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Getting to grips with Ubuntu

Investigate the software management system and play mp3s, DVDs and more

If you're at the stage where we left off last month, you should now have a freshly installed Ubuntu Linux system, complete with the latest security and bugfix updates. Ubuntu will download the latest updates periodically, but you can do it manually at any time by running the Update Manager from the System and Administration menu and selecting 'Reload' (see screen 1). This will download the most recent list of changes available for install.

Package management

Ubuntu Linux is based on the long-running Debian distribution and uses the same system for package management: Apt. Although it implements the same system, it uses different software packages and generally you shouldn't use Debian packages on Ubuntu.

Apt is based around repositories of software. A repository holds a set of packages and can be as small or large as desired. Each package in the repository has a list of any other packages it depends on, as well as suggested extras that aren't necessary but may be useful.

Multiple repositories can work together and are often used to separate out different kinds of software. When you try to install a piece of software, Apt automatically checks the dependent packages and downloads and installs them from the repositories. This means you can install any application from the repositories with one command or click. The management system does all the work for you: you don't need to know where to get the package from or worry about any dependencies.

Ubuntu offers two ways to install packages: using the 'apt-get' command line or using the GUI front end, Synaptic. Both are easy to use but one is sometimes more suited to certain circumstances than

SCREEN 1

Get the latest updates for Ubuntu

the other. For searching and browsing, the GUI is easier, and for installing a known package, the command line can be quicker.

Start by firing up Synaptic from the System menu. The main application window opens (see screen 2), listing software categories down the left-hand side and individual packages on the right. Packages that have the circular orange and red Ubuntu logo are officially supported, and those marked with a green square are currently

installed. Click on any package to get further information.

To install a package, right-click on its name and select 'mark for installation'. You can mark as many packages as you like and install them together. To search for a particular package, click the Search button and enter part of its name. This will bring up the search results instead (see the bottom left buttons), replacing the category lists. Once your packages are marked, click on the Apply button to install them all at once.

As an example, let's install the official Nvidia graphics drivers. The standard open-source drivers do not support hardware-accelerated 3D graphics, and may not support some of the latest cards. Installing the drivers with Synaptic is simple: click the Search button and enter 'nvidia' into the box. In the new list of packages, scroll down to the bottom and mark 'nvidia-glx' and 'nvidia-settings' for installation. Click Apply and you'll see the window shown in screen 3 confirming your choice. It tells you the total download size and the amount of space required. Hit Apply and Synaptic takes care of the rest.

To activate the Nvidia drivers you need to run a configuration command. Don't run this if you don't have an Nvidia card installed. Open a terminal

A different route to the root account

Unlike most distributions, Ubuntu gives no direct access to the 'root' (super-user) account. You can't log in as root, nor can you use 'su' to switch to the root account. Instead, you get the 'sudo' program.

Any authorised user (including the first account you set up during installation) can use sudo to run a command as root. Put 'sudo' at the start and otherwise enter the command as usual. You'll be asked for your user password initially, though for a short while afterwards it isn't needed in that particular terminal window. Just close the window when finished.

Many GUI applications that require super-user access make similar use of sudo; in this case they will request your password. If you do want to run a shell as root, just enter 'sudo -s' to convert the login to a standard root login.