

# SERVER COMPATIBILITY

Undoubtedly the most important domains of Linux at present lie in the server field. But is it possible in this day and age to build a Web, mail or Intranet server with any distribution, without headaches?

## SuSE Linux 7.2

In the software pool of the SuSE Professional release you will find everything necessary to construct servers of all shapes and sizes. And less common functions such as fax servers, virus protection for email gateways and routers can also be realised. If you use the distribution to construct servers, then a lot depends, not so much on the equipment, but more on the personal preferences of the administrators, because non-SuSE users must first get used to *YaST*, the central configuration file *rc.config* and *SuSEConfig*.

On the other hand, server planners should keep their hands off SuSE's Personal Edition – unless downloads are free. Apart from a mail server, the trimmed-down distribution version provides next to no applications for this purpose.

In the SuSE online update integrated in *YaST2*, with SuSE 7.2 there's also an option of updating packages via the Net. This is possible automatically or manually. Unfortunately this only takes part of the

load off the administrators, because the method using *YaST2* is not suitable for script-controlled updates.

## Red Hat 7.1 Professional

What SuSE and other distributions include in the package price, comes at a high tariff from Red Hat. After 90 days of free online updates for 10 computers via the Red Hat Network, this service costs almost 20 dollars per computer per month – for smaller and non-commercial server installations a KO criterion. Nevertheless Red Hat Professional provides a few interesting features especially for server installations. So the server services can be selected even during the installation. X11 is, unlike workstations, only installed on request. For nameservers, Apache and Wu-FTP there are separate configuration tools, *xinetd* and the utilities to be started are installed via *linuxconf*.

## Mandrake 8.0 Power Pack/Pro Suite Edition

Even if there aren't any help texts available for all subdomains, with Mandrake there are special configuration tools to facilitate the initial configuration of server services. So a tool for configuring the Apache server can be called up easily from the *K* menu under *Settings/Network/Netconf*.

It has a modular structure and offers a wide variety of options, such as speed, which can be optimised or the security settings configured for HTTP-SSL. Furthermore, the *K* menu offers a menu on NFS, in which only the directory permissions can be defined. For more extensive settings Webmin may be more suitable.

To install the FTP server, the administrator can fall back on *ftpconfig*. This manages users and groups, gives directory permissions or performs security and protocol settings.

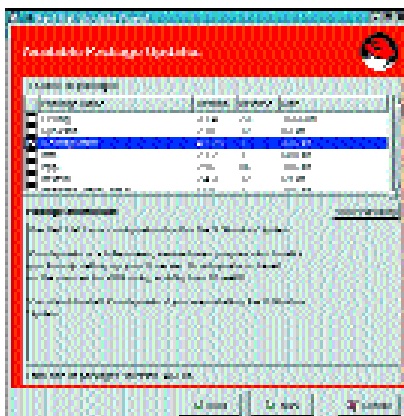
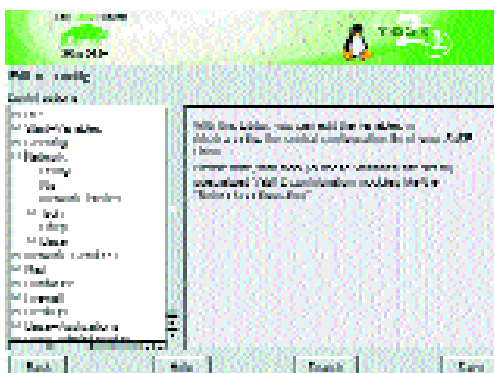
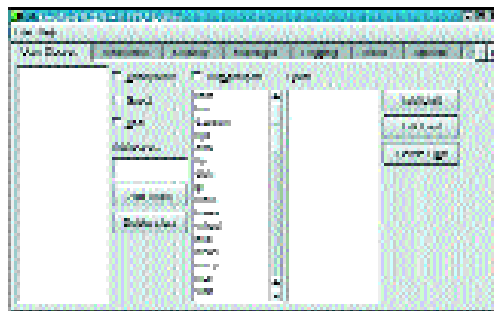
Anyone wanting to use Mandrake and set up an individual Linux-based server, must keep well away from a standard installation, because there the installer makes use of the first hard disk found and merely makes reference to the presence of



Current server services can be installed in Red Hat 7.1 simply with their own configuration programs

[right]  
SuSE making the editing of rc files easy

[left]  
Current server services can be installed simply in Red Hat 7.1 with their own configuration programs



additional disks. Plus, the separate partitions usual to servers for */tmp* and */var* are not provided, so that a would-be server administrator will have to perform the partitioning by hand. By default, Mandrake 8 installs Samba and a LAMP system (Apache, MySQL plus PHP) when you select the server package grouping.

There is no difference in the two Mandrake editions in terms of software, so that they are in theory equally suitable for server use. But there are differences when it comes to support. Where SuSE in the Professional Edition offers only installation support, and expressly excludes server support, the latter is fully guaranteed in the Mandrake Pro Suite. This means that system administrators who face problems in the initial phase are not left to their own devices and don't have to fall back on support for which they're charged.

### Caldera Open Linux Server 3.1

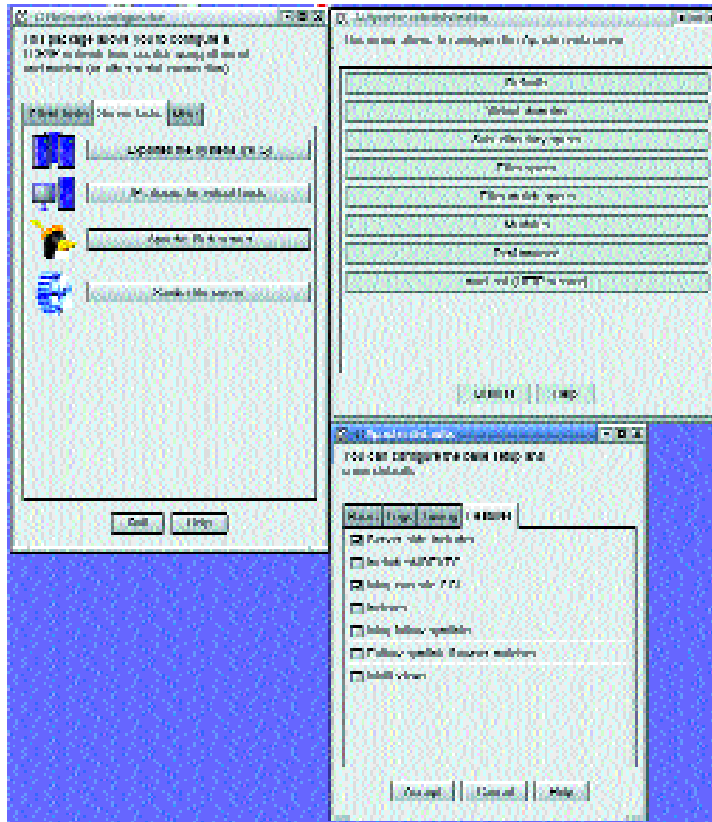
The OpenLinux server can be defined during installation for its later purpose, for example as a file, print or Web server.

During operational use, Webmin considerably alleviates configuration and fine-tuning, but inexperienced administrators can be seduced into a lot of aimless clicking around.

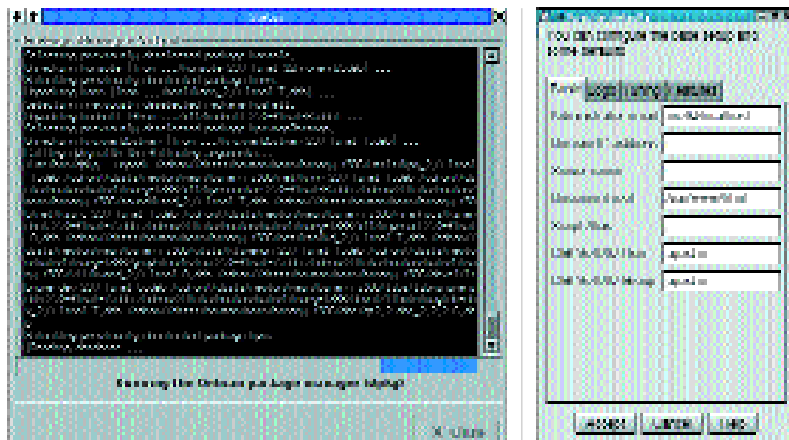
Unfortunately the software which comes with it is often not quite up to date, so Samba 2.2 would certainly have been an advantage for heterogeneous environments. Anyone who wants to get to grips with OpenLinux mail or list servers should already have knowledge of Sendmail and Majordomo. Caldera does not come with any alternative servers. On the other hand it is gratifying to see ready-installed security tools like Tripwire.

### Progeny Debian 1.0

Because of its smooth update mechanism and its stability, Debian GNU/Linux is very popular as a server operating system. Progeny can considerably accelerate the initial installation here — provided the administrator is fairly familiar with Debian or Linux without distribution-specific configuration aids.



The Apache configuration tool in the guise of Mandrake



[right] Setting up the base Apache configuration in Mandrake

[left] Old acquaintance in new clothes: gnome-dpkg-config in Progeny

### SuSE Linux 7.2: Conclusion

*Despite all criticism, we can attest to the fact that the latest SuSE distribution beats the other candidates in terms of compatibility and tidy structure. The fact that diverse design decisions are a matter of taste is old hat and will continue to ensure that the distribution will be the subject of controversial discussion among Linux connoisseurs.*

*Both the tasks of the distribution are clearly oriented towards target groups. Anyone who only needs Linux for their desktop, can do very well without diverse servers and is best served with the Personal Edition.*

*The Professional release on the other hand is aimed at experienced Linuxers and administrators. The justifiable price differential for the Personal Edition may pain home users, but with a few extra downloads even the latter can be built up into a server for special purposes.*

packages available on the Net and adjust them here and there by hand.

System administrators who have to look after computer pools will value the automatic installation of several computers, based on a Progeny system. Here it makes even less work to equip the desktops with KDE, since in this case users will have to do without the Progeny configuration tools anyway.

## Spoil for choice

With the diversification of the range of distributions available the would-be administrator can't rely on current server software being an integral part of every Linux distribution. Even in those distribution variants intended more for the mass market the accoutrements differ. Experienced administrators

Server suitability				
	SuSE Linux 7.2 Personal	SuSE Linux 7.2 Professional	Red Hat Linux 7.1 Deluxe Edition	Red Hat Linux 7.1 Professional Edition
Basic equipment with current servers				
SecureShell	OpenSSH 2.9	OpenSSH 2.9	OpenSSH 2.5.2	OpenSSH 2.5.2
Configuration during the installation?	Yes	Yes	Yes	Yes
Automatically started after installation?	Yes	Yes	Yes	Yes
Configuration front-end	-	-	-	-
Nameserver	-	bind 9.1.2	bind 9.1.0	bind 9.1.0
Configuration during the installation?	-	Not installed	No	No
Automatically started after installation?	-	-	No	No
Configuration front-end	-	-	bindconf	bindconf
Webserver	Apache 1.3.19	Apache 1.3.19	Apache 1.3.19	Apache 1.3.19
Configuration during the installation?	Not installed	Not installed	No	No
Automatically started after installation?	-	-	No	No
Configuration front-end	-	-	apacheconf	apacheconf
Mailserver	Sendmail 8.11.3	Sendmail 8.11.3	Sendmail 8.11.2	Sendmail 8.11.2
Configuration during the installation?	No	Yes	Automatic	Automatic
Automatically started after installation?	-	No	No	Yes
Configuration front-end	YaST2	YaST2	-	-
FTP server	-	BSD-ftpd 0.3.2	wu-ftpd 2.6.1	wu-ftpd 2.6.1
Configuration during the installation?	-	No	No	No
Automatically started after installation?	-	No (inetd not started)	No	No
Configuration front-end	-	-	linuxconf	linuxconf
Database	-	MySQL 3.23.37, PostgreSQL 7.0.3	MySQL 3.23.36, PostgreSQL 7.0.3	MySQL 3.23.36, PostgreSQL 7.0.3
Configuration during the installation?	-	Not installed	Not installed	Not installed
Automatically started after installation?	-	-	-	-
Configuration front-end	-	-	-	-
Dhcpd	-	dhcp 3.0rc4	dhcp 1.3.18pl18	dhcp 1.3.18pl18
Configuration during the installation?	-	Not installed	Not installed	Not installed
Automatically started after installation?	-	-	-	-
Configuration front-end	-	-	-	-
Samba	-	Samba 2.2.0	Samba 2.0.7	Samba 2.0.7
Configuration during the installation?	-	Not installed	Automatic	Automatic
Automatically started after installation?	-	-	No	No
Configuration front-end	-	-	-	-
Printserver	Lprold 3.0.48	Lprold 3.0.48	LPRng 3.7.4	LPRng 3.7.4
Configuration during the installation?	Yes	Yes	No	No
Automatically started after installation?	Yes	Yes	No	No
Configuration front-end	YaST2	YaST2	printer-config	printer-config
Inetd	inetd 1.2	inetd 1.2	xinetd 2.1.8.9pre14	xinetd 2.1.8.9pre14
Configuration during the installation?	No	No	Yes	Yes
Automatically started after installation?	No	No	Yes	Yes
Configuration front-end	YaST2	YaST2	linuxconf	linuxconf
Also automatically started, fairly unusual servers	-	nscd	-	-
RunlevelConfigurator	-	-	Control-Panel	Control-Panel
Inittyp	SysV	SysV	SysV	SysV
Configuration of several network interf.	YaST2	YaST2	Control panel	Control panel
LVM support	Yes	Yes	No	No
Monitoring tools	tcpdump, traceroute	mrtg, tcpdump, traceroute etc.	traceroute, tcpdump	traceroute, tcpdump

will find the small Mandrake release sufficient, but not the SuSE Personal.

Newbies in the field of Linux system administration will appreciate it when they can make basic adjustments to current servers as in the case of Red Hat and Mandrake in graphical configuration tools. This is where Mandrake sets an example, too, as in the Pro Suite, support for server

installations is explicitly included in the package price.

Software updates by Cronjob continue to be the domain of Debian and Co., but apart from that, the decision for or against a distribution always depends on the personal preferences of the system administrator. For this reason the table does not include any rating. ■

Mandrake Linux 8.0 Power Pack	Mandrake Linux 8.0 Pro Suite	Caldera Open Linux Workstation 3.1	Caldera Open Linux Server 3.1	Progeny Debian 1.0
OpenSSH 2.5.2	OpenSSH 2.5.2	OpenSSH 2.5.2	OpenSSH 2.5.2	OpenSSH 2.5.1
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	No
-	-	-	-	-
bind 9.1.1	bind 9.1.1	bind 8.2.3	bind 8.2.3	bind 8.2.3
No	No	No	No	Incomplete
No	No	No	No	On request
linuxconf, netconf	linuxconf, netconf	No	No	-
Apache 1.3.19	Apache 1.3.19	Apache 1.3.19	Apache 1.3.19	Apache 1.3.9
Yes	Yes	No	No	Yes
Yes	Yes	No	No	Yes
linuxconf, netconf	linuxconf, netconf	webmin	webmin	-
Postfix 20010228	Postfix 20010228	Sendmail 8.11.1	Sendmail 8.11.1	Postfix 2000531
No	No	No	No	Yes (simple config.)
Yes	Yes	Yes	No	No Yes
linuxconf, netconf	linuxconf, netconf	-	-	Caplet in the Gnome-CC
ProFTPD 1.2.2	ProFTPD 1.2.2	-	wu-ftpd	BSD-ftpd 0.3.2
No	No	-	-	Yes
Yes	Yes	-	-	On request
linuxconf, netconf	linuxconf, netconf	-	-	Gnome-dpkg-reconf
MySQL 3.23.36	MySQL 3.23.36	MySQL 3.23	MySQL 3.23	-
No	No	No	No	-
Yes	Yes	No	No	-
linuxconf, netconf	linuxconf, netconf	kmysql, webmin	kmysql, webmin	-
dhcp 2.0	dhcp 2.0	-	dhcp-server 3.0b2pl9	dhcpcd 2.0pl5
No	No	-	No	No
Yes	Yes	-	-	No
linuxconf, netconf	linuxconf, netconf	-	-	-
Samba 2.0.7	Samba 2.0.7	Samba 2.08	Samba 2.08	Samba 2.0.7
No	No	No	No	No
No	No	No	No	No
linuxconf, netconf	linuxconf, netconf	webmin	webmin	gnosamba
CUPS 1.1.6	CUPS 1.1.6	CUPS 1.1.6	CUPS 1.1.6	LPRng 3.6.26
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
kups, kprint (Qt-cups)	kups, kprint (Qt-cups)	kups	kups	Caplet i. Gnome-CC
xinetd 2.1.8.9	xinetd 2.1.8.9	Netkit-inetd 0.17	Netkit-inetd 0.17	Netkit-inetd 0.10
Yes	Yes	No	No	Yes
Yes	Yes	Yes	Yes	Yes
linuxconf, netconf	linuxconf, netconf	webmin	webmin	-
Cups, qt-print, linuxconf, webmin, kuduzu	Cups, qt-print, linuxconf, webmin, kuduzu	calserver, slpd	calserver, slpd	ntpd
Mandrake-CC	Mandrake-CC	-	-	-
SysV	SysV	SysV	SysV	SysV
linuxconf, netconf	linuxconf, netconf	K-Centre/kcmshell	K-Centre/kcmshell	-
Yes	Yes	No	No	No
traceroute etc.	traceroute etc.	traceroute, tcpdump	traceroute, tcpdump	traceroute