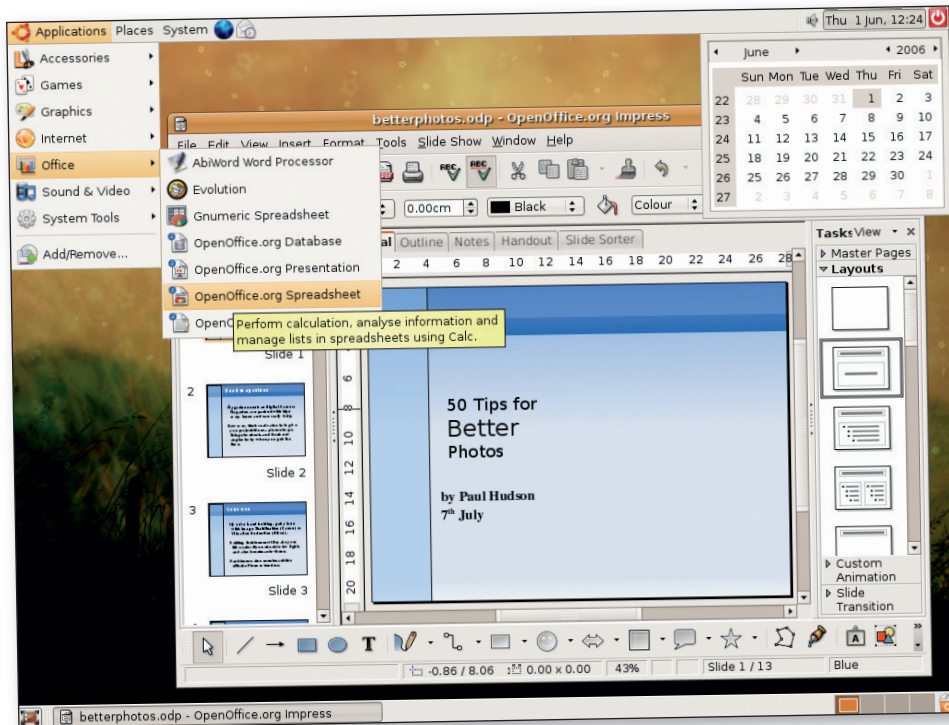




Your journey starts here!

Before you install your new operating system with our step-by-step guide, here's a quick introduction to the wonderful Ubuntu.



YOU ARE about an hour away from having a working Linux system, and you don't need to be an expert or have any previous experience with Linux to make it happen. Linux is no longer the arcane, convoluted piece of software that many people found when they first tried it. Now, nearly everything will work straight 'out of the box', an expression you often come across in Linux to mean it will run as is without needing any extra software. Ubuntu uses a 'Live CD' installation system, which means it loads a desktop system from the CD that you can use like a normal computer, without any need for installation. Then, when you're satisfied it works, you can install it to your hard disk. If you decide Ubuntu isn't for you, just reboot your computer and take the CD out, and you'll be back to your normal operating system.

The word Ubuntu is an African word meaning 'humanity to others', and the Ubuntu developers live up to that meaning by ensuring this distro is free, well supported and available for people to use in their own language. When you finish the installation and Ubuntu is up and running, you should feel at home, because the user interface looks and works like Microsoft Windows or Mac OS X. Everything you need is a mouse click away, from a comprehensive office suite to the latest web browser or email client. If you think Linux is all about glowing amber screens full of computer code, you're in for a surprise.

COMMUNITY SUPPORT

This version of Ubuntu has been christened Ubuntu 6.06 LTS, with those last three initials standing for Long-Term Support. As Ubuntu is

Ubuntu is a friendly, well-supported operating system. There are bags of open source applications available online, but practically everything you need is included on your discs!

free software, it doesn't come with any commercial support. But the developers of the operating system have promised that this release of Ubuntu will have software patches and security fixes provided for three years, free of charge. If you intend to use it on a server, they will provide five years of support – again, for free. All this comes pre-configured in your Ubuntu installation, which means you need to do nothing to benefit from this huge level of community support.

Of course, if you want real, enterprise-level support, you can get that too!

HARDWARE HINTS

The biggest problem people encounter when trying Linux for the first time is simply getting their hardware to work. Much as we wish it were otherwise, Linux is *not* the standard computing system for hardware manufacturers, which means they often don't provide drivers that work outside of Windows and OS X.

The two biggest hardware troublemakers are internal modems and USB ADSL modems. If you use a router to connect your computer to the internet, it will almost certainly work out of the box (there's that phrase again). While it's true that internal modems are becoming less and less important in the age of broadband, many people still rely on them as their only means of connecting to the internet. This is especially true for laptop users. Sadly, there isn't an easy answer. You will

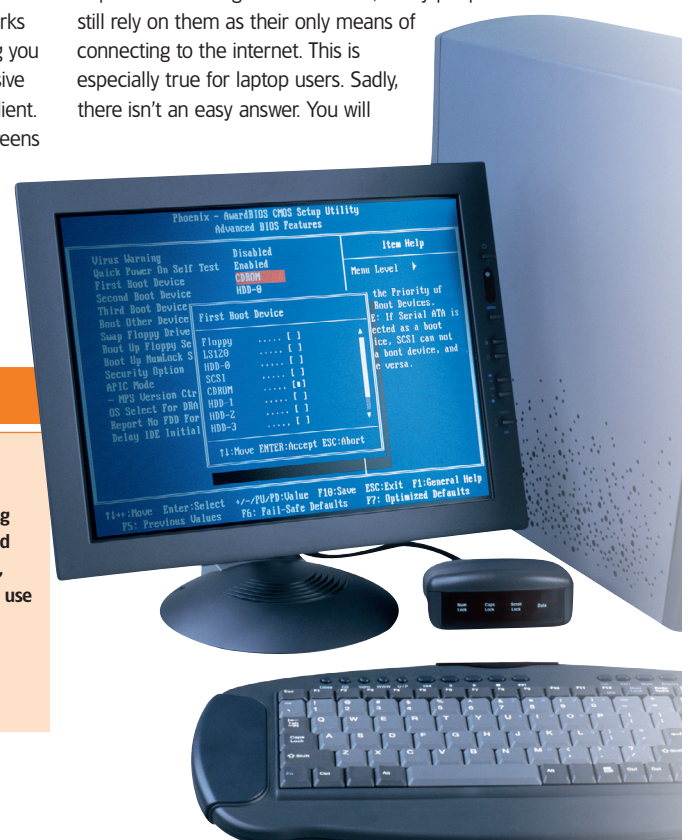
HOWTO... INSTALL LINUX ALONGSIDE WINDOWS

One installation option is to 'dual boot' your computer. Here you leave another system, such as Windows XP, installed on the computer alongside Linux, and choose which you want to run whenever you start up the PC. This is a good way to familiarise yourself with Linux, but you will have to give some hard disk space over to it.

To do this, you need to allocate space for Windows (or any other operating system) and Linux on the same hard disk, or have multiple hard disks. If you have already allocated all of your disk space to Windows, you need to use a program such as *Partition Magic* to shrink the Windows installation. Alternatively, you can download the

System Rescue CD from www.sysresccd.org, which includes a free hard disk resizing tool called *QtParted*. You'll need around 10GB for an installation, and far more when you start to use Ubuntu as your main OS.

If you do plan to dual boot, install Windows first (if it's not already installed on your PC!).





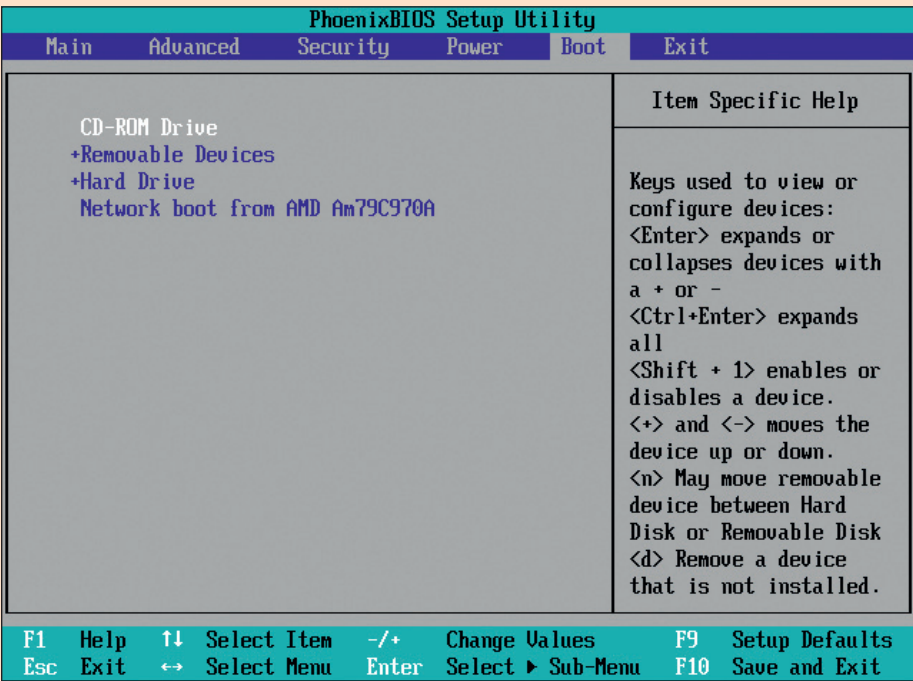
HELP! MY COMPUTER WON'T BOOT OFF THE DISC!

One of the most common problems with installing an operating system off a CD is that nothing happens when you insert the disc and restart your machine. If you find that your computer is booting into Windows as it was before, you will need to change the boot priority in your system's BIOS.

Don't worry! BIOS sounds far worse than it actually is. Short for Basic Input/Output System, it is simply a group of important system settings that you access in the first instances of your computer's boot sequence. You get access to these settings by pressing a certain key when the first screen appears.

The only problem is that nearly every computer uses slightly different BIOS settings, and occasionally, a different key to access them. For most computers, you can just press either F2 or the Delete key. Some modern systems will even let you change the boot sequence by just pressing F8. But if none of these works, have a look at the text you see at the bottom of the screen when you restart your machine. It should say something like 'Press F2 to change system settings/BIOS'.

When you do get into your system's BIOS, you will see a very sparse and antiquated blue text interface (for an example, see the image at right or the computer screen below left). Once again, because of all possible variations in the BIOS, it's impossible to say where the boot sequence is hidden, but most people should find it under a 'Boot' page. There you will find all of the devices attached to your system that it's possible to boot off, including the hard drive and the CD-ROM. You need to make sure that the CD-ROM is higher in the priority



list that the hard drive (usually by pressing the '+' and '-' keys). When you're satisfied this is configured correctly, select Exit and make sure you save the settings. Next time your reboot, your computer will check the CD-ROM first.

If your computer doesn't boot up from our Ubuntu Special disc, you will need to change your BIOS settings.

find that some will just work, and Ubuntu will recognise the modem and configure it automatically. If this doesn't happen, there's not a great deal you can do, but you could ask for advice on the forums at www.linuxformat.co.uk.

Beyond modems, you can sometimes have problems with multifunction printers and scanners. Some brands such as HP and Epson work well, but others such as Canon are severely limiting.

The best solution to any hardware woes is to take advantage of the Live CD desktop system in Ubuntu. When it boots up, it will do its best to detect and configure your hardware. If you can't get online from the Live CD, you will probably be unable to get online when it's installed.

GAMES, 3D AND MORE!

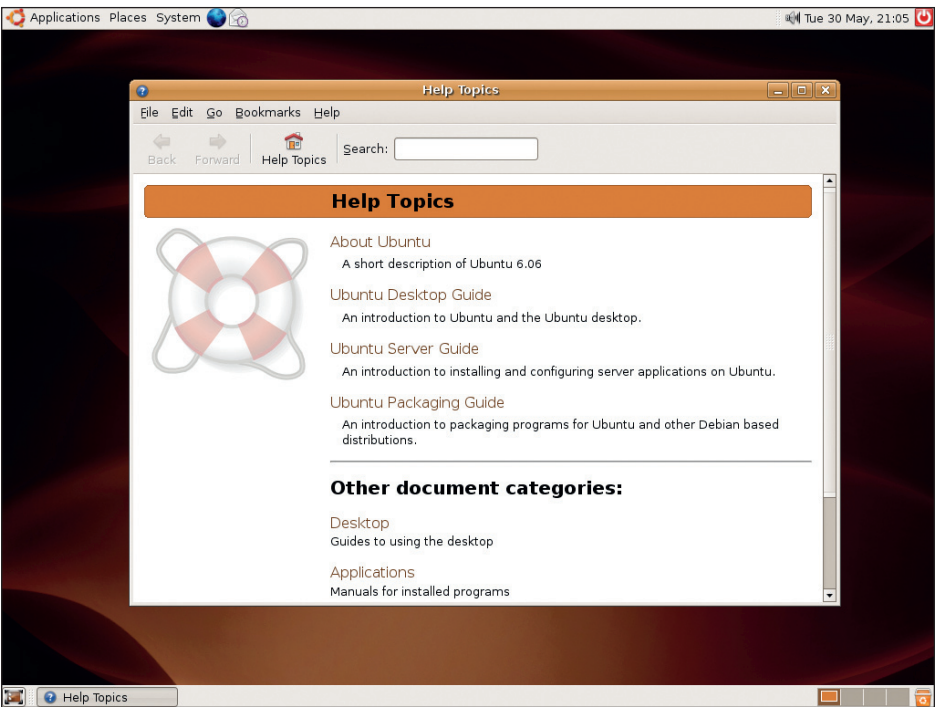
The manufacturers ATI and Nvidia both offer Linux drivers for their hardware, which is useful for playing games or 3D modelling. If you have the choice, we generally recommend people choose Nvidia cards, because they are more mature and effective than ATI's. Older cards, especially Matrox and S3 cards, will work without any effort.

One of the most praised features of Ubuntu is that you can get great performance out of it with a relatively modest PC. A 500 MHz processor along with 128MB of RAM and a 10GB hard disk is more than enough for the majority of tasks. True, it won't be the most responsive or powerful machine, but it will easily be capable of checking email, browsing the internet, streaming movies and playing music. You could even configure it as a file server for your

family. Of course, the faster your machine is, the better your experience is going to be, and Ubuntu is happy to take advantage of all modern processors, including multiple-processor, multi-core machines and hyper threading.

Installing Linux isn't difficult. For the vast majority

of users, it's going to be easier than installing any other operating system. Just put the first of our discs into your CD/DVD ROM drive, and restart your machine to boot into the Ubuntu Live desktop. Once you've had a play and are ready to go further, turn over to continue...

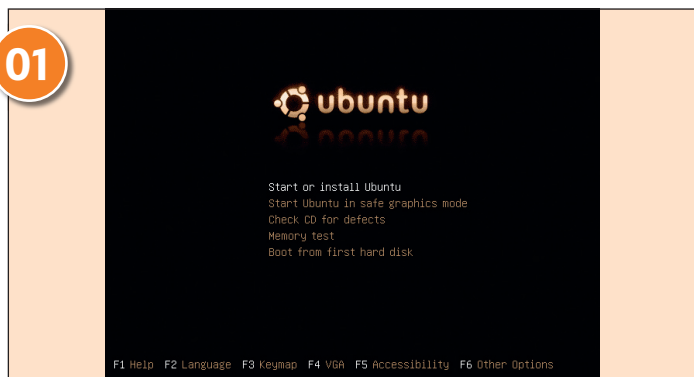


If you get into problems while reading this guide, refer to the Ubuntu help files (under the System menu) to guide you – or ask for help on the *Linux Format* forums at www.linuxformat.co.uk.



INSTALLING UBUNTU

01



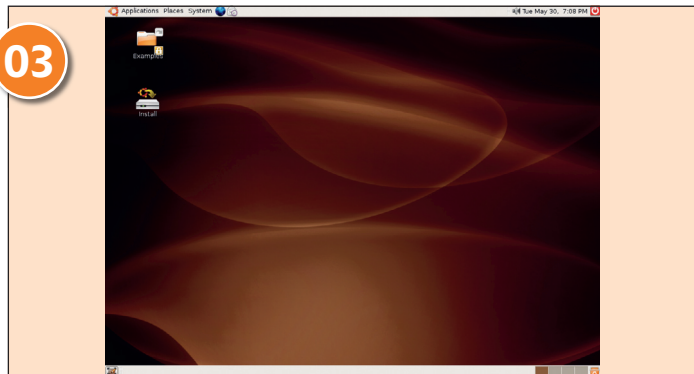
Insert the first Ubuntu CD into your CD/DVD drive and restart your PC. After a couple of seconds, you will see the above screen. Pressing Enter will automatically move you on to the next stage, or you could just wait 30 seconds.

02



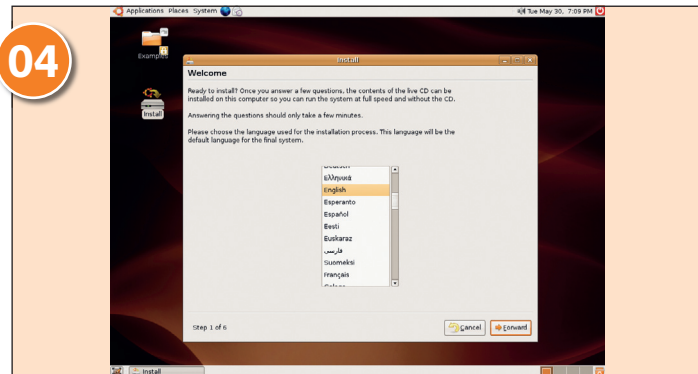
Ubuntu uses a Live CD installation system, which boots up into a working desktop that you can try out before installing. As a result, it has to copy everything from the CD into your RAM, and can take a few minutes to boot.

03



Once Ubuntu has finished loading, you'll see a fully usable desktop environment ready to go. You can launch programs from here and have a play around to see whether you like Ubuntu. Note: if you reboot, any files you created will be lost.

04



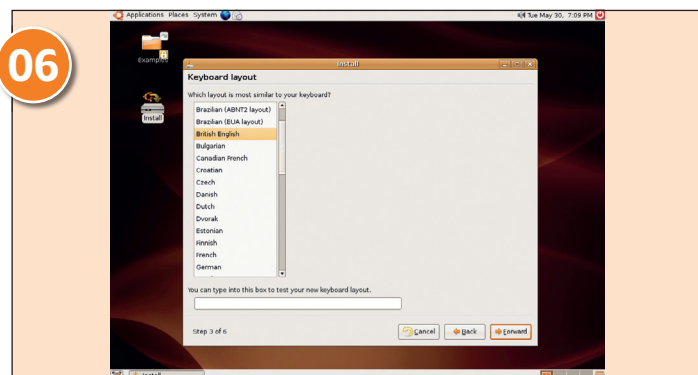
If you decide to keep Ubuntu, double-click on the Install icon on the desktop to continue. Ubuntu's installer has six very simple steps, starting with your preferred language. This language will be used for the remainder of the installer.

05



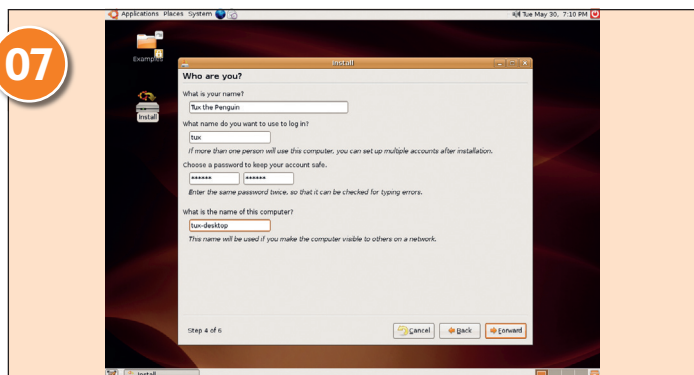
The second step is to click on your location on the world map, so Ubuntu knows what time zone you're in and whether to enable daylight saving time or not. Click on the map once to zoom in, then again to choose the nearest city to you.

06



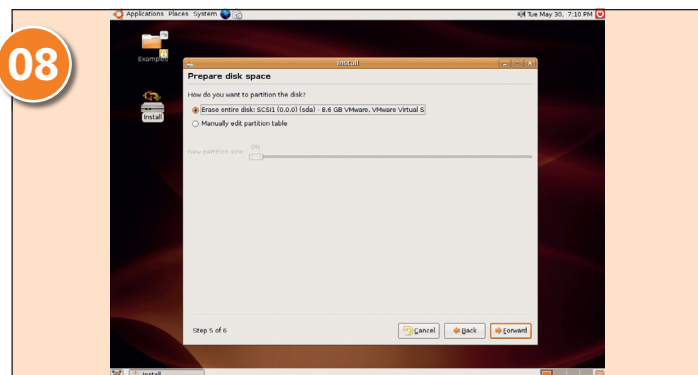
Based on your language selection in Step 4 of this walkthrough, and the nearest city to you that you chose in Step 5, Ubuntu will pick what it thinks is the most likely keyboard layout for your area. If this is wrong, just change it.

07

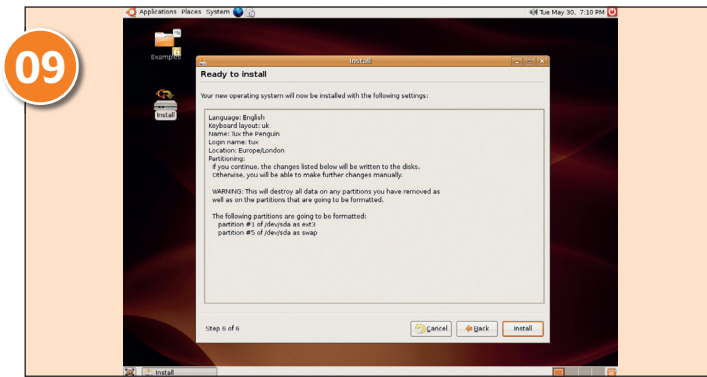


You need to provide Ubuntu with some basic user information. In the first box, enter your full name. In the second, enter a username for your account. The third and fourth boxes should be your password, and the last box will fill itself.

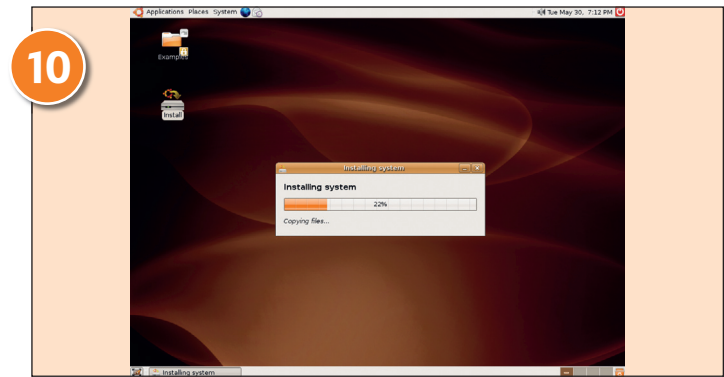
08



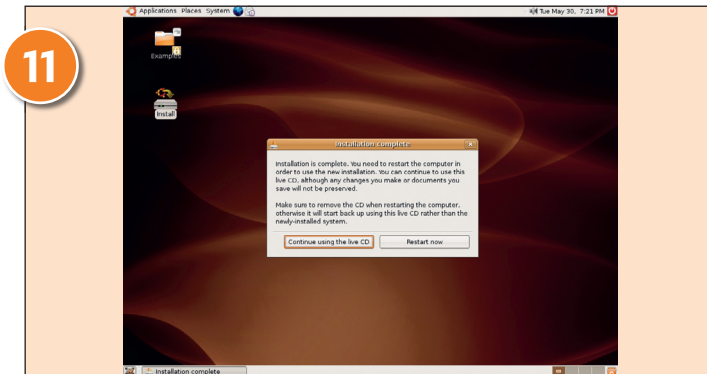
Here's where you choose where Ubuntu should be installed on your computer. If you have other operating systems installed, you should have followed the advice from the box Howto... Install Linux Alongside Windows on page 10.



The last step in the installer summarises your requests, giving you one last chance to make changes or back out entirely before installing Ubuntu on your hard drive. If you're all set, click on Install.



The base Ubuntu installation comes on one CD, so it should take under ten minutes to be copied to your computer. Ubuntu will automatically remove unnecessary language packs, based upon your selections in the installer.



Once the installation is complete, you'll see the window above. Unless you have particular reason not to do so, go ahead and click on the Restart Now button. Leave the CD in the drive for now.



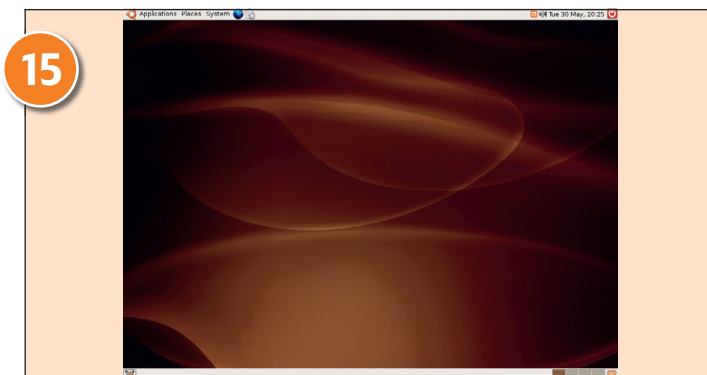
At this point, Ubuntu will shut down. This will take a couple of minutes, as it's all still running from the CD. Once it finishes, Ubuntu will prompt you – as above – to remove the install CD, then press Enter.



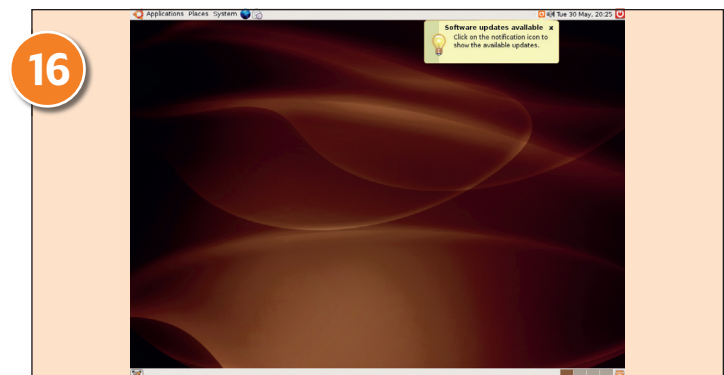
Your computer will reboot, and this time should load Ubuntu a lot faster because it's now loading from your hard disk using its existing hardware configuration. Depending on the speed of your computer, it should take about a minute to load.



This is the standard login screen for Ubuntu. To progress, you need to enter the username and password for the user you created in Step 7. Press Enter after the username, then Enter after the password, and you should be in.



You'll now see your new Ubuntu desktop. The two icons that were there earlier have gone, leaving you with a clean desktop. Along the top is the system menu, where you can launch your programs and get help.



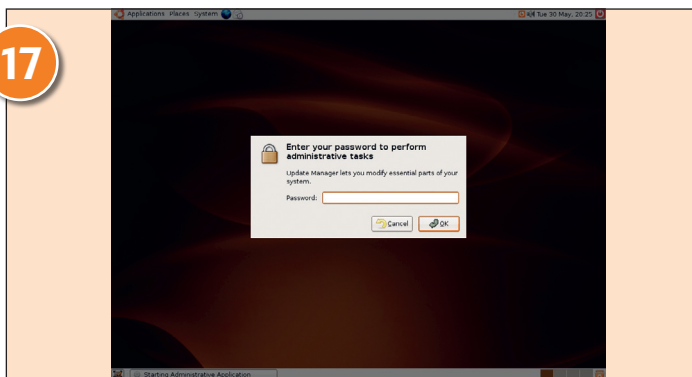
If you're connected to the internet, chances are this little help bubble will pop up telling you there are updates to download. Click on the orange icon where the message came from to download the updates. This is highly recommended!





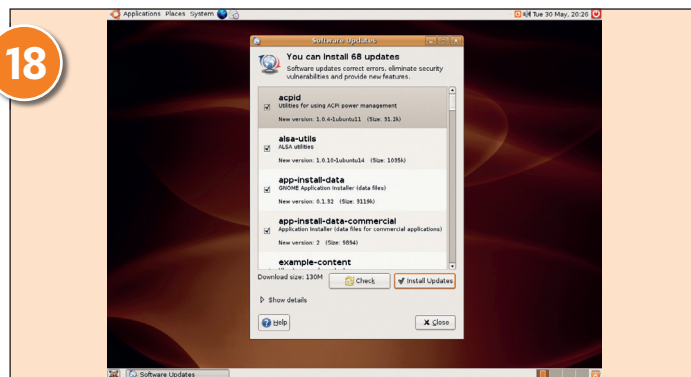
INSTALLING UBUNTU

➔ 17



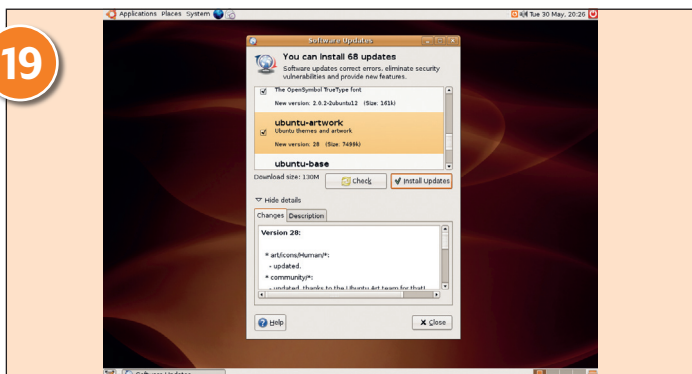
Ubuntu is secure by default, which means it won't let anyone install software on your machine just because you wandered away to make some tea. Instead, it will ask you to re-enter your password to prove your identity.

18



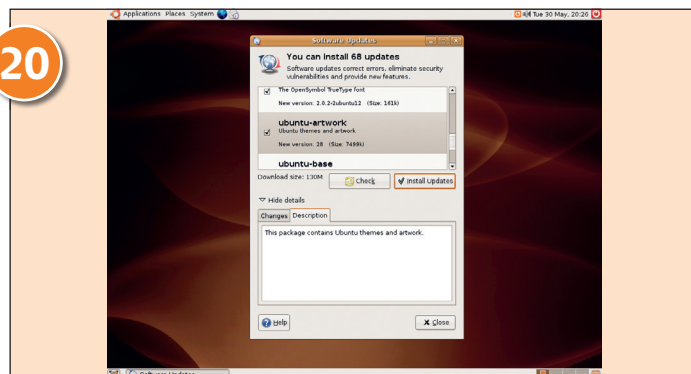
The Software Updates screen lists all the updates available for all the software currently installed on your machine. Every patch (a small piece of software to fix a bug or update) that gets released for Ubuntu will appear here sooner or later.

19



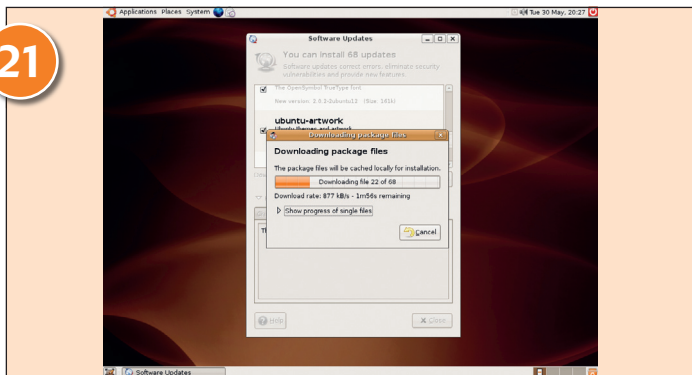
If you want more information about an update, you can select it then click on the Show Details text towards the bottom of the screen. This will reveal some notes about the update, which will tell you roughly what's changed.

20



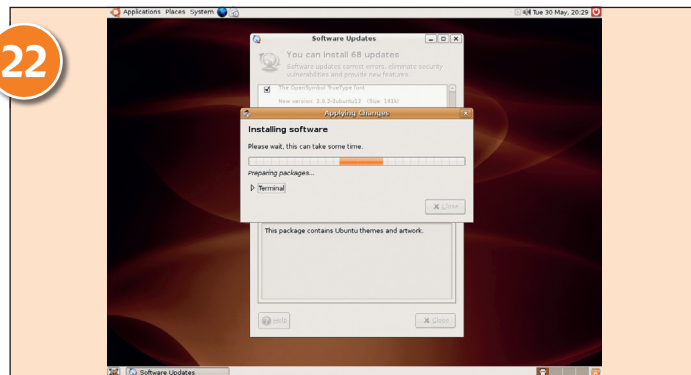
If you're not sure what a certain package does, click on the Description tab from the Software Updates window. Sometimes the names of software can be quite cryptic, so the Description view is very helpful!

21



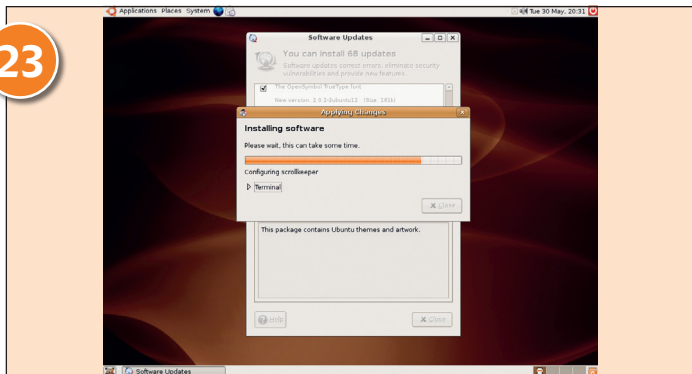
Once you've selected all the updates you want (they are all selected by default, ensuring maximum security), click on the Install Updates button to proceed. This will automatically download the selected patches from the web.

22



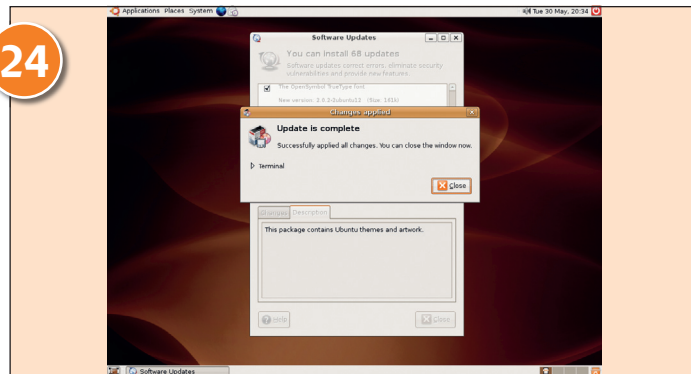
After the software has been downloaded, Ubuntu will extract it and prepare it for installation. This can take quite a long time, depending on how many patches there were available for download.

23

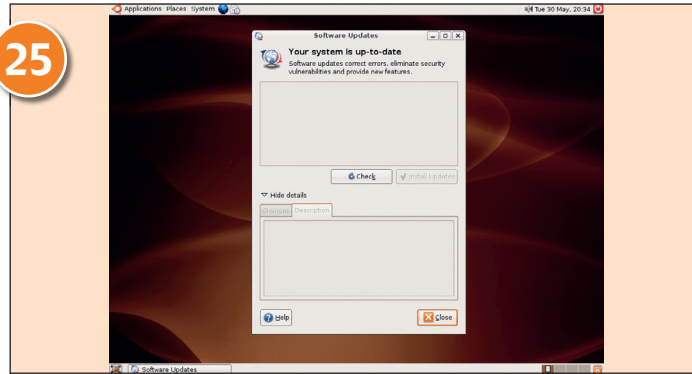


When the patches are prepared, Ubuntu will go ahead and upgrade your system with the fixes. This too can take a while, so just sit back and relax – Ubuntu will let you know when it's finished.

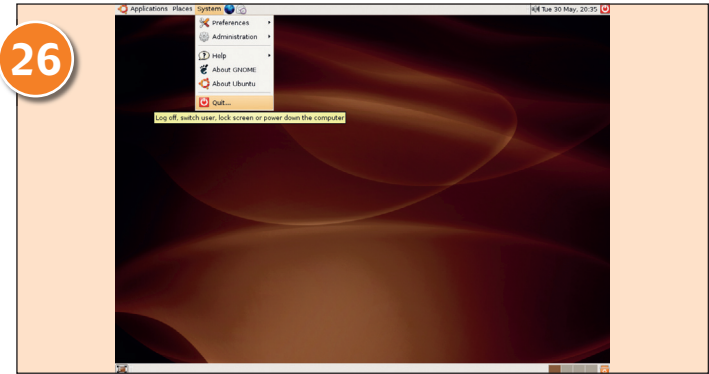
24



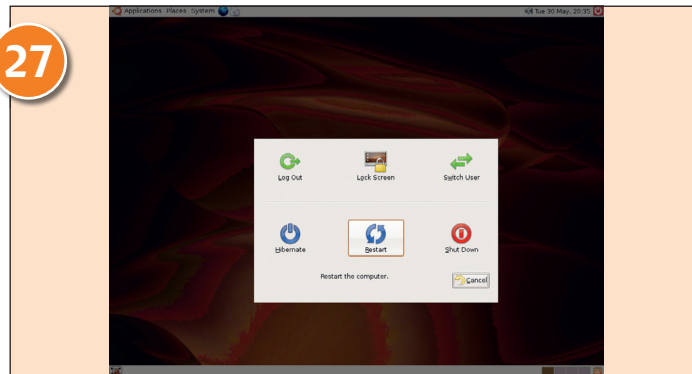
Happily, you know that when this screen pops up, Ubuntu has finished applying all the patches you selected. Click on Close to continue.



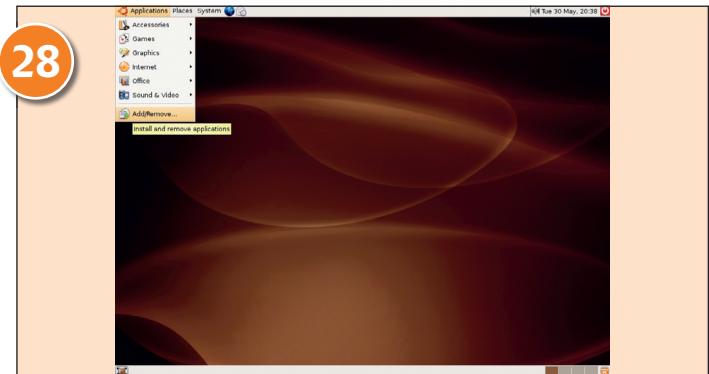
The Software Updates screen will rescan your system to make sure it has all the latest software. If it has, you'll see the message 'Your system is up-to-date' at the top of the window. We recommend you install all patches, just to be safe.



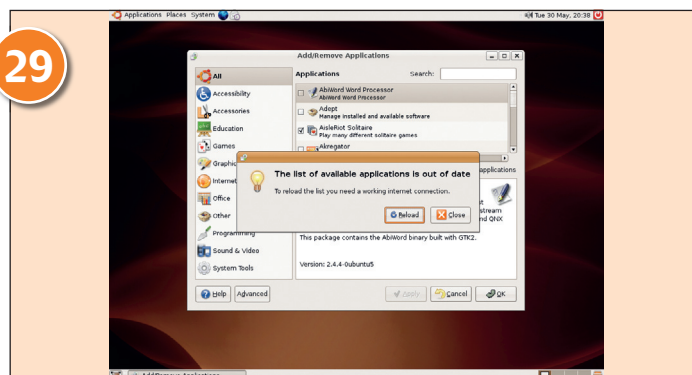
After running any software upgrade, we recommend you reboot your machine. Sometimes Ubuntu will force a reboot on you, because critical system components have changed. Click on the System menu, then the Quit option.



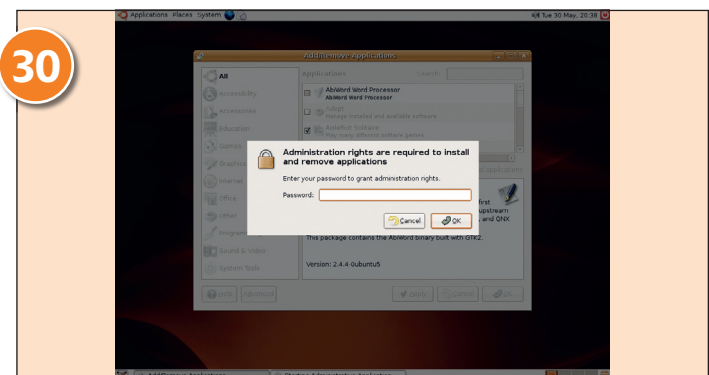
Your desktop will darken and Ubuntu will ask you what you want to do. Select Restart from the list of options, which will power down your machine then restart it, ensuring all the new software will be fully installed.



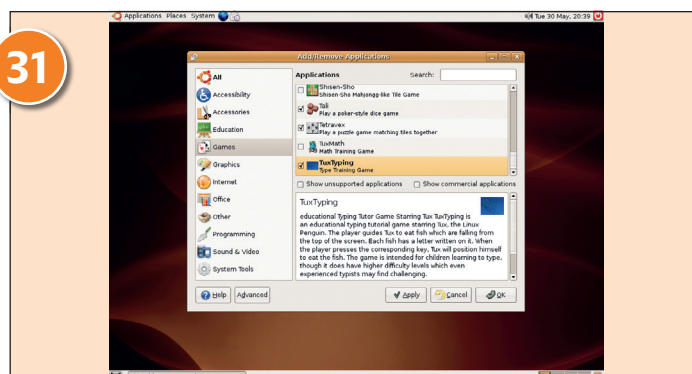
When Ubuntu has rebooted and you've logged in again, you can try installing some new software. Ubuntu comes loaded with cool software to play with, and it's easy to install it. From the Applications menu, choose the Add/Remove option.



As we have just updated our software using the Software Updates program, it's quite likely that Ubuntu will warn you that its list of applications is out of date. Go ahead and click on Reload to make it refresh its list.



Changing your software requires you to enter your password as security (you'll get used to this over time!), so type it in here and click on OK.



The Add/Remove Applications dialog lists all the software Ubuntu has made available to you, grouped into categories along the left. Select the software you want to install by checking the box next to its name, and click on Apply.



Ubuntu will confirm the list of applications you want to add and remove. If you're sure this is what you want, click on Apply. And that's it: you've installed and patched Ubuntu, and even installed new software. Whoever said Linux was hard?