the view mode, last change, and last print out.
styles.xml	Styles such as headings, bulleted lists, and enumerated lists.
mimetype	The document type, for example, <i>application/vnd.oasis.opendocument.text</i> for text files.
META-INF/manifest.xml	Details on the files in the ZIP archive.
Thumbnails/thumbnail.png	Preview of the first page as a transparent PNG image.

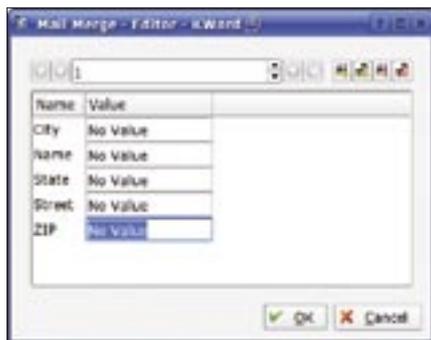


Figure 3: Use the mail merge editor for quick and easy mass mailing work. KWord stores the address records in the document.

change to the *Bullets/Numbers* tab, and type a dot in the *Suffix text* box.

On the positive side, KWord's bullet mode is very flexible. For example, you can use any character you choose as a bullet, and you can add characters as a prefix.

Setting Up the Thesaurus

KOffice has an English-language thesaurus by default (downloads are available for other languages). To use the thesaurus, right click on a word in a KWord document and select *Show related words* in the dropdown. This pops up the thesaurus dialog. If you prefer, you can use the *Tools | Show related words* menu entry instead.

Mail Merge

The KOffice developers have come up with two approaches to mail merge chores. You can either draw on an external database as your data source, or you can enter address data directly using the mail merge editor, which is configured by selecting *Tools | Configure mail merge*.

If you opt for an existing database, KOffice gives you a choice between a KOffice spreadsheet document, the KDE addressbook, or an SQL data source. At this time of writing, there is no way to use the Kexi database component as the data source. In contrast to previous versions of KOffice, only the KOffice spreadsheet and internal storage worked as data sources. The program refused to cooperate with any other sources.

To store the address records in a KWord document, select *Create new...* in the *Mail merge configuration* dialog, and then click *OK* in the dialog that appears. This launches the KWord mail merge

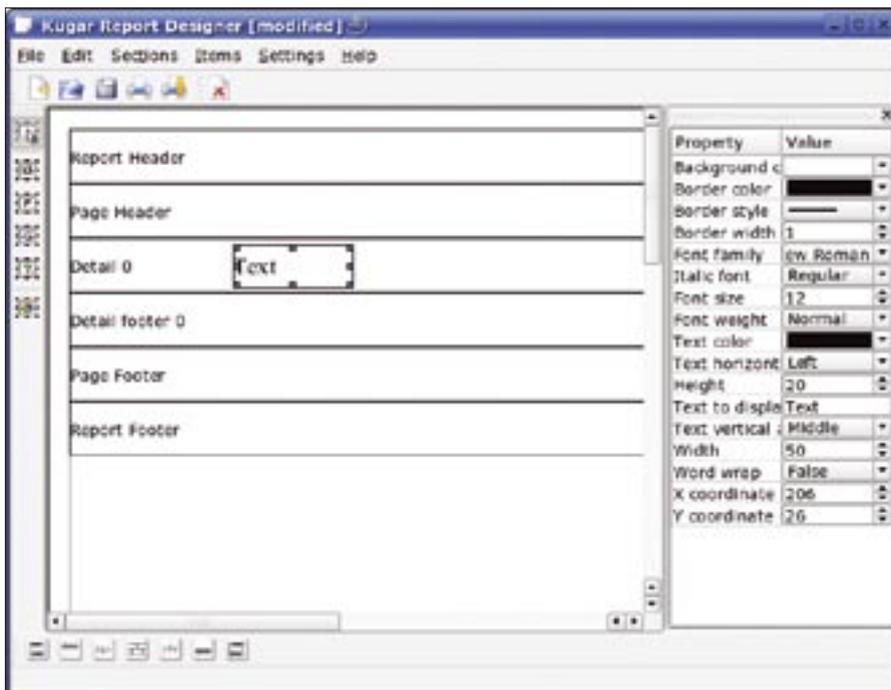


Figure 4: The Kugar report designer can create layouts, but the program is fairly useless when it comes to actually generating reports.

editor. In the editor, click on the *Add entry* symbol and type a name for the field, *Title*, for example. Repeat these steps for any other fields you need, such as *Family Name*, *First Name*, *Street*, *Zip*, and *City*.

The dialog should now resemble the one shown in Figure 3. After clicking on *No value*, you can populate the first record. To add more records, click on *Add record*.

After adding as many records as you like, click the button labeled *OK*. You can then add the fields to your document by selecting *Insert | Variable | Mail merge*. Unfortunately, the window closes after each selection you make, leaving you to repeat these steps multiple times.

If you already have a document with your address data, you can select the KOffice spreadsheet as your data source. You only need a minimal spreadsheet with the field names in the first line and the data in the following lines. Select *Tools | Configure mail merge | Open*

existing and select your KSpread spreadsheet as your data source.

Spreadsheets and Presentations

KSpread compares well with its OpenOffice counterpart. Although the KOffice application may not be as feature-rich as Calc, it has more than enough for most applications. And there are three things that KSpread does far better than the OpenOffice spreadsheet. When you select a cell, KSpread does not use black, but a light blue. It also uses light blue to highlight column headers and new lines, and it tags cells that contain formulas or functions with a blue triangle in the bottom left corner.

Another feature that many users will miss after working with KSpread is the tool's ability to auto-adjust the column width. Whereas OpenOffice Calc requires users to take a detour via the context menu, KSpread will auto-adjust when you double-click the column header. Finally, the KDE spreadsheet

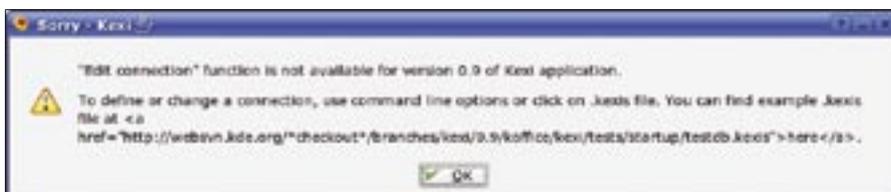


Figure 5: Teething trouble with Kexi database access.

also supports the creation of arbitrary series. To do this, select *Insert | Series* and type the start, stop, and step values. KSpread can create either logical (2,4,6,8) or geometrical (2,4,8,16) series.

There is not a lot to say about KPresenter. Although it obviously lags behind OpenOffice Impress in terms of functionality, the available features are all most people need to create attractive presentations. One positive aspect we noticed during our tests was that, in contrast to OpenOffice 2.0, KPresenter can export slides in Sony memory stick format, allowing users to show presentations without needing a PC. And the KDE program has an advantage with 16:9 screen formats. It automatically scales the slides to fit the screen, whereas Impress leaves black borders. What the developers definitely need to add to KPresenter is a handout printing feature.

Kugar and Kexi

The three main components, KWord, KSpread, and KPresenter are all that most people need to tackle any typical office-related task, but KOffice has more programs to offer. Some of these programs turned out to be real jewels in our testing, whereas others had us wondering what on earth a user would want

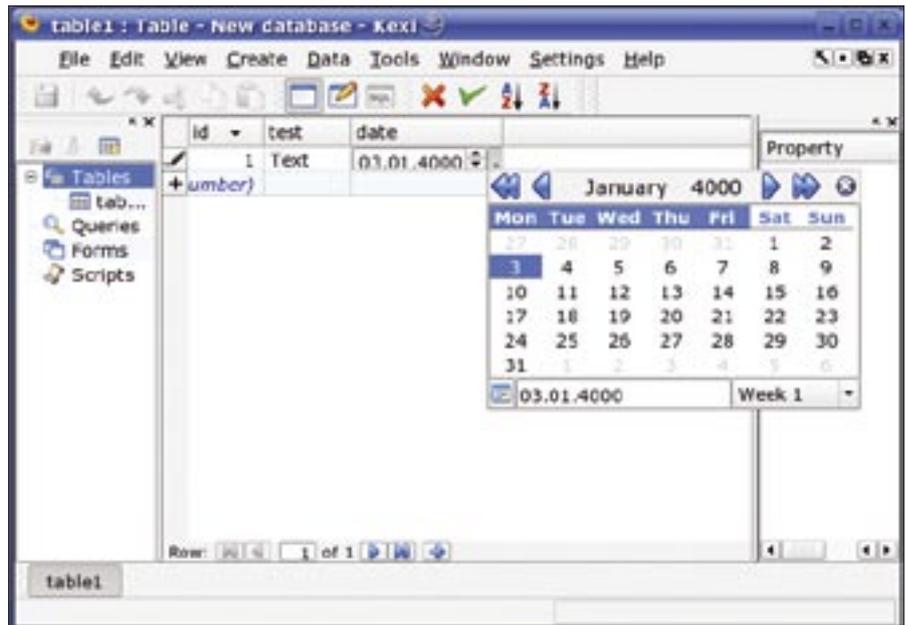


Figure 6: Clicking to select the date may be simple, but not with the kind of values that Kexi suggests.

with them. Kugar belongs to the latter category. The program is theoretically used for report generating, but working with the program turned out to be so convoluted that even experienced KDE users would need to consult the documentation to get anywhere.

To launch the program, press [Alt + F2] and type *kugar*. This displays

a file browser dialog where you can select a Kugar archive file or Kugar data. If you do not have a Kugar report that you created previously, you can't launch the program. The workaround here is the *kudesigner* command, which launches the Kugar report designer. You can then use the designer to create a layout for your report. The KOffice program

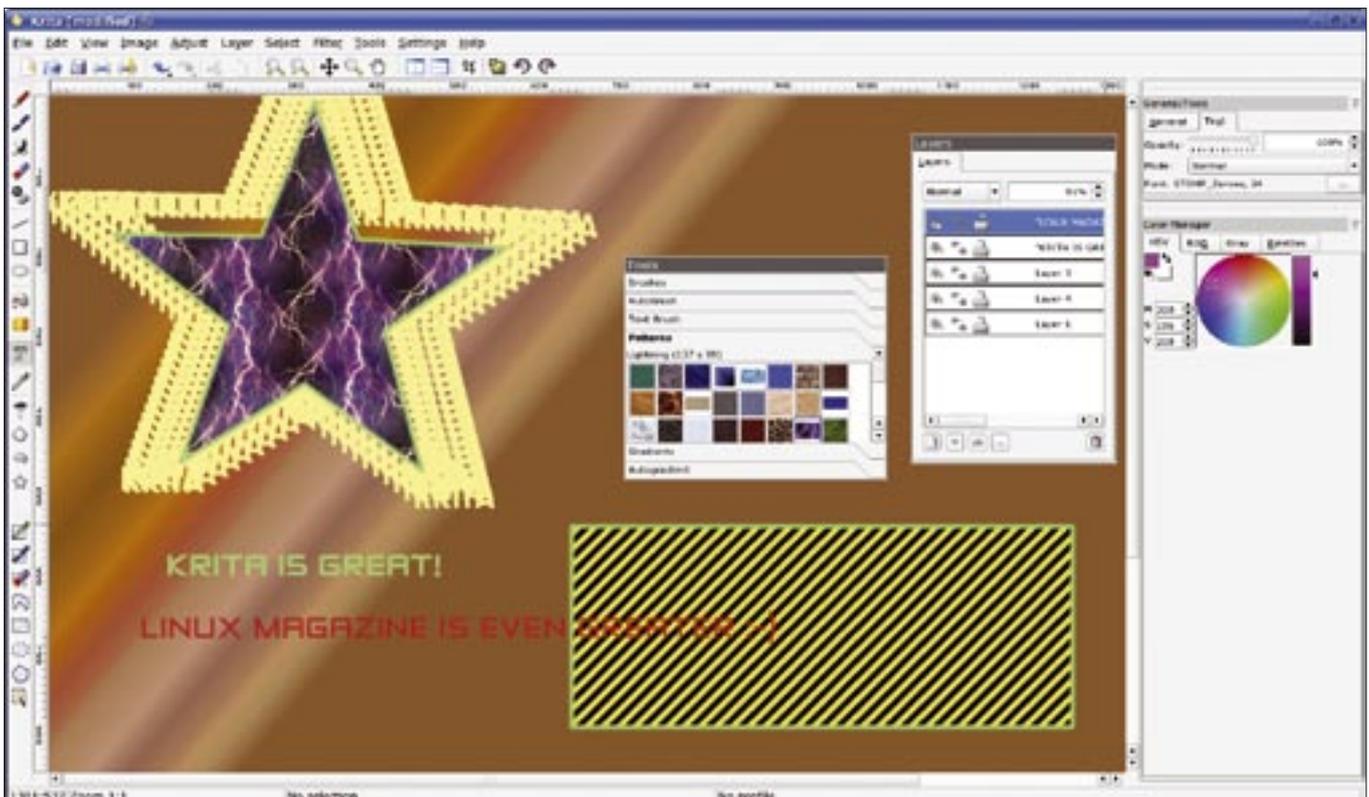


Figure 7: The Krita image manipulation tool is one of the highlights of the new KOffice package.

stores the layout in a separate file with a *.kut extension.

So far, so good, but the report designer does not allow users to specify a data source (Figure 4). According to the documentation, users are expected to compile the data source manually in the form of an XML file and store the results in a file with a *.kud extension. If you get this far, you can then give the *kugar layout.kut data.kud* command to load the report. This is neither user-friendly, nor practical. Why don't the developers allow users to specify a KSpread table or a Kexi database as the data source?

Teething Trouble

The new Kexi database front-end is plagued by teething trouble. Of the storage methods the program offers, *Project in file* and *Project on database server*, only the former method actually works. If you select a database server-based project, the selection dialog for MySQL PostgreSQL connectors does appear, but you can't actually use it. Kexi then goes on to output an error message (Figure 5). Even after we edited the connector file (there is an example in the source code in the *kexi/tests/startup* directory) and launched the database tool with a call to *kexi testdb.kexis*, Kexi was unable to establish a connection to the MySQL server.

At least the program managed to create a local database file. *Create | Table* tells Kexi to create a new table. The program supports *Text*, *Integer number*, *Floating point number*, *Yes/No*, and *Date/Time*. But the program is riddled with bugs. A primary key needs to exist for each table; Kexi can't edit the data if the key does not exist. Date/Time fields are not usable in the current version; you can only use the date field, but time entries are not possible. This said, there is no way to enter a date manually; users are forced to click their way through the appropriate KDE widget. And Kexi

makes all kinds of strange suggestions for the date (Figure 6).

Finally, the Kexi form editor is impractical. Although users can put wonderful forms together with just a few mouse clicks, there is no way to specify a data source for the individual fields, let alone use the form to enter data. In contrast, the query editor is very useful.

Neither Kugar nor Kexi are really integrated into KOffice: KWord uses its own database format, and it is impossible to create reports or forms using one of the three main KOffice components. Additionally, the integrated KOffice workplace, which you can launch by giving the *koshell* command, fails to add genuine value. On the upside, the Krita and Karbon14 drawing programs, along with the KChart chart drawing tool, left a more favorable impression. Kivio is another more mature KOffice component.

Krita and Karbon14

Krita sees the introduction of an image manipulation tool to KOffice version 1.4 (Figure 7). If you have had difficulty getting to grips with GIMP thus far, due to the quirky interface, you might like to check out this KDE program. It's range of features is comparable with GIMP, but with the kind of interface that newcomers will definitely prefer. The KDE program borrows its selection of patterns, gradients, and brushes from GIMP. Krita can open GIMP files and includes sup-

port for layers. Using the application is an intuitive process, and we did not experience a single crash during our testing. Bad news for professional users: Krita only supports the RGB colorspace.

KOffice now also has a feature-rich vector drawing program called Karbon14 (Figure 8). Learning the ropes can be tricky, as much of Karbon14's functionality is hidden behind icons that you need to double click. For example, to enter text, you first need to double click the T icon; this pops up a text entry box. Strangely enough, you have to click *Cancel* to close the box after entering the text. The text baseline does not become visible until you have done this. And to modify any text you entered previously, you again need to double click the text icon, then confirm your changes by clicking *OK*. The approach to converting text to curves is similar.

Gradients

To create a new gradient in Karbon14, again double click the icon. Karbon14 pops up an *Edit gradient* dialog with a triangle for each color in the gradient displayed below the gradient box. If you click on a triangle, Karbon14 removes the color from the gradient. But if you hold down the mouse button on the triangle, you can change the color. To add a new color, you need to double click on the area shown in red in Figure 9, and then select the new color. After completing the gradient, you can select *Add to*

Marcel Hilzinger studied history at university. He has been working for Suse Linux's Hungarian office in Budapest since 2001, where he translated the Suse documentation into Hungarian, among other things.

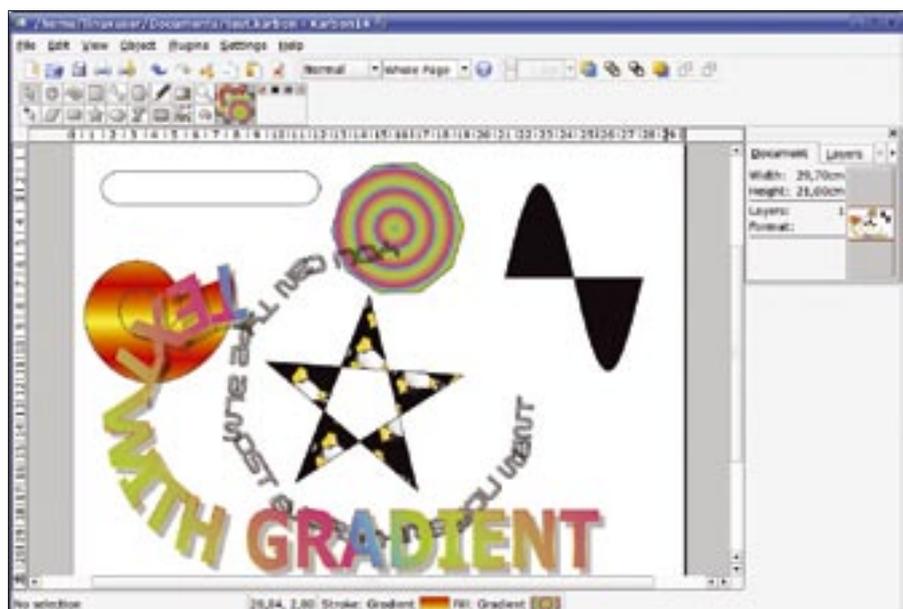


Figure 8: The Karbon14 vector drawing program gives users room for creativity. The developers need to put more work into the palette.

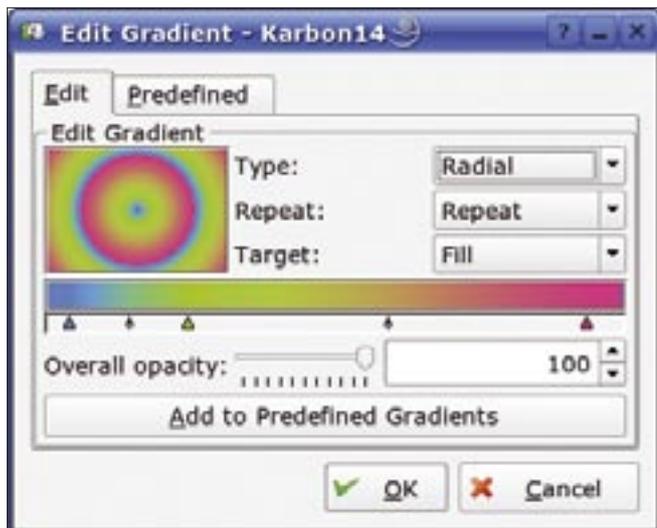


Figure 9: The Karbon14 gradient tool is hard to find and use, but the final results are very good.

predefined gradients. You can then switch to the *Predefined* tab and select the new gradient.

Another point of criticism while testing Karbon14 was that the tool windows are not freely scalable. Krita has found a better solution to this problem.

Karbon14 and Krita integrate well into KOffice, and this means you can add Krita or Karbon14 drawings to KWord, KSpread, or KPresenter.

KChart

Keeping to the Unix principle of a “a tool for each chore,” KChart is a chart drawing tool; and it does its job in a convincingly simple way. After launching the program by pressing [Alt + F2] and entering *kchart*, the standard KOffice open or create file dialog appears. Select *Bars* and then click *OK*; if you have a template for the chart, you can simply select *Edit | Edit data* to change the values for the bars.

Details such as the chart type, legend, colors, font, and background can then be specified via *Edit | Chart | Create chart*. KChart also runs as an embedded appli-

cation in KWord and KSpread.

Conclusions

The new KOffice version is on the right track. The three major components, KWord, Kspread, and KPresenter, can't hold a candle to OpenOffice with respect to importing and exporting third-party formats, but the fact that KOffice is moving to the OpenDocument format should remove many compatibility issues between the two major Linux office packages. The KOffice label is exaggerated at times: the Kexi database front-end is far too immature for integration – and lightyears away from being a replacement for Access. And the KOffice developers would do well to think hard about the future of the Kugar report generator.

The Karbon14 vector drawing program and the Krita image manipulation software are on a par, or just ahead of their OpenOffice counterparts right now. The biggest advantage of KOffice may be the speed and the small footprint – KOffice weighs in at a mere 25MBytes, a size that other office packages can only dream of. ■