

Gnome News and Programs

GNOMOGRAM

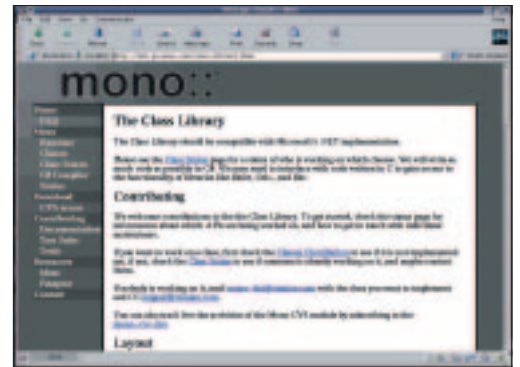
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+++ Ximian Mono +++ GNOME at the LinuxTag +++
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Ximian Mono

What was already widely suspected after the announcement of SOUP is now official: Under the name of Mono Ximian will be porting some of the standardised parts of Microsoft's .NET as free software onto Linux. This also includes the programming language C#, which, because of its design, works with both Java and with C++. One of the great strengths of the .NET-framework is that a compiler does not create the usual binary code, but an intermediate language called MSIL (Microsoft Intermediate Language). This intermediate language is then compiled as required by a so-called JIT-compiler (Just In Time). Since it makes no difference from which language the MSIL code has been created, it can access class libraries regardless of language, which could in principle also simplify GNOME programming in various language. Ximian must thus create at least two compilers as well as a .NET-compatible class library. This class library is very



.NET also for Linux

large in the original and also contains classes for Windows' own GUI, which Ximian wants to convert with GTK+. Also, there are plans to use the libraries stemming from the GNOME environment, Libart and Libgda, for Drawing2D or database access. Since the .NET framework is still considerably larger, the Free Software Foundation has also come up with another project named DotGNU. This project, unlike Microsoft's "Passport", is intended to allow decentralised and secure authentication and thus give developers and users more freedom.

GNOME at the LinuxTag

The GNOME Project was once again on show at this years LinuxTag, and hard at work it was too. In addition to the computers, which were provided by SuSE and Sun, there were also some private computers on the stand and during the show it was possible to compile countless programs from diverse CVS archives. The other machines were quickly refitted with Debian Unstable, in order to present visitors with the latest achievements in the world of GNOME software. The concept obviously worked, since the stand was chronically overcrowded, and the trade in both CD-ROMs and T-shirts was roaring. Also of interest to GNOME fans was the Japanese stand: Here AXE presented its Sikigami-GNOME on the iPaq and a handheld from NEC not yet available in this country. Even though the interface was clearly recognisable as GNOME, using it turned out to be somewhat fiddly, since it was designed for the Japanese market.

As he did last year, Matthias Warkus gave a talk on GNOME – this time with the emphasis on GNOME 1.4. In the course of the talk, though, he also went into the origins of GNOME and offered a small preview of GNOME 2.0. Also of interest for all Python programmers was the talk by Christian Egli, who presented Methods of Rapid Application Developments with Python and GNOME.

For all those who missed out on the LinuxTag, there are numerous photos at the LinuxTag website, some of them portraying the GNOME Team.

One year of Gnomogram

The first Gnomogram appeared almost exactly one year ago – at that time still under the heading of software. For GNOME fans it was in any case an exciting year, and although many were prophesying the imminent death of the GNOME project following the end of Eazel, GNOME is now livelier than ever, and work is proceeding apace on the next release. And so that GNOME and Gnomogram can become even better in future, we will obviously be glad to receive both praise and constructive criticism (and birthday presents!).

GLAME

GLAME, which stands for GNU/Linux Audio Mechanics, is preparing to become the "GIMP of sound" and thus compete with Windows programs such as Soundforge. But that's a long way off,

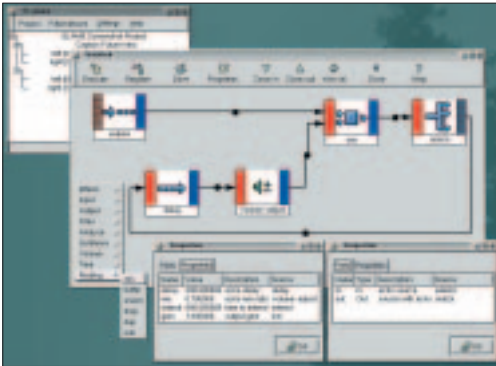


Figure 2: A small filter in GLAME

although, even if the program is still somewhat unstable, you can have already have some fun working with GLAME.

On starting, the user first sees a project view, in which samples can be assigned to different groups and projects. Such samples can be recorded or imported via the sound card, where the pop-up menu gives you a choice between *Import...* and *Apply Operation/ImEx/Import*. Although both options achieve the same purpose, the latter uses *libaudiofile* and is thus a bit faster. If you have a few samples together, they can also be roughly arranged in chronological order using *Timeline* in the pop-up menu, and for each sample an editor-view can be started. In addition to the usual effects such as Cut & Paste, the editor also allows you to create a filter network under *Apply Custom...*. In this filter network, a large number of filters can be classified between the default source *swapfile_in* and the output *swapfile_out*, and GLAME offers not only its own, but also all installed LADSPA filters to choose from. Of course other sources such as an MP3 file or an oscillator can be combined with the specified source. But with all synthetic sound sources you must make sure that they are connected to a repeater, in case you need a longer sound as input. You can of course also create a filter network under *Filternetwork/New Filternetwork...* independent of the wave editor, which can then be applied to files on the hard disk or even to a source on the sound card. Should you have already networked your own effect, you can save it as normal. You can also re-route ports with a right click on the input or output of the components and register the complete network as a new filter, which can then in turn be used in another network. For anyone finding this is all too graphic, GLAME also offers a scheme front-end named *cglame*, which is documented on the GLAME website. Even if the front-end is not particularly intuitive, it does offer some interesting options with respect to automation.

Gnomemeeting

It's not only the name of Gnomemeeting which is reminiscent of Microsoft's Netmeeting, both programs are based on the open standard H323, which makes it possible to exchange video and sound between programs. Gnomemeeting makes use of the

OpenH323 library to do this, which in addition to H323 itself, also comes with a few other standards for the transfer of video and/or diverse audio and video codecs. In order to "ring up" a conversational partner, you need their IP, but this is only static for very few users. For this reason, Gnomemeeting can call on ILS databases, in which other users register. In the case of ILS this is mainly LDAP, which is why Gnomemeeting also needs OpenLDAP to compile. A list of such ILS servers can be found at the netmeetings website, while in most cases the ports 389 or 1002 are used. If you have found a potential partner, you can copy him from the ILS window via the button with the thumbs-up in the main window. This is not the only place where the interface takes some getting used to – very few users would find out spontaneously that you can get to the video and audio settings with a right click on *Remote User Info*. Similarly to most instant messengers, the program also comes with an applet for the panel, which reports any calls. If you can overlook the minor weaknesses in the way it is used though, Gnomemeeting is a truly refined program for Internet telephony and represents an interesting – if bandwidth-intensive – alternative to the normal Chat.

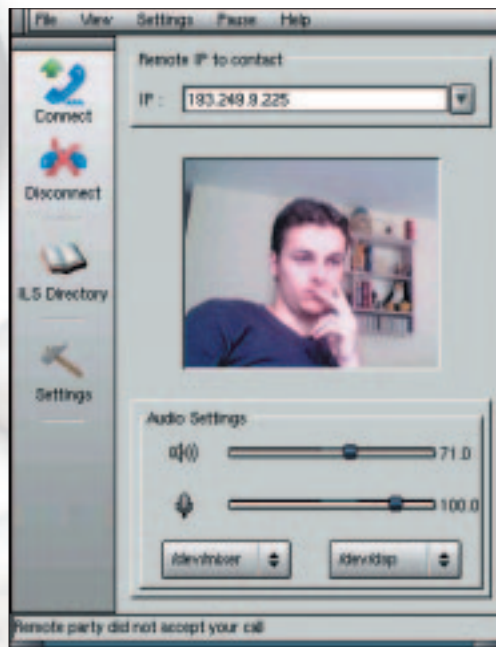


Figure 3: A picture says more than a thousand words

Info

www.ximian.com/mono/
dotgnu.org
hydra.linuxtag.uni-kl.de/~daniel/lt2k++/
linuxtag.openit.de/2001/
jadzia.nl.capsi.com/~cap/digicam/2001-07-09-linuxtag/
tigert.gimp.org/photos/
www.hf.vslib.cz/~jimmac/
glame.sourceforge.net
www.ladspa.org
www.gnomemeeting.org
www.openh323.org
www.netmeet.net/bestservers.asp

The author

Bjorn Ganslandt is a student and a passionate bandwidth squanderer. When he is not involved in trying out new programs he is reading books or playing the saxophone.