

World News

■ Free software helps print Indian telephone directory

India's largest telephone company, Bharat Sanchar Nigam Ltd. (BSNL), has turned to free software tools to process and typeset this year's directory for its subscribers in Thiruvananthapuram (Trivandrum), the capital of the southern State of Kerala.

The two-volume directory, to be distributed to all subscribers of the Thiruvananthapuram Secondary Switching Area (SSA), has 1,200 pages and 320,000 entries. The 400,000 copies have been printed by the city-based St. Joseph's Press (SJP), using typesetting software and programs provided by River Valley Technologies (RVT), a Thiruvananthapuram-based software house that has vast expertise in offering typesetting and publishing solutions using Free and Open Source software.

In the normal course, this print run would have taken six months and involved around 50 employees wholly dedicated to the work. However, in this case, SJP was able to finish the entire printing in four months, using a small team.

The secret to the swift processing of the job was in the typesetting work. The

BSNL data of telephone numbers, subscribers names and addresses was supplied as dBase files. Using a set of free software libraries downloaded from the Internet and locally customised, this data was extracted into a PostgreSQL database. RVT then wrote a Java program to pipe this newly generated database into TeX, from which the company produced the final output as PDF files, using pdfTeX. Altogether this work method saved man-months of time compared to doing the same job using normal programs like PageMaker or QuarkXPress.

"So powerful is TeX that it was able to process nearly 1,200 pages in just four minutes," says RVT's Managing Director C. V. Radhakrishnan, who is also the founding member of the Indian TeX users group. To incorporate corrections and editorial changes to the proof sheets, RVT designed a graphical spreadsheet interface for SJP. This also helped to save time in updating around 10,000 entries which had changed since the last directory was printed four years ago. ■

<http://www.river-valley.com/>

<http://www.tug.org.in/>

■ Enable the blind

The development of the graphic user interface (GUI) has empowered lay-users to operate computers more easily. For blind people, however, GUI is an obstacle as verbal expressions and keyboards are their basic means of using computers.

A group of free/open source software designers have been aware of this gap and elaborated *brlTTY*, a daemon interface program for Braille displays, currently maintained by Dave Mielke. Its function is to transform the content of virtual consoles into Braille code and transfer it to Braille displays. Currently Debian, Red Hat, Slackware, SuSE as well as Sun's Solaris Sparc workstation deploy *brlTTY*.

Jun-Ren Yang, a Taiwanese, has started a Taiwanese *brlTTY* distribution to

resolve the shortage of usable Braille display interface programs as DOS gradually runs out of fashion. The GPLed *twbrlTTY* contains various patches for *brlTTY* including Chinese Big5 and Braille code (*twbrl.table*). The recently updated *twbrlTTY* version is the third release based on *brlTTY* 3.1. Beta testing has been done at Taichung blind people school as well as by other blind volunteers using Red Hat and ZipSlack.

To start with, users must download the corresponding versions of *brlTTY* and *twbrlTTY* respectively, and install them simultaneously. So far, a perfect solution for *consolechars* is still missing due to the Unicode problem. The main challenge remains the locale setting problem in Chinese Linux Extension (CLE).

■ Wavering Netherlands

When the Lower House of the Dutch Parliament – against the vote of the Liberal Party (VVD) – accepted the motion of the Green Party (GroenLinks) to implement open standards throughout the national government by the end of 2006 (see World News, Linux Magazine, Issue 27, p12), it looked like the Dutch government finally was ready for the operating system with the penguin mascot. But although Joop Wijn, the countries' Secretary of Economics Affairs, welcomed the move, he recently expressed serious doubts if all systems would be compliant with the open standards directive by 2006.

Based on the same report the Green Party started convincing local governments to make a similar choice. Many cities welcomed the initiative, including Nijmegen, which initially accepted the proposal with a vast majority.

Three weeks later the Labor party had a change of heart and wanted a revote. The cause was that the socialists didn't believe in the TCO-advantages any more and couldn't be convinced. Disregarding the freedom element Nijmegen turned their back on open standards.

On the other hand major Dutch companies like e.g. Philips, Shell and Unilever have expressed clear plans to use Open Source and Linux in their organizations. ■

Though the application charset map and screen font map in console recognize Big5 code, *twbrlTTY* still lacks a perfect solution for braille input due of the innate difference of Chinese characters and Roman letters.

As there is no perceptible message from the Braille display during installation (remember, blind people are not able to see anything on the screen), Linux still isn't as widespread among sightless users as it could have been. Thus the key development for the next *twbrlTTY* release will be sound response (most of the sightless people have a sharp ear). At the moment users are elaborating sound effects for starting programs and option lists. ■

<ftp://ftp.batol.net/linux/twbrlTTY.tgz>

■ Linux World Ireland

For the third year running, the Irish Linux Users Group (ILUG) took part in the ICT Expo, Ireland's leading IT event which was held at the RDS Irish International Convention and Exhibition Centre in Dublin on 1st to 3rd April, 2003. The 36 squaremetres stand was sponsored by IBM and Scope, and was manned by volunteers from ILUG. During the show, they gave away free copies of a customised version of Knoppix 3.2 (used to demonstrate on laptops at the show), and sold Red Hat 8.0 boxsets.

One of the highlights of the ICT Expo was the Linuxworld Ireland Conference. During the second and third day speakers such as Jon "maddog" Hall, Raven Alder, and Michael Meeks took part in a number of seminars. Jon delivered the keynote speech and also spoke of his pleasure in getting his laptop setup the way he wanted it, while Raven covered cryptography on the Linux platform. Industry contributors included IBM, Open App and HP.

Support for Linux has become noticeably stronger over the past three years. ILUG has had one of

the busiest stands overall for those years, but this year there were more Linux stands than ever – from Linux-based devices to training, consultancy and recruitment. Different from past years, the booth personnel no longer have to explain what Linux is, only how it can help businesses and schools work cheaper, cleverer, better.

The next free software event to watch out for in Ireland is the Fourth Annual GNOME Users and Developers European Conference (GU4DEC), June 16th–18th in Dublin. ■

<http://www.ictexpo.ie/>

<http://www.guadec.org/>



■ A Spanish model for the rest of the world

Back in 1998 the government of Extremadura, a small region of Spain, launched a Plan of Technological Alphabetization (PAT). One thing was clear right from the beginning: The success of this educational project depended totally on the chosen software, and access to source code was a very important issue. As a result, LinEx, a new Linux distribution based on Debian GNU/Linux 2.0, came into being. Its name derives from the words "Linux" and "Extremadura".

To make it more friendly to novices, Linex drops Debian's installation routine in favor of its own, automatic one using a lot of wizards.

The recent version Linex 3.0 is based on Woody, the last stable Debian version. GNOME 2.0 serves as desktop environment, but icons and other items have been designed to reflect the region's familiar historical landmarks. Linex 3.0 includes OpenOffice 1.0.1,

Evolution 1.0.5, MySQL 3.23, xmms 1.2.7, GIMP 1.3.7, Galeon 1.25, Nautilus 2.0 and other useful free tools.

The government of Extremadura produced 150,000 CDs of it and is distributing them in business offices, stores, schools and community centers. An update version, Linex 3.0 release 1, including drivers for SCSI hardware has been published in April.

Currently, Linex has an installation base of over 10,000 computers, mainly in government offices and schools. 80 percent of all government offices in Extremadura use the distribution without complaints. The European Commission is promoting Linex as a model for the rest of the world, and countries like China, Italy and Brazil have been studying the project. ■

<http://www.linex.org/>

<ftp://62.175.249.5/linex/>

linex_scsi-3r01-i.386.iso