DEBIAN 2.2 R2

#### **COVER FEATURE**

## THE PURIST'S ALTERNATIVE ANDREAS HUCHLER

Debian, unlike most common distributions, is not compiled and updated by a distributor with a commercial interest, but survives on the voluntary commitment of a world-wide community of developers and compilers. The product – the official release, which is regarded as extremely stable – can be downloaded in full from the Internet. As an alternative to this, various Debian resellers offer distribution packages, with which they sometimes include, in addition to the official release CDs, a manual or supplementary CDs. But we are only going to look at the official release.

#### Installation

Going against the general trend towards graphical installers, the developers of Debian 2.2 continue to insist on the tried and tested menu-supported or console-based installation routine. This would not be so bad if at least a passable automatic hardware recognition was integrated. But unfortunately this still does not exist, and so only experienced or wellread users can get through the installation marathon, so that when they first log in, at least the most important hardware components are preconfigured for use. For the ISDN configuration, for example, there is no explicit configuration mask. Thus you have to know in advance that most ISDN cards can be run with the Hisax kernel module by specifying a few card-specific parameters, so that one loads them in at installation in the

### Short introduction: Commissioning a USB mouse under Debian 2.2

- 1. Making a device file
- mkdir /dev/input
- mknod /dev/input/mice c 13 63
- 2. If necessary, reload the following USB kernel module with modprobe:
- usb-ohci or usb-uhci (depending on the USB controller)
- mousedev, usbmouse
- 3. Adapt the pointer section in /etc/X11/XF86Config:
- Protocol "IMPS/2"
- Device "/dev/input/mice"
- and wheel support too, if necessary, by buttons 4 and 5

corresponding module loader submenu by hand. Packet selection is equally unusual in its concept, with the menu-based standard packet manager *dselect*. Nevertheless, pre-defined packet combinations are offered for a palette of implementation scenarios (*tasksel*). For the Linux newbie and user-only, though, this installation procedure seems cryptic and off-putting.

#### **Initial configuration**

Not only is there no automatic hardware recognition, after the first console login you will also search in vain for a configuration tool which is at least menusupported. The X-server configuration can be mastered (if you know about this) with the classic *xf86config* or with *XF86Setup*. There is a USB mouse, which can be installed with a bit of manual work (see boxout). Without a modicum of experience of manually editing major Linux configuration files, one would soon give up at this point. But one thing has to be said for Debian: The configuration files are mostly neatly structured and adequately documented.

#### Expandability

Once you have become accustomed to the interplay of the packet management tools *apt* (alternatively: GNOME front-end GNOME-apt) and *dselect*, the expansion and updating of Debian packets becomes a real pleasure. Because in Debian it is not the rpm format which is used as standard (though conversion with *alien* is possible), but its own format with the ending *.deb*, which, among other things, can also resolve packet dependencies by itself. So with a few precautions, effortless online updates are possible without jeopardising the consistency of the whole system.

#### Stable, but cryptic

Linux newbies and non administrators would be better off keeping away from Debian 2.2. Although in principle it can also be used as a desktop operating system, the initial configuration hurdles are not to be underestimated. For newbies and users, CorelLinux OS, Stormix or Linux by Libranet would be of greater interest. These are based on Debian and come with graphical installers. Most of these Debian add-ons, though, are not at present right up to date or else are only adapted for USA requirements. Debian/GNU is regarded by many Linux fans as a tricky hacker system. Linux Magazine has nevertheless attempted to install the latest Debian for desktop use.

# debian



Debian 2.2: menu-based installation without automatic hardware recognition



Figure 2: With a bit of manual work, Debian can also be used as a desktop system, here with packet manager *dselect* and *apt-setup* 

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- + Can be obtained at a good price
- + very good expandability
- installation and initial
- configuration not easy
- CD distribution is now out of date.