

An up-to-date look at free software and its makers

# PROJECTS ON THE MOVE

Should free development be a part of free software, or is Apache pioneer Roy Fielding asking too much of Sun? Besides looking at the commercial side of free software, this month's column investigates synchronization of speech and text. **BY CARSTEN SCHNOBER**

Is open source an ideology or a business model [1]? Roy T. Fielding again raised this question in his February blog announcement that he would be quitting the OpenSolaris project. The co-creator of the world's most widespread web server, Apache [2], is turning his back on the Sun project and the discussions surrounding it [3].

## Ideals, Religion, and Business

Roy Fielding accuses Sun of enticing him with the promise that development of OpenSolaris, which was placed under a free license in June 2005, also would be free. In fact, Sun can prescribe the path taken by the distribution because it owns the OpenSolaris brand, and can thus dictate the content of the releases. Fielding points out that he is not an ideologist who is looking to free the whole software community – and with it many other areas – of economic constraints. “Open Source is a business decision, not a religion,” he writes in his blog.

Consequently, Fielding must answer questions concerning the motivation for voluntary work on a free software project if it is simply an efficient business

model. Self-serving behavior by Sun and other companies shows that expectations of altruism from commercial software developers are unrealistic.

In the end, Fielding legitimizes Sun's behavior by equating open source ideology and religion. In Fielding's case, there also seems to be an element of personal insult because, from his point of view, Sun has not kept the promises it made.

In the past, talented programmers would collaborate on developing software in their free time, often producing results that put their commercial competitors to shame, but this age seems to be passing.

From the amateur programmer's perspective, taking part in a project controlled by a software giant like Sun is somewhat similar to an internship – instructive and probably fun, but at the end of the day all that unpaid work belongs to a corporation.

On the other hand, some companies remind us that the ideals of the free software pioneers are still alive and kicking. These companies treat the community

fairly and are prepared to pay free developers for their work. The professionalism and pace of development that characterizes many free software projects would be almost impossible to achieve without committed and paid programmers. Most of the major free projects are in the hands of foundations that take care of collecting donations and coordinating development work.

## Gnome for All

One of these foundations, the Gnome Foundation, has launched a promotional program to support the Gnome Accessibility project, which ensures that users who have difficulty using legacy computer input devices, such as the keyboard, or reading texts on screen because of physical challenges can still work with the Gnome desktop. Thanks to sponsors, the Gnome Outreach Program [4] has a budget of about US\$ 77,000, which the Gnome Foundation is investing to give developers an incentive to put more work into this field.



Before the start of the programming phase on January 1, 2009, users have time to make suggestions. Developers can choose a topic on the wish list and submit their implementation plans. Those lucky few who are nominated for a project by the Gnome Foundation and produce the goods within six months will receive US\$ 6,000. The second phase of the outreach program is dedicated to fixing bugs: Developers can earn US\$ 1,000 for removing five bugs.

The Outreach program will be accepting proposals until October 15 (or December 15 for short-term tasks). The project is intended to advance the desktop in the long term and is not just interested in short-term enhancements of an existing Gnome version.

## Praat

Although I'm sure many developers would be interested in earning money by working on open source software, there are still many noncommercial, free software projects, such as the Praat phonetics program [5] (Figure 1).

In linguistics, phonetics is the discipline that investigates the sounds of human speech, and the Praat program uses the computer as a tool in this field. Scientific investigation of the spoken language is just one of the software's applications, and using the program for your own experiments does not require expert knowledge.

When launched, Praat first needs some sound files on which to work. The *Read | Read from file...* menu tells the software to read files in the WAV, MP3, AIFF, AIFC, Next, Nist, or Flac formats.

*Read from special Sound file* lets users open A-Law-encoded sound data.

If you need to open a large-volume file or do not have sufficient memory resources, you can select *Read | Open long sound file...* to open the sound file. This tells Praat not to process the whole sound file in one piece, but to load it into memory chunk by chunk.

To map a sound recording to the matching text, you first need to create a file by selecting *New | Create Text-Grid...*. The text grid can be split into segments, which facilitates the process of mapping individual sentences or words to specific time intervals.

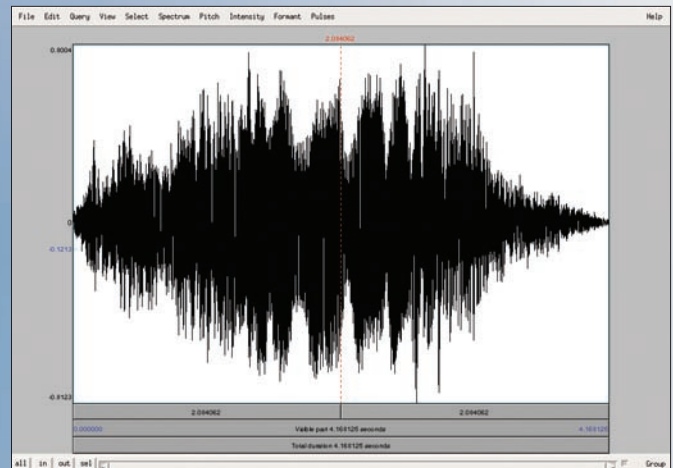
Praat offers many methods for more detailed analyses of speech recordings, including graphical analysis (Figure 2). The human ear uses formants, the peaks in frequency spectrums caused by resonances, to identify parts of speech, and they also play an important role in speech recognition applications.

Development work on Praat is progressing rapidly.

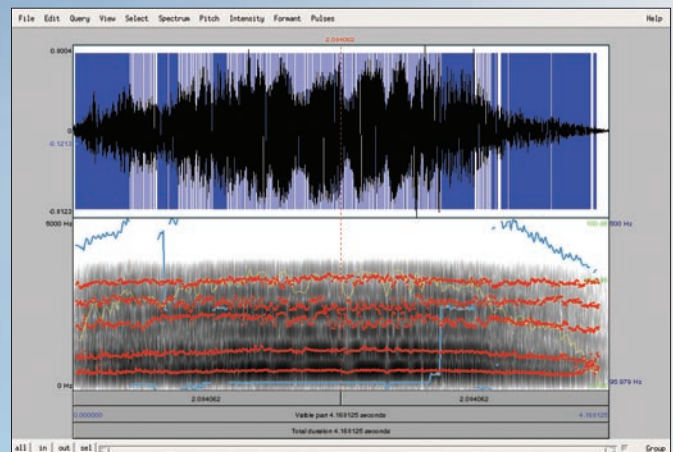
The two main developers, Paul Boersma and David Weenink, from the Institute of Phonetics at the University of Amsterdam, released no fewer than eight new versions of the free software in the first two months of this year.

## User Friendly

Because of its slightly old-fashioned LessTif (a Motif clone [6][7]) interface, Praat is unlikely to win any design



**Figure 1: Sound and text are often linked. Praat synchronizes these two aspects of human speech.**



**Figure 2: Praat is suitable for linguistic analysis of recordings. It creates spectrograms and other phonetic diagrams.**

awards, but at least it is user friendly. The developers have not restricted their work to the Linux version; the software has been ported to FreeBSD, Mac OS X, Windows, SGI, Solaris, and HP-UX. If you are interested in porting Praat to a system that is not currently supported, you just need the compiler and the LessTif library for the graphical interface. ■

## INFO

- [1] Roy T. Fielding's blog: <http://roy.gbiv.com>
- [2] Apache http Server Project: <http://httpd.apache.org>
- [3] OpenSolaris: <http://www.opensolaris.org>
- [4] Gnome Outreach Program: <http://www.gnome.org/projects/outreach/a11y>
- [5] Praat: <http://www.praat.org>
- [6] LessTif: <http://www.lesstif.org>
- [7] Motif: <http://www.opengroup.org/motif/>