

GNOMOGRAM LOOKING FORWARD

Björn Gansladt looks at GNOME Foundation, Accessibility in GNOME, New income for Ximian, Overflow, GDKXFT and Devhelp

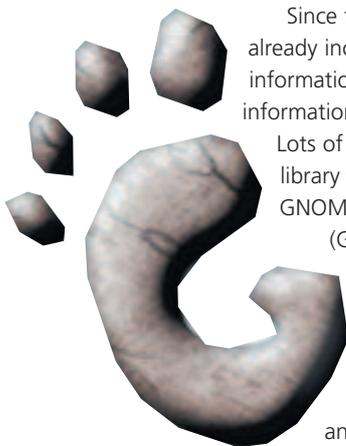
Accessibility in GNOME

Behind the friendly word Accessibility, lies the objective of making GNOME accessible not only to typical users, but also to those with special needs. As in the case of Usability, there exists an associated project, which is supported by Sun. The basis of the Accessibility framework is the Accessibility ToolKit or ATK, through which the data goes to an "Assistive Technologies Service Provider Interface" (AT SPI). This interface in turn serves diverse programs, one such concept being speech output for example.

Since the definition of a GTK interface already includes any amount of useable information, only a small amount of information has to be passed on directly to ATK.

Lots of information is read out by another library with a nice acronym, namely the GNOME Accessibility Implementation Library (GAIL), and passed on to ATK. This means that GNOME programs can be made substantially more usable by the disabled, without a great deal of additional expense. Such a library could obviously be written for any other toolkit such as Qt or Motif,

for example. Another option might be bridges to existing accessibility frameworks, such as Java's JA, enabling various programs to communicate via the same output device. Whether ATK will actually become established is of course another story, but it has at least made a good start.



New income for Ximian

Just in time for the LinuxWorld Expo, Ximian has decided that man cannot live by fuzzy monkeys and T-shirts sales alone, and has organised a range of new sources of income. Following the example of the common Linux distributors, there now exists both standard and professional versions of the Ximian desktop, which differ mainly in the support period and StarOffice. The two versions will cost \$29.95 and \$49.95 respectively, and can be downloaded – without support, naturally – free of charge.

Red Carpet, will also be making money in future. Faster downloads via Red Carpet Express will in future cost \$9.95 per month, and with Corporate Connect, the management and updating of software within larger groups from \$2,500 plus annual fee will become much simpler.

So that Red Carpet does not remain limited to software from Ximian, a partner program has also been developed, which is an option Mission Critical Linux took advantage of immediately at the LinuxWorld Expo.

Libraries required

Overflow LibXML, FFTW
Gdkxft LibXft (should be included in XFree86)
Devhelp GConf >= 0.12, GtkHTML >= 0.10.0, Gnome-print >= 0.29, LibXML >= 1.8.10

GNOME Foundation appoints Timothy Ney

It's been common knowledge for some time that the GNOME Foundation has had a candidate for the post of Executive Director – exactly who that candidate was has only recently been revealed with the appointment of Timothy Ney. With experience in the Free Software Foundation

and a few other non-profit enterprises, Ney appears to be the ideal candidate for the position. In future he will be concerned with operational activities and the representation of the GNOME project.

Since his salary depends on successful fund-raising, Timothy Ney should have

sufficient motivation to organise as many donations as possible. This makes him the only non-elected director who gets paid for his work. Nevertheless, Ney comes highly recommended and will hopefully contribute to the strengthening of contacts between business and the GNOME Foundation.

Devhelp

The fact that every larger Linux library now comes with some documentation of its own is a promising development, but this can also lead to a certain amount of confusion. Devhelp has set itself the task of bringing order to the chaos of the various pieces of documentation. The program manages documentation files in books, for which metadata is stored in so-called spec-files. Thanks to Gnome-vfs, it makes no difference whether the actual content of the books is on your hard drive or on a network, although there are lots of books available for download at the codefactory. Of course it is also possible to search the books, and the search method should be familiar to all Emacs users. Since the target group of Devhelp and IDEs are intended to be roughly the same, it's obviously a good idea to integrate the program into some common IDEs, which should occur in the CVS, at least in the case of Anjuta and Gide.

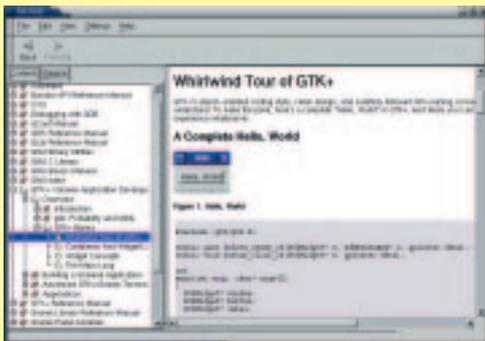


Figure 3: Devhelp can also download documentation from the Internet if required

Overflow

With Overflow, relatively fast flow-oriented programs can be developed, by networking various functions. In this it is similar to programs like Simulink and LabView, even if the range of functions might appear somewhat smaller by comparison. Since Overflow is part of the Open Mind Speech Project, these functions also encompass, in addition to fuzzy logic and neural networks, analyses for human speech.

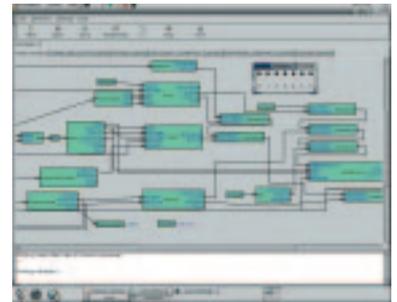


Figure 1: An audio effect in Overflow

As with other programming languages, for the sake of clarity, it is also possible to define your own functions, which can then be used in the MAIN subnet. Although this is the main task of Overflow, the functions are not restricted to the analysis of data, but also enable graphical inputs and plots, and in future, image processing will also be possible.

Once you've set up a network, this can not only be executed but also translated and compiled in C++ code. This also makes it possible to produce comparatively fast programs. An optimised fast-Fourier transformation is also critical for the speed of many functions, which is why Overflow relies on FFTW (Fastest Fourier Transform in the West). If you like it even faster, you might also want to get your hands on some processor-optimised offspring of FFTW. There are also plans to integrate Overflow into Piper, which will make it possible to run Overflow components on different computers. Nevertheless, Overflow will continue to be available in future as a separate program.

Info

GNOME Accessibility Project	developer.gnome.org/projects/gap/
Ximian	www.ximian.com
Overflow	freespeech.sourceforge.net/overflow.html
Open Mind Speech Project	freespeech.sourceforge.net
Piper	www.bioinformatics.org/piper/
FFTW	www.fftw.org
gdkxft	gdkxft.sourceforge.net
Devhelp	devhelp.codefactory.se
Devhelp	devhelp.codefactory.se/books.php

Gdkxft

A diverse range of patches for GTK+ 1.2 has existed for some time now, offering soft focus fonts and facilitating binary compatibility, for example. However, compiling GTK itself is not everyone's cup of tea. For those unwilling to wait for GTK+ 2, there's now a minimally-invasive method, in the form of Gdkxft.

In order for this to work, Gdkxft sets the environment variable LD_PRELOAD and thus ensures that libgdkxft.so is loaded before any other libraries. This means that the library can start commands really

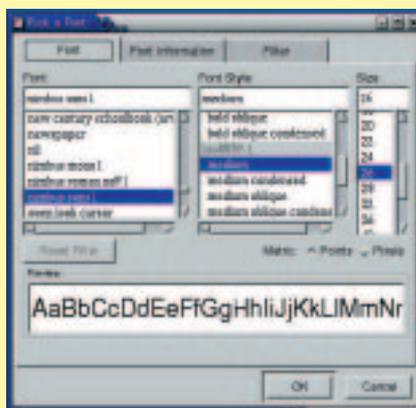


Figure 2: Soft edges, wherever you look

intended for GDK, and display soft-focus fonts via Xft.

Obviously LibXft is necessary for this but this ought to be included in XFree86. The configuration of Xft here is taken over by its own script gdkxft_sysinstall, which also installs its own GTK theme with soft focus fonts. Which fonts the library gives a soft focus can be specified in ~/.gdkxft, since Xft certainly can't handle all fonts. Nor does Gdkxft cope with all programs, but with "gdkxft_sysinstall -u" and "make uninstall" the whole thing is also easy to remove again.