

# BRAVE GNU WORLD

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**Welcome to Georg's Brave GNU World. I can hardly believe that it is already the two year anniversary of the GNU World Web site. Of course, I'd like to say a few things about that. But first I have an interesting mix of different topics for this month's issue.**

## GNU Paint

GNU Paint (gpaint) by Andy Tai is a port of the xpaint program to the GTK+ toolkit and the GNOME libraries. It deliberately avoids competing with GIMP, which is more of a high-end program. Instead GNU Paint concentrates on being very lean and easy to use in order to also allow beginners to manipulate it.

The strong GNOME-integration of GNU Paint is a desirable feature because it seeks to be an extension of the GNOME desktop. One of its future plans is to make gpaint a Bonobo-component. That way, other GNOME applications like gnumeric can share the functionality of gpaint.

Being an official GNU Project it comes as no surprise that GNU Paint is distributed under the GNU General Public License. As far as further development is concerned, Andy would like to receive more help from translators to expand the internationalization; the program itself is otherwise very usable.

## Gnatsweb

Gnatsweb, a Web-based front-end for the GNU Bug Tracking System, has found a new maintainer in Gerald Pfeifer.

The GNU Bug Tracking System is one of the most robust bug-tracking systems available and is in use by projects and companies around the world. Its function is to give users an easy way to report bugs that can then be fixed by developers. One of the core features is the coordination of cooperative work. This reduces the danger of simultaneous solutions for the developers whilst users can check whether an error is already known or even fixed.

The last stable version of GNATS was released in 1993 and the official development has been

dormant for a while. But now GNATS has also found a new maintainer in Milan Zamazal and we should therefore expect to see a new stable release soon.

The main problem for the two new maintainers and the group of volunteers is the inclusion of all the patches that have been written in past years. There will most probably always be problems but the loss of know-how should be avoided. So Gerald is still looking for more developers interested in this task.

## Fcron

Fcron aims to be a replacement for the wide-spread daemons *Vixie cron* and *anacron*. The function of so-called *cron-daemons* is to start programs at predefined times and they are essential for system maintenance.

Typically, the daemons allow users to start specific programs at a certain time, date and/or day of week and send the user a mail upon completion with the result of the program. They normally also support periodical time specifications like every 2 hours or every minute. Fcron by Thibault Godouet expands this in several interesting ways. First of all it is also possible to make the program start dependent on the system-load, which is an indicator for how busy the system is. It also supports the specification of a field that specifies the recipient of the mail sent upon completion – mails do not have to go to the user running the program.

Furthermore, there is a field for nice-values that can be used to determine the priority of the program directly. Also very interesting is the capability to also specify how often a program should be started. This makes it possible to specify something like 'start it once a day either between 3:00 and 6:00 or 19:00 and 22:00.'

Especially for computers that are not running permanently, the execution intervals can be keyed to the uptime instead of the normal time. So a program could be run all 24 hours of uptime, for instance.

In order to avoid making the configuration file obscure, it is possible to have entries being valid for multiple lines and jobs can be serialized to prevent them from running in parallel.

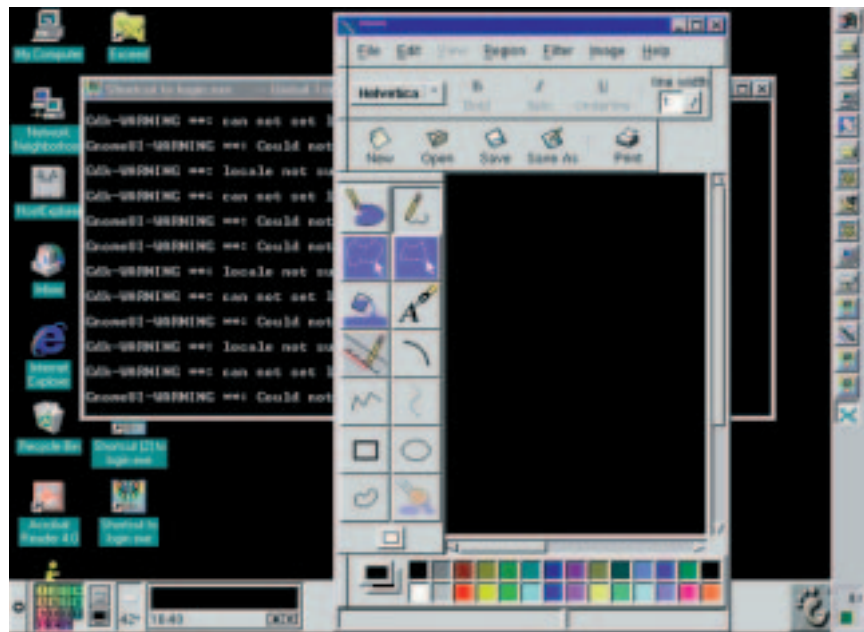
Currently, fcron is still in the beta-test phase but it is already rather stable. So the current goal is to test it thoroughly and to release a stable version. Thibault is still looking for volunteers, especially for testing under different environments and situations.

## Euklides

Euklides is an extension of LaTeX under the GNU General Public License that provides a command-language to create Euclidean geometry.

Christian Obrecht, author of Euklides, sees LaTeX-using maths teachers like himself as the biggest target audience. But every pupil and student can probably benefit from it. Thanks to the included euk2ps shell-script it is possible to create encapsulated postscript files, which can be viewed with Ghostview, directly out of the Euklides-commands.

The advantage of Euklides in comparison with other programs like DrGeo or Kseg is that Euklides is not limited to WYSIWYG interfaces like those programs are, because WYSIWYG is not necessarily the best method to describe geometrical figures. But since a GUI can be very helpful sometimes, he



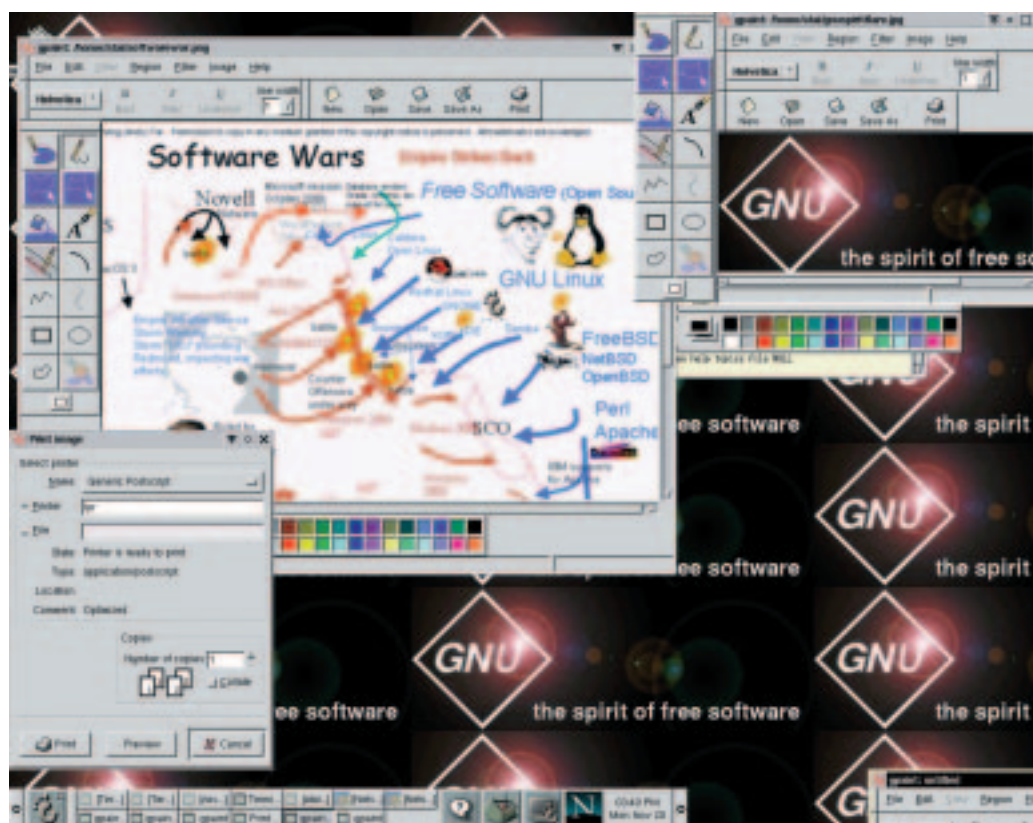
plans on writing a GTK+ based front-end – this will allow users to change figures interactively.

The next project could be especially interesting to users reading their mail with EMACS.

## Etach

John M. Rulnick wrote Etach, which is an EMACS extension for easy and comfortable use of MIME-attachments in email.

Although there are several projects in this area, John wasn't really satisfied by any of them, so he finally started writing his own. His prime incentive was to



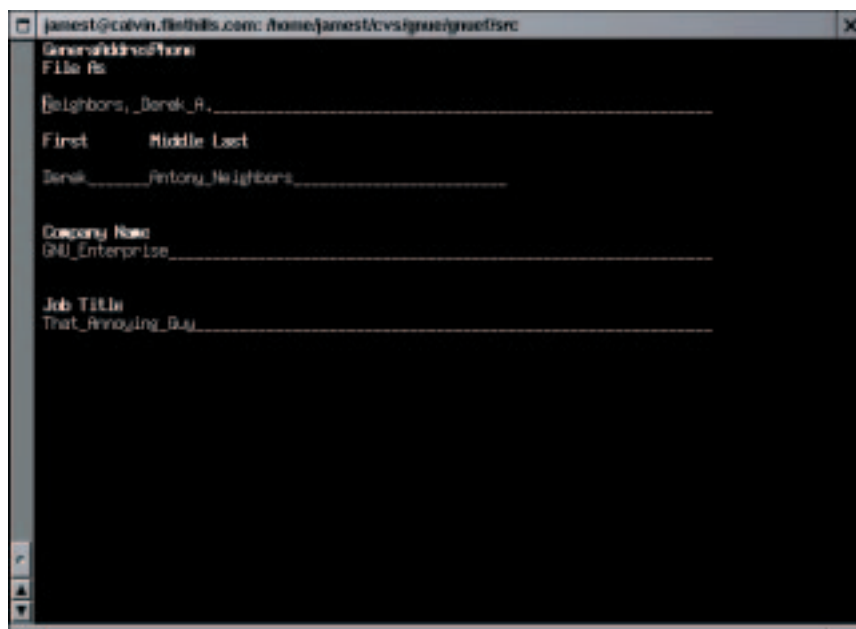
make it as easy as possible to attach MIME attachments when composing mail and saving MIME attachments to disk in incoming mail. For this reason Etach was written so that some often-needed tasks are easy to do, whilst offering multiple options for customization to your own needs.

Etach works together with versions of EMACS and has no limiting dependencies. This makes it easy to install – which should encourage EMACS-beginners especially to check it out.

The status of etach is 'almost finished', as John himself does not plan any more extensions although he is open to suggestions and willing to implement them. Although etach is officially available as beta-release, there has been no bug-report filed for several months so it is probably ready to be considered stable.

## GNU Serveez

GNU Serveez is a server-framework originally written by Martin Grabmüller and now maintained by Raimund Jacob and Stefan Jahn.



GNU Serveez provides routines and help for IP-based servers (TCP, UDP and ICMP) as well as named pipes for all connection-based protocols. It demonstrates in a portable manner the different aspects of network programming and is reported to run on GNU/Linux and other 32-bit and 64-bit Unices as well as Microsoft Windows (9x/ME/NT/2000). Among the funniest experiences during development accordingly to the developers are the built-in restriction of some Windows-Systems. Windows 95 for instance can only have up to 100 TCP-connections system-wide.

Users can implement their own servers with GNU Serveez or use it to understand how a server works. The servers included in GNU Serveez can be used as examples for this. The servers included are, for example, a very fast and easy to configure HTTP-server, an extremely clean IRC server or a Gnutella spider. Since GNU Serveez is entirely covered under the GNU General Public Licence, routines can also be used directly in own projects.

People especially interested in the exotic should take a look at GNU Serveez. There is for instance a very well functioning TCP-over-ICMP tunnel and all protocols included in GNU Serveez can run on a single port.

The easy configuration and installation especially, have been a prime goal of the developers in order to allow normal users to benefit from GNU Serveez. To keep this up and/or to improve it even further is very high on the list for further development.

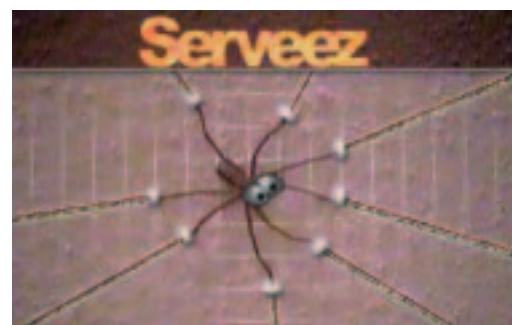
There are plans to put the functionality into a libserveez library so other projects can use it and to make the server extensible with the help of dynamically loaded modules. The developers are also considering moving the configuration language from Scheme to Guile.

People running a network at home could be interested to hear that the plans for further servers also include an easy to configure DNS-server that can modify its functionality accordingly to the online/offline status of the local network.

But now I would like to introduce a project that I consider extremely important.

## GNU Enterprise

The GNU Enterprise project has been started by Derek A. Neighbors and has the goal of covering



the complete area of tasks normally needed by enterprises under the GNU General Public Licence.

The project is modular and several of the modules are usable out of the box, while others are included on an extensible or customizable basis. Modules would for instance be 'human resources', 'finance' 'customer relationship management (CRM)' or 'enterprise resource planning (ERP)'.

The currently functional core includes GNUe forms, the GNU-Engine, GEAS, the application-server and libGDA, the library for data abstraction. GNUe reports, the report-server and GNUe integrator, the enterprise application integration (EAI) tools, are currently under development. Other parts like EWOK, the fax, email communications-engine and GNUe Workflow for workflow-management and so on, are currently in the planning phase. There are also ideas for load-balancing and discussions about a transaction-processor.

Originally the project targeted small and medium-sized enterprises but by now the orientation includes corporations of all size. It is obvious that this is a huge project which is essentially the main problem. Right now there is a bunch of volunteers and employees of some big computer-companies, universities and governmental agencies of the US working on it with Derek.

In order to achieve maximum portability, things have been based upon XML and GNUe runs on Unix (GTK+ or Motif), Win32, Mac, Curses and the Web. Since developers from all corners of the world are busy with it, complete internationalization is one of the major goals of the project.

Extraordinary is also its fundamental and very conscious orientation towards Free Software. So the GPL has very consciously been chosen instead of its lesser counterpart and the developers seek to have a good insulation with CORBA rather than risking losing freedom. It is also a principle of the project that all active developers give their copyright to the Free Software Foundation to assure the lastingness of the project.

As solutions in this area have pretty much been exclusively proprietary in nature, this is a very important project that can, in the long run, ensure the introduction of Free Software into every company.

This brings us to the last topic of the month – which is a matter of great personal pleasure for me.

## Two years of Brave GNU World

The past year has gone by so fast that I find it hard to believe but the Brave GNU World is two years old. When I began writing it, I was not entirely sure whether it would be possible to fill a page with Free Software topics every month for a long period of time. It seems we now have the proof that it is indeed possible.

But the column has not only survived, it is still growing. Two Korean translators – Lee Jong Keun and Ki-Young Choi, have joined the Brave GNU World family. Thus, the column now appears in six languages. Additionally, it seems that it is also printed in the Korean Linux Magazine which increases the count of magazines it appears in to four (Linux-Magazin Germany & U.K., Linux-Magazine France and now Korea). All this would have been impossible without all the help I received from volunteers that work in the background as proofreaders, translators, scouts and moral supporters. This anniversary is as much yours as it is mine and I would very much like to thank every single one of you!

I would like to take even another step forward with Brave GNU World but, due to my work for the Free Software Foundation Europe, time is rather limited. That is why I am looking for someone or a small group of volunteers that would be willing to maintain the Brave GNU World Web page and slowly start expanding it towards a fully fledged Web site.

Currently the most important task is maintaining the page, but although the design isn't bad there is still room for improvement. Osvaldo La Rosa has for instance had some ideas how the page could be made more friendly to read for visually impaired people. And at some point I would like the Web site to become a truly interactive forum in which the column will appear every month but I have also been thinking about a speakers corner, in which selected essays to some topics could be published. Also the integration and the layout of the 'We run GNU' campaign is in need of a redesign.

If you think you can do this and feel like it would be fun to do so, please email me.

I hope this was not the last anniversary the Brave GNU World has seen – it will definitely continue next month. Ideas, comments, questions, interesting projects and life-stories by email are welcome as always. ■

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### Info

- [1] Send ideas, comments and questions to Brave GNU World <column@brave-gnu-world.org>
  - [2] Home page of the GNU Project <http://www.gnu.org/>
  - [3] Home page of Georg's Brave GNU World <http://brave-gnu-world.org>
  - [5] GNU Paint home page <http://gpaint.sourceforge.net/>
  - [6] GNU Image Manipulation Program (GIMP) home page <http://www.gimp.org/>
  - [7] GNATS home page <http://sources.redhat.com/gnats/>
  - [8] Fcron home page <http://fcron.free.fr/>
  - [9] Euklides home page <http://euklides.multimania.com/>
  - [10] Etach home page <http://etach.sourceforge.net/>
  - [11] GNU Serveez home page <http://www.textsure.net/~ela/serveez/>
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