The monthly GNU Column

BRAVE GNU WORLD

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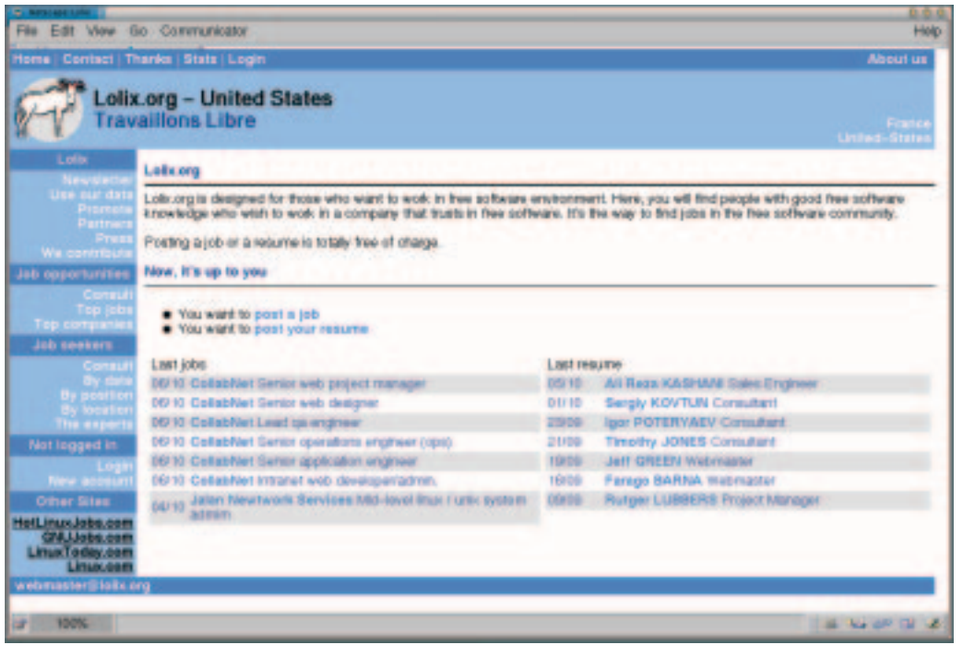


Welcome to Brave GNU World. This month we have got several small projects covering a wide spectrum of applications: Lolix, GtkLP, GNU FaXile, KBasic, Colibri and PPCBoot

Lolix in action

Welcome once again to Georg's Brave GNU World. I'll begin this month's issue with a project originating in France.

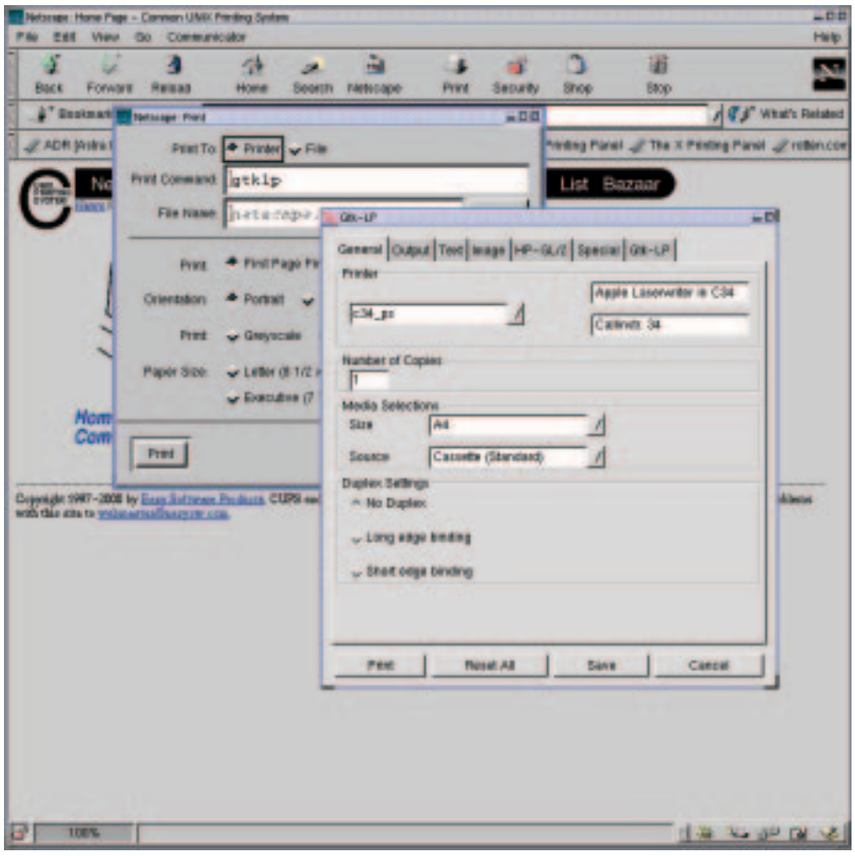
Lolix

The Lolix project by Rodolphe Quiedeville is based on a webpage on which job seekers in and around Free Software can get together with possible employers.

It follows the tried and tested concept that companies register their job openings parallel to IT specialists listing their profiles. Both categories can be browsed with a search engine for possible matches. The search engine is pretty interesting, as it allows fine-tuning of the search parameters to produce better matches. A high quality of technical implementation is very important to Rodolphe. He perceives this to be one of the major advantages of his project.

At the moment the technical part is being assisted by Loic Dachary and Raphael Rousseau. Of course all the code is published under the GNU General Public License.

Originally limited to the French job market, Lolix has been offering its services in the United States



Print with ease using the CUPS frontend GtkLP

since September 2000. The goal is to support other markets and to translate the webpage into other languages. The English translation is not yet complete and could see some improvement. For this task, the protagonists are still looking for contacts in the different countries. They are also seeking to improve functionality and online help.

Because of its specialization on Free Software, this project is very interesting. One can only hope that the UK job market will be represented soon.

GtkLP

The GtkLP project is a graphical frontend for the Common Unix Printing System (CUPS). As the name suggests, it is based on the GTK+ toolkit which ascertains an especially seamless integration into the GNOME desktop. The advantages of such a project for "standard" users should be obvious as a lot of people lose track of the different commandline parameters.

This project under the GNU General Public License has been written by Tobias Mueller, a mathematics and computer science student. The only thing really missing is support for password-protected printers and the special options - all the CUPS standard options are already completely implemented. Adding the extended functionality is the next task - support for more languages would also be nice. Either way, this is a project that can definitely make life easier.

GNU FaXile

Wolfgang Sourdeau created the GNU FaXile project. It's goal is to implement a complete fax environment for the GNU system. Even if the name suggests it, GNU FaXile is not yet an official GNU Project - making it one is currently being discussed. This shouldn't pose any major problems as it is already published under the GNU General Public License. Even the library uses the GPL because Wolfgang Sourdeau is very much opposed to proprietary software benefiting from his work.

The goal - a complete, high-performing and user friendly fax environment based on Free Software, is still quite some time away. The only part working right now there is the fax viewer. But this one already looks quite nice.

Regarding the technical implementation, one of the goals is to keep the package independent of the transport method. GNU FaXile will support HylaFAX as well as mgetty and efax. For all of these it will not only provide a GNOME GUI but also text-based interfaces. One further goal is to re-implement some components of HylaFAX and mgetty, making them better and more usable.

Besides the fax viewer, the complete package will provide a dialog for sending faxes, an administrative frontend and a GNOME panel applet. Pretty much all of the non-GUI components will be provided for other programs within a modular library, too.

There is a second project with the goal of creating a fax environment based on Free Software which is GNOME-GFax by George Farris. Since both projects seek to achieve something remarkably similar, Wolfgang Sourdeau, George Farris and Till Bubbeq, one of the very active participants for GNOME-GFax, came together to discuss merging both projects. So far this has been quite successful and a joining of forces can be expected.

After merging the code the next common goal will be a strong GNOME integration; especially the connectivity to gnome-print and the GNOME address book. Additionally functions like an activity log are to be implemented. But before this happens, it is very important for Wolfgang to see GNU FaXile become an official part of the GNU Project in order to justify the name. His long term plans are to implement an OCR engine, but that is definitely not to be expected within the next few months.

Before the real work can begin, some concepts have to be sketched out and discussed - ideas and support by other developers are very much welcome for this.

After these projects (which mainly appeal to the end-user) I will now enter the area of software development.

KBasic

The KBasic project is working on a very easy to use development environment in the kind of MS Visual

Basic. Graphical user interfaces can be assembled with the mouse.

The original author and current maintainer, Bernd Noetscher, discovered that he was unable to find a good BASIC IDE under GNU/Linux. For C/C++ one can use projects like Glade (GNOME) or KDevelop (KDE), but he failed completely when looking for something like it based on BASIC. Even if BASIC does not have the best reputation among experienced developers, it very often is the first language people learn because it is easy. KBasic makes it possible for relatively inexperienced programmers to create functional GUI programs without a lot of work.

Right now KBasic is still alpha grade software, the first stable release is due to come out next year. The rather big development team still has a lot of work up to that point and additional programmers with C++ and/or Visual Basic experience are definitely welcome.

Tommy Scheunemann, being developer and documentation author within the KBasic project, would like to emphasize that although KBasic will provide a functionality similar to that of MS Visual Basic, it will not be able to run Visual Basic programs. The reason for this is the proprietary nature of Visual Basic. KBasic is of course being developed under the GNU General Public License.

Colibri

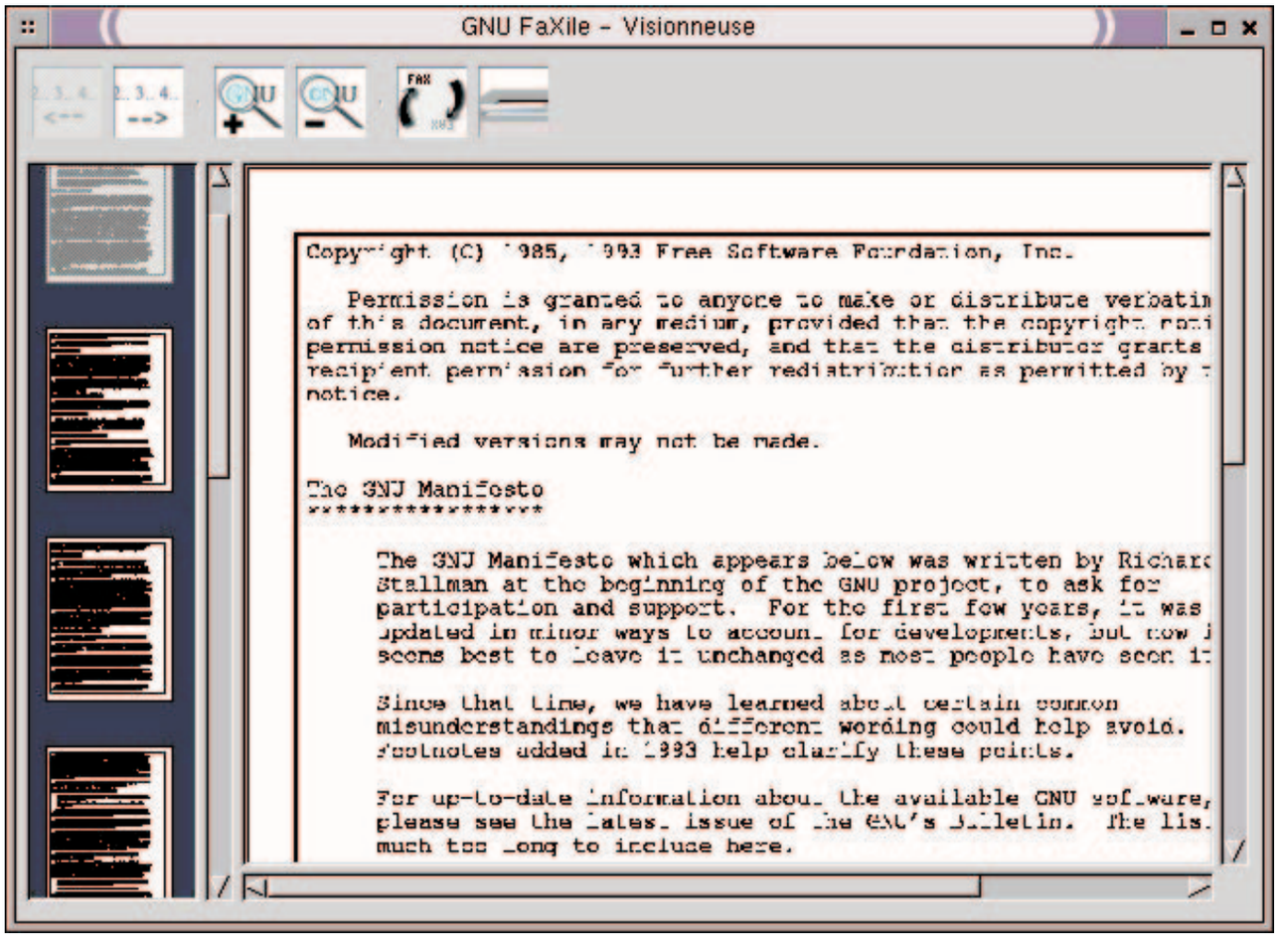
Colibri has been created by Christian Liesch during his computer science studies. It is a developer framework for ASCII-based applications published under the GNU GPL.

This project is probably especially interesting for developers of ASCII based applications in the embedded area or for dedicated servers with small displays. The project allows building an ASCII GUI with an XML description - so it could be understood as a kind of "ASCII Glade."

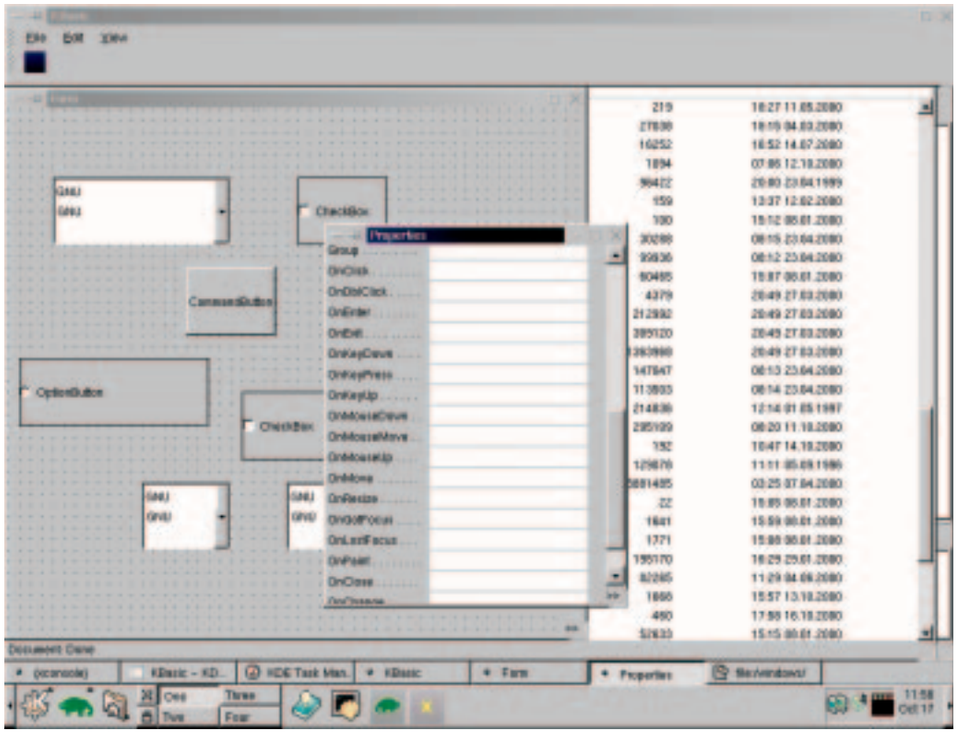
Although it has been written in C, an object-oriented structure has been chosen. For interpretation Colibri uses the Expat XML parser which cannot handle Document Type Definitions at the moment. In the case of faulty XML files this can crash the program. This is its biggest weakness as far as Christian can see.

His further plans include DTD support and then colors in the GUI as well as a developer kit for WYSIWYG click-by-click creation of the interfaces. Of course he'd always welcome help with it - although he would have to write down the guidelines for that first.

The project has its origin in the control software for a measurement station which had a small 1/4 VGA display. To realize this, Christian created a



GNU FaXile should soon be capable of optical character recognition



Although still at the alpha test stage, KBasic is already usable

menu to run processes. This menu was based on a description file. The menu slowly turned into a widget collection. The description file is being written in XML now.

java2html & cpp2htm

The projects java2html and cpp2html have been written by Lorenzo Bettini, the maintainer of gengetopt which has been introduced in the previous issue. The programs take Java or C/C++ source code and create HTML files with syntax highlighting.

These tools can be extremely useful, especially for explanation & visualization of source code in presentations or web pages. Their main advantage compared to similar projects is that they also run under MS Windows - so they can be used in heterogeneous environments.

The output is very customizable and can make use of CSS - unfortunately it does not support hyperlinking to other source code HTML files. According to Lorenzo this is the biggest weakness and is on top of the list of things to do. Most probably the rest of the work will be finding and fixing the remaining bugs - which is definitely something he would like some help with.

About the licensing: both projects are official parts of the GNU Project and are being published under the GNU General Public License.

PPCBoot

The Embedded PowerPC Linux Boot Project (PPCBoot) is based on the 8xxROM project by Magnus Damm which has been extended for fads823 boards. Its goal is to create an easy and extensible standard boot-solution for embedded devices focusing on the 4xx/5xx/8xx Motorola processors. Support for other processor types is not explicitly excluded but does depend on the support the project will receive.

The major problem is that products in the embedded area hardly stick to any standards - which requires a very customizable interface. In order to keep other users from reinventing the wheel, it is also necessary to provide a maximum number of examples. Working on these has a relatively high priority.

Besides the developer already mentioned, there is an ever-growing group of active programmers; Wolfgang Denk, Duncan Palmer and Dan A. Dickey in particular, should be mentioned here. At the moment Wolfgang Denk is working on BOOTP and TFTP support to gain flexibility in the methods of booting a kernel. Especially for devices with small flash cards this can be very handy as the Kernel doesn't have to be written to the Flash-ROM for every trial. On top of this the support of PCMCIA for IDE, Ethernet, ISDN or modem devices is being thought about. By the way: Raphael Bossek would like it to be known that PPCBoot follows a completely modular concept - every unnecessary or unwanted feature can be left out.

He also emphasized that the project depends very much on sponsorship. Siemens Austria approached Wolfgang Denk and asked how much work would have to go into a boot solution for their boards. Wolfgang replied that it would take him about a month under the GNU General Public

License and about two months otherwise, as he would have to rewrite several things. Siemens very quickly settled for the GPL solution that has now become part of PPCBoot. Of course the rest of PPCBoot is also GPL'ed.

Software patents

Finally I would like to approach the topic of patents on software. Why can't patents be applied to software in a useful way? In the pre-decision about software patents, the result was one vote in favor of software patents. This may seem to warrant a certain degree of hope as only one year ago it would have been much more clearly in favor of software patents, but the work is still far from over. It is of paramount importance that this is mooted now. It is dawning on the people responsible for this development that software patents might actually be a bad idea.

On this topic there is an excellent document by the League for Programming Freedom with the title "An Industry at Risk". I can only recommend reading this document as it uses a very factual approach to disassemble the arguments of software patent advocates. The United States have had to suffer from the slowing of innovation by software patents for several years now. Although it is already 6 years old, this document is almost frighteningly up-to-date.

Personally I would like to ask each and every one of you to sign the EuroLinux Petition against software patents in Europe and to ask others to do likewise. It is also important to disseminate knowledge about this topic - use every opportunity to talk about it with others.

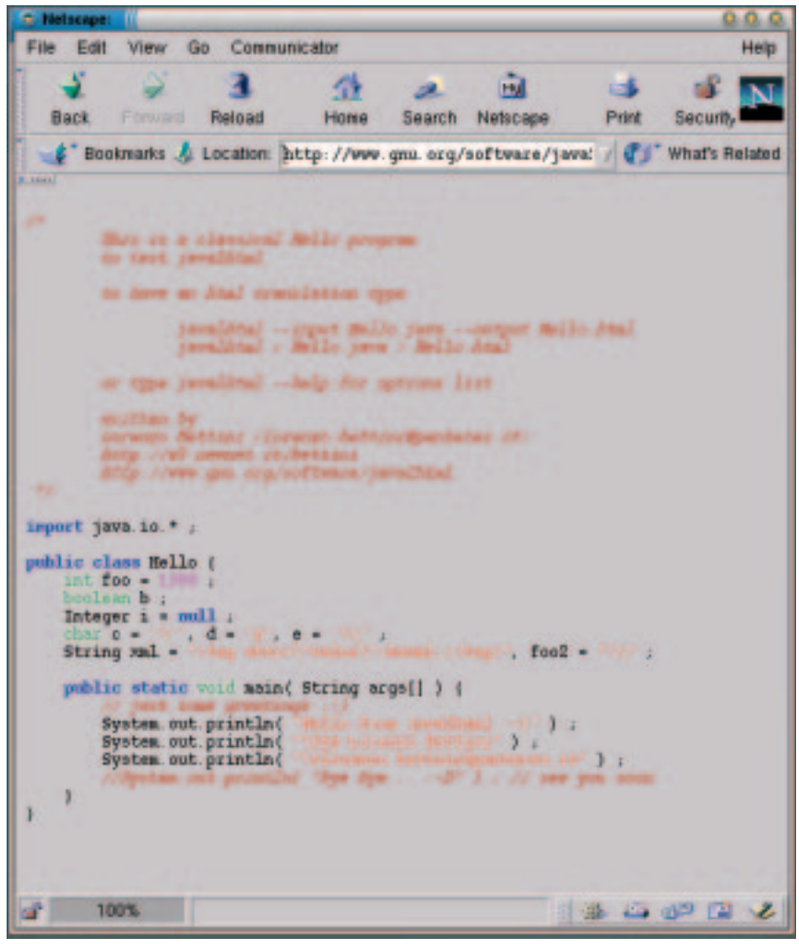
Recently, it has often happened that software patent advocates tried to avoid the discussion by offering exceptions for Free Software. But they are usually committing the cardinal mistake of thinking about the price and not about the freedom the community it is built around.

The basic principles of Free Software quite deliberately do not make a difference between commercial and non-commercial software. A significant part of the important projects is at least partially commercial - and none of the projects is solely commercial. This interwoven structure creates a positive interaction that is one of the fundamentals for the current success of Free Software. If this feedback loop is broken, the damage could be immense.

For this reason it is essential that all exceptions for Free Software must explicitly include commercial and non-commercial Free Software. We can and must not accept less.

That's it

Alright, that's it for this month. If you have questions, suggestions, ideas or comments, please don't hesitate to let me know at the first items listed below. This is also the address under which you can suggest projects to feature. ■



Converting java to html files

Info

[1] Send ideas, comments and questions to *Brave GNU World <column@brave-gnu world.org>, mailto: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*
[4] "We run GNU" initiative *http://www.gnu.org/brave-gnu-world/rungnu/rungnu.en.html*
[5] Lolix Project *http://www.lolix.org/*
[6] GtkLP home page *http://www.stud.uni-hannover.de/~sirtobi/gtklp/*
[7] GNU FaXile home page *http://www.ultim.net/~wolfgang/gfv.html*
[8] GNOME-GFax home page *http://www.gmsys.com/gnome-gfax.html*
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[13] Embedded PowerPC Linux Boot Project *http://ppcboot.sourceforge.net/*
[14] "An Industry at Risk" by the "League for Programming Freedom" *http://lpf.ai.mit.edu/Patents/industry-at-risk.html*
[15] Eurolinux petition against software patents *http://petition.eurolinux.org/index.html*

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