

Distro challenge



Paul

Minix
www.minix3.org

I chose something that isn't strictly a Linux distro. In fact, it's not even loosely a Linux distro, because it's not Linux at all – Minix is a miniature Unix dating from 1987, and it's famous for two reasons. First, it's designed as a teaching operating system, so it takes a slightly simplified approach to Unix that means it gives up things such as comprehensive driver support so that the code can remain clean and easy to understand. Second, it was the operating system that Linus Torvalds used when he was learning

computer science at university. Sadly, Minix wasn't open source at the time, so Linus went ahead and created his own, x86-specific kernel.

The australopithecus of Linux

Since then, Linux has shot to fame, but Minix is far from dead – although it does feel like you're going back in time. Keep in mind the need to keep things easy to understand, then prepare yourself to use *Sh* rather than *Bash* (by default, but it's easily changed), *Xdm* rather than Anything Useful, *Apache 1.3* rather than a real web server, and lots and lots of the command line. Still, it boots in no time at all, it does manage to have a surprising selection of software (*GCC 4.4*, *Git*, *PHP 5.2*, and *Qemu* all make an appearance – hurray for Posix compatibility!), and with a little monkeying around in the package manager you can even get a workable system up. Our recommendation: keep the CD in the drive after install, log in as root, then run **packman** and enter **all** when you're asked what you want to install. The end result includes a full X install along with everyone's favourite tools *Xeyes* and *Xterm*, plus a real text editor (*Vim*) and *Dungeon*, the ancient text adventure.

Minix looks like and ultimately is a throwback to 20 years ago. But if you pick up a copy of the Minix handbook you can follow the source code, read the theory and really get a strong grasp of how Unix works. Who knows – you might even follow Torvalds and write the next big Unix kernel!



› **Dungeon: one of the (many) highlights of Minix that are waiting for you.**



Graham

Paldo
www.paldo.org

Paldo was chosen because, despite being all the way down at number in the Distrowatch hit-list, it looks like an original distro with ideas of its own. This is a big contrast to the glut of re-themed derivatives and language re-spins that usually occupy Distrowatch at this level.

Its unique selling point is a new package manager, called *Upkg*, which enables the user to install both binary and

source versions of any required package, building the code and installing any dependencies as necessary. This should mean custom-built packages and applications run with a modicum of extra performance, as each is fine-tuned for your specific hardware.

Another package manager?

It's the Paldo installer, launched from the desktop of the live CD version, that is Paldo's best feature. This is a custom application that asks very few questions and performs its task effortlessly. Even the partitioning tool is easy to understand, leaving you with a new desktop installation in around half an hour. Other distributions might want to take a look at how the installer works if they're considering a new installation scheme.

In everyday use, Paldo wasn't a problem. It includes the vast majority of applications you'll ever need, and works in just the way you'd expect. *Gnome 2.30.1* is untouched, for example, and operates just like any other default installation of *Gnome*. It's the same for *OpenOffice.org 3.2.0*, *Firefox 3.6* and *Gimp 2.6.8*. Paldo is also refreshingly fast and stable. And because the desktop and applications work exactly how their developers intended, Paldo is a good example of how far Linux has come in the last 10 years, regardless of how a distro chooses to package and modify tools for its own use.

Paldo is an interesting experiment. If only *Upkg* could live up to its potential, we'd be able to fully recommend it – it just needs a little more love.



› **Paldo takes a no-nonsense, developer approach to furnishing both packages and the desktop.**

As keen listeners to the TuxRadar podcast will know, we were challenged to use a Linux distribution for a fortnight from outside of the Distrowatch top 100. Here's what we chose...



Mike

GNUstep Live CD 2.0

<http://io.debian.net/~tar/gnustep>

Being an alternative OS junkie, I couldn't just opt for any normal distro. The GNUstep Live CD immediately caught my eye – but don't worry, the 'GNU' here doesn't imply that this is running The Hurd kernel or anything crazy like that. GNUstep is a free software implementation of Next/OpenStep, a programming framework developed by Steve Jobs and his team of hackers after he left Apple.

Many years ago I used to run the (still rather fabulous) *Window Maker* window manager, which provided some superficial sense of the Next GUI. GNUstep takes this further with applications and utilities written using the framework, and they have a very distinct look and feel. Take the text editor, for instance. When you launch it, you spend a few moments trying to work out what has happened, as there's no obvious indication that the program has started.

But look closely and you'll see a horizontal menu in the top-left of the screen. From this you can start a new document, change options and so forth. It's rather strange, but not bad – indeed, NextStep was a popular OS among academics for a while. (Tim Berners-Lee wrote the world's first web browser, *WorldWideWeb.app*, on a Next box.)



› Black and grey abounds in GNUstep – it's not a particularly attractive desktop, taking instead a more industrial approach to aesthetics.

Ultimately, NextStep never made a great impact as a desktop operating system, but in a bizarre turn of events, Apple bought Next and got two things it needed: a powerful operating system (which became Mac OS X), and that Steve Jobs chap who started the company.

Outside of the fascinating GNUstep business, this Live CD is nothing special, and because there aren't many GNUstep applications doing the rounds it's a bit of a strange jumble of toolkits and interface designs. Nonetheless, the GNUstep documentation has been a valuable resource for those coding on OS X and the iOS (iPhone) platform, so even if it never makes the big leagues, it has made the world a better place.



Andrew

Linex

www.linex.org

Linex is not a typo: instead, it's a "language re-spin" of the kind dismissed by Graham over the page. It's based on Debian and boots into a Gnome desktop by default, and there's very little to recommend it from the hundreds of other distros out there. Unless, that is, you're one of the hundreds of millions of people in the world who speak Spanish as their first language.

The Linex project is the brainchild of the regional government of Extremadura, which created the distro with the aim of using it in schools and government departments. The scholastic influence is apparent in the Linex app launcher, which replaces the icons for the most popular desktop apps with something more Iberocentric. *Gimp* has been renamed *Zurbarán* after the painter, for example, and *OoO Writer* has been rebranded as *Espronceda* after a poet taught in Spanish schools. This little touch really makes Linex feel loved.

What Graham has overlooked is that the distro at the top of the Distrowatch rankings, Ubuntu, got there by making usability a feature. Linex takes a leaf out of that book by providing stable, virus-free Debian goodness and making it more usable for a specific set of people. And that's what Linux needs: rather than have lots of brilliant but half-baked features that could, given work, take over the world, we need



› *Synaptic* still gets most of its description text from English sources, though everything else in Linex is in Spanish.

more people like the Linex team, who have taken a good base and are changing one thing (the language) completely, with no corners cut.

Almost every text string that can be translated from English has been, which is a mammoth feat. Every menu in every app, every configuration utility, every step of the installer is written in Spanish. This is not a work in progress; this is finished, it's ready, and it deserves to be adopted worldwide. **LXF**

Over to you

We know you like to experiment with your operating systems, and you know we do – so tell us about it! What crazy stuff have you installed recently that needs to be adopted, encouraged or just plain avoided? Let us know at linuxformat.letters@futurenet.com or join in the discussion at www.linuxformat.co.uk/forums.