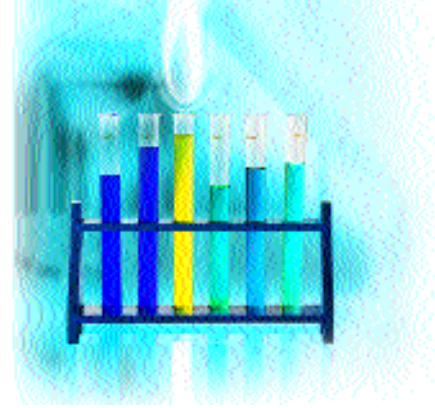


INSTALLATION

Linux has managed to score a good few points against Windows recently because the installation programs of most distributions have become markedly easier to use.



One collection of software intended for the mass market is now no more complicated to put onto disk than Windows 2000. But sometimes the devil is in the detail.

SuSE Linux 7.2 Professional

Opinion is divided about SuSE's YaST2. As an installation tool it is now refined, easy to understand and makes an excellent case for itself. But this does not mean that it is beyond criticism. Due to the ruthless sequential processing, installation takes a very long time. This does guarantee that you can always go back to the beginning before the actual partitioning, but then the tool remembers some, but not all, of the previously made settings, which leads to some confusion.

Errors in the previous version have largely disappeared, so the network configuration

Installation	SuSE Linux 7.2 Personal	SuSE Linux 7.2 Professional	Red Hat Linux 7.1 Deluxe Edition	Red Hat Linux 7.1 Professional Edition
Language English	yes	yes	yes	yes
Clarity	very good	very good	usable	usable
Automatic Partitioning	yes, result relatively usable, FAT32 resizing possible 1)	yes, result relatively usable, FAT32 resizing possible 1)	yes / result relatively usable (see text)	yes / result relatively usable (see text)
Other FS offered	FAT32 ReiserFS LVM, encryption possible	FAT32, ReiserFS,-LVM, encryption possible	FAT with restriction, Soft-RAID with Ext2	FAT with restriction, Soft-RAID with Ext2
Number of standard profiles / packet groups	5 / 7	5 / 7	4 / 3 to 8	4 / 3 to 8
Package manager	organised hierarchically, search by packet name possible	organised hierarchically, search by packet name possible	organised hierarchically, search by packet name does not work, only for CD 1+2	organised hierarchically, search by packet name does not work, only for CD 1+2
Hard disk capacity (MB)	1500	1500	1200	1200
Graphics card correctly recognised	yes, but 3D-acceleration cannot be activated	yes, but 3D-acceleration cannot be activated	yes	yes
Large Monitor DB	yes	yes	yes	yes
Image Refresh	optimal	optimal	optimal	optimal
Image geometry	optimal	optimal	optimal 2)	optimal 2)
Boot manager installation	automatic and manual, Win98 partition recognised	automatic and manual, Win98 partition not recognised	fully automatic, can be adapted to user-defined inst.	fully automatic, can be adapted to user-defined inst.
Boot manager	Lilo 21.6	Lilo 21.6	Lilo 21.4	Lilo 21.4
Dial-up Installation	Modem, ISDN, ADSL	Modem, ISDN, ADSL	no	no
Provider-DB	yes	yes	no	no
Mouse/wheel recognised	yes / no	yes / no	yes / no	yes / no
Printer database	yes, printer autom. recognised, test image printout	yes, printer autom. recognised, test image printout	add-on only, then driver DB in Linuxconf	add-on only, then driver DB in Linuxconf
Navigation in wizard	serial and forwards / backwards	serial and forwards / backwards	serial and forwards / backwards	serial and forwards / backwards
Overall impression of installation	Consistent, easy to understand, clearly described. Apart from the LVM configuration, exemplary.	Consistent, easy to understand, clearly described.	Usable, but a few bugs and language confusion, difficult to install additional CDs.	Usable, but a few bugs and language confusion, difficult to install additional CDs. (DVD: see Text)
Assessment	++	++	-	-

1) Bug: With automatic partitioning an existing Windows partition must be reduced, although there are deletable partitions.

functions perfectly, unlike the SuSE-7.1 YaST2.

The bugs which have not been removed included an insistence on wanting to reduce an existing Windows partition even when other partitions have to be deleted to make space.

SuSE offers to encrypt file systems of any kind whatsoever on installation. You then need a password for mounting. Logic volumes can also be defined at the time of installation. A Yast module for run-time configuration should soon be issued as an online update.

Gnome fans will not get their money's worth with a standard installation, but they will from the extended packet selection. Missing the checkbox means you will have to install the individual packets later in YaST2 manually. Only YaST1 offers easy retro-installation of the Gnome group.

SuSE Linux 7.2 Personal

SuSE Linux in the reduced Personal version offers the same installation routine as its big sister. LVM can also be installed, but the target group of the mass market product will be overtaxed by the

unclear user help and error messages such as "The entry is invalid. You must enter a value between 1M and 0MB. e.g. 40M 1 G...".

Red Hat Linux 7.1

Installation of Red Hat 7.1 Deluxe and Professional edition are the same, because the first eight CDs of both variants are identical. The installation program has hardly changed at all compared to earlier versions.

Automatic partitioning is somewhat misleading. Contrary to the description "Automatic partitioning and DELETION OF DATA" only Linux partitions are removed – except in the case of server installation. But the help text on the left margin does explain this peculiarity.

Since version 2.4.1 Reiser-FS has had official entry to the Linux kernel – but this has not prompted Red Hat to support this file system. In the partition program Disk Druid one still has to settle for the Ext2 or DOS file system, although you can make a software RAID system. LVM on the other hand is not offered by Red Hat.

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
yes	yes	yes	yes	yes
good	good	good	good	usable
yes, result usable, FAT32	yes, result usable, FAT32 resizing possible	no	no	no
no	no	ReiserFS	ReiserFS	no
no / yes	no / yes	3 / yes	3 / yes	1 / yes
organised hierarchically, full text search possible	organised hierarchically, full text search possible	organised hierarchically	organised hierarchically	no
650	650	1600	1600	800
yes	yes	yes	yes	yes:Voodoo3, no: ATI Mach64
yes	yes	yes	yes	no
good	good	optimal	optimal	optimal
good	good	optimal	optimal	optimal
fully automatic, Win98 partition recognised	fully automatic, Win98 partition recognised	fully automatic, Win98 partition recognised	fully automatic, Win98 partition recognised	manual
Lilo 21.7, Grub 0.5.96.1	Lilo 21.7, Grub 0.5.96.1	Grub	Grub	Grub 0.5.96.1
Modem, ISDN, ADSL	Modem, ISDN, ADSL	Modem	Modem	no
yes	yes	no	no	no
yes / no	yes / no	yes / yes	yes / yes	yes / no
yes	yes	yes	yes	yes
free	free	serial and forwards / backwards (restric.)	serial and forwards / backwards (restric.)	serial
Installation easy, bug in the data communications installation	Installation easy, bug in the data communications installation	Installation easy, a few cosmetic faults	Installation easy, a few cosmetic faults	Appears inconsistent and half-finished, graphics card not recognised
++	++	+	+	-

2) Bug: The selected resolution/colour depth cannot be tested. Instead the first setting appears.

Defective DVD in Red Hat 7.1 Professional

A surprise awaits owners of the first DVD pressing of the Red Hat Linux 7.1 Professional. The XFree86 Basic packet *XFree86-4.0.3-5.i386.rpm* contains an incorrect MD5 sum and can only be half installed. But the installation program does not notice this. When you first start the system the X11 system will not run. There are substantial libraries and modules missing.

Retro-installation of the packet from CD helps only to a limited extent. But this means it was not possible for us to start a KDE session via the GDM – the interprocess communication by means of DCOP server fails. Red Hat promises to exchange any faulty DVDs.



The installer screen for Mandrake Linux has three areas. Left, the worksteps and below, the current help text. In the middle is the main selection workarea

Disk Druid has a slight tendency to inconsistencies if you trouble it a second time during installation. When installing a network card it is important to have a functioning connection to the Net and nameserver. Otherwise, if the IP address is static, the computer name is not taken on and the machine later logs on as *localhost.localdomain*.

The installation of the X-server demands particular attention. The recognition of graphics card and monitor functioned very well in our test; but not the setting of resolution and colour depth. The installer suggests 1024x768 pixels for 16 bit. Anyone who alters the settings cannot rely on the test image. The X-server test is always done with the standard settings, thus 1024x768 pixels at 16-bit colour depth.

Linux-Mandrake 8.0 Power Pack/Pro Suite Edition

Both Mandrake versions are identical (apart from the amount of support provided). The manufacturer supplies six chock-full CDs, the content of which – at least in part – is to go onto the hard disk. This runs satisfyingly smoothly due to the nicely designed graphical installation assistant DrakeX. The installation requires, with graphical user interface at least 64MByte RAM, 32MByte for text-based installation.

DrakeX – the details of which have been improved compared to the previous version – offers a choice between two classes of installation, *Recommended* and *Expert*. The *Recommended* variant lives up to its name. The context-sensitive help in the installer is also new. Both types of installation use automatic hardware recognition as far as possible. New processors, such as Pentium 4, Duron and Athlon, are directly supported.

During the installation, the user always knows where they're up to, because the work step which has just been performed is displayed in the left margin. You can also make items which have already been processed pop up in the left menu frame, so entries which have already been made are not lost.

Selection of software is easy to understand, being grouped into *Workstation*, *Server* and *Graphical user interface*. The pros will surely tend towards the individual packet selection, which is also on offer. The latter is somewhat time-consuming and nerve-racking, but the manufacturer has distributed the individual RPM packets so neatly over the CDs that you hardly need to qualify as a DJ.

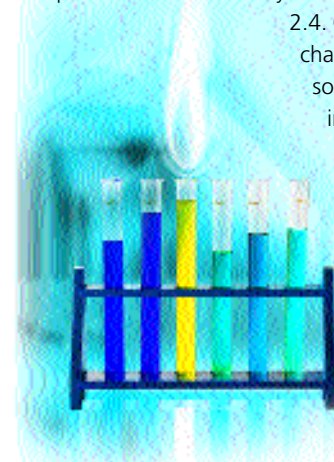
In addition to KDE 2.1.1 and Gnome 1.4, you can select from another nine desktops. To finish off, X11 is configured. The current release XFree86 4.03 recognises a range of new graphics chips and activates 3D acceleration.

Both of the current Linux Mandrakes are well-suited to the desktop and for server application. Even beginners will cope well with installation. But the manuals did not blow the testers' socks off. In sum, this French distribution is certainly a match for SuSE.

It is highly doubtful whether the 30 days extra support justifies the considerable additional cost of £80 for the ProSuite, when you consider that the rest of the equipment is identical. MandrakeSoft is planning to revise the manuals for the Pro version.

Caldera Open Linux 3.1 workstation and server

Installation of the two new Open Linux variants, as usual, runs smoothly and without any problems. Visually, next to nothing has changed by comparison with the already-dated previous version



2.4. Orgies of CD changing are something the installer need not fear. Both versions install the basic system from just one CD. After that you can log onto the system without rebooting.

The lack of a repartitioning option for an existing MS Windows system makes it dated. Here, external tools like Partition Magic or Fips have to be used. If required, the new Caldera makes ReiserFS partitions, from which it is also possible to boot, and configures a SoftRAID system. There is, however, no LVM.

Considering the quantity of data, you should completely install Open Linux. The variants *Minimum*, *Recommended* and the individual selection of packets are also available, though in the case of the latter the curious categorisation of many packets may give you a crashing headache. In the Open Linux server for example news and FTP servers are placed in the *WWW* category, but the nameserver BIND comes under *Server* -> *NFS/NIS* -> *DHCP*.

The installer does not offer a search function for such cleverly hidden RPMs. The *Unattended Installation Mode* installation failed on all test computers due to unsuitable hardware.

The warning from Caldera about problems in testing the X-server configuration should be taken seriously, or to be more precise, in returning to installation mode after a successful test. In the case of a Voodoo3 graphics card the X-server managed to get so completely hung that only a reset and restarting the complete installation helped. Since the X configuration comes at an early stage, this is something to get over.

Caldera shines as a good team player in the LAN. DHCP is no problem, and in the workstation variant even CUPS is configured with the found network printers. In ergonomic terms the distribution is highly satisfactory. Clear help texts in the right-hand third of the screen accompany the installation.

The actual click work is done at the beginning. The installer can then devote themselves to other tasks or enjoy the odd game of Solitaire, while the installation routines slave away behind the scenes.

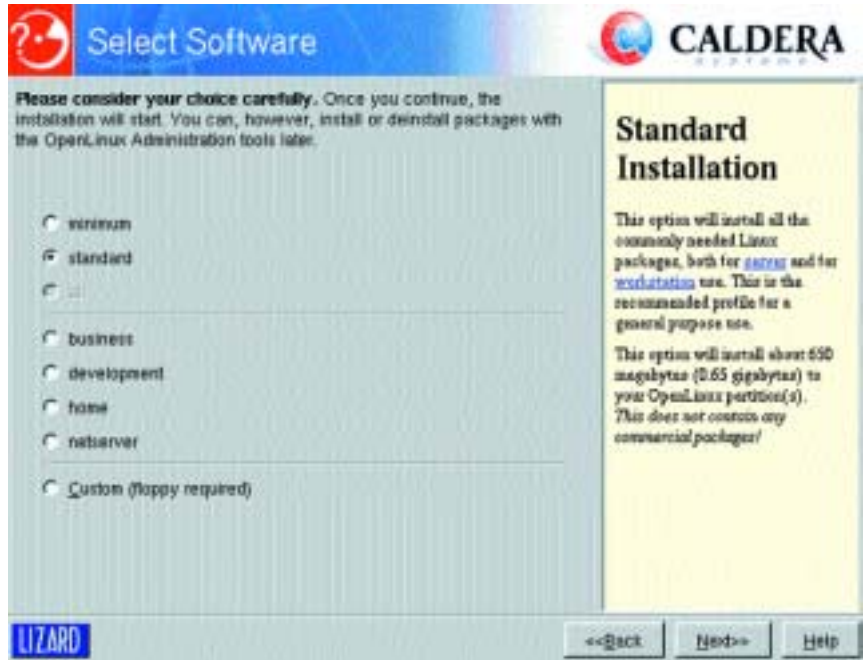
Progeny Debian 1.0

Debian may be very popular for its excellent update systems and its stability, but we're reluctant to talk about the installation routine.

Progeny Debian, the commercial distribution of the Debian founder Ian Murdock, made its debut on the website claiming to be a distribution based on Debian 2.2 with "simple graphical installation, hardware recognition and improved configuration and management tools". It has to be said that it does not live up to this claim.

So an ATI-Mach64 graphics card was certainly recognised by the first, graphical part of the installation routine. Once this has installed and booted the basic system, it runs round in circles. Without a Mach64 server (the card is not supported by the SVGA server), there is no getting past this point.

Even if you overlook the fact that the graphical installer for the basic installation is rudimentary,



there are other problems. ReiserFS or encrypted Ext2 partitions, which have to be reformatted and used, completely flummox the program. The partitioning dialog hangs.

In the case of computers that manage it in the second part of the installation, you will also be shown configuration dialogs, which can be called up later from the Gnome control centre.

Once nice feature of the X configuration dialog: when selecting a monitor you can make it simple and just enter the size in inches – unfortunately 17 inches is the limit. To install KDE and other packets from the second CD, you will definitely have to look in the manual. The KO criterion is that at no point in the entire installation is there the option of configuring a keyboard layout which varies from the American style.

The well thought out Caldera installation program lets you choose which type of install you require

Progeny: Mail and printer are configured in the installer or in the Gnome control centre

