

DISTROHOPPER

We've tapped GCHQ's communications to find out what's going on in distro land.

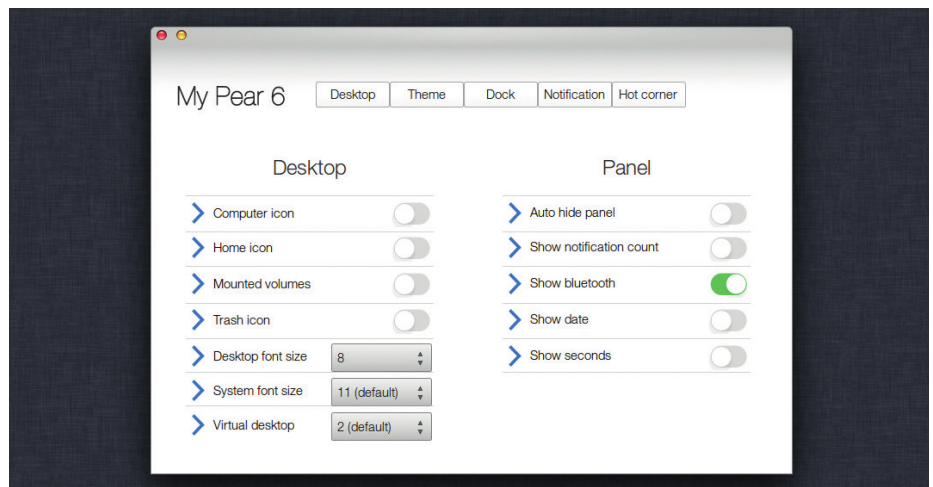
The end of the road for Pear OS

This slick desktop OS takes its final bow. Or does it?

Pear OS never really hit the big time, but it still managed to court more than its fair share of controversy. Fans adored its slick good looks and ease-of-use (both heavily influenced by Apple's OS X), while critics pointed out that it was little more than a tweaked version of ElementaryOS with an icon set that looked suspiciously similar to Apple's.

Late January, Pear OS disappeared. The website switched to a holding page saying that a "very large company" had bought Pear OS, and that its future was in the hands of its new owner. The downloads were taken offline, and anyone with data stored on the Pear OS cloud servers had 10 days to recover it before it was deleted. By the time you read this, more may have been revealed at <http://pearlinux.fr>.

About a week after Pear's mysterious disappearance, Clementine OS appeared at www.clementineos.hj.cx promising to continue PearOS. It's not clear exactly how they'll do this, or if they have access to Pear's source code that others haven't been able to get. It'll be a while before we find out though, since the first version isn't scheduled to be



Pear Linux faced accusations that it wasn't sharing its source code, as required under the GPL.

released until after Ubuntu 14.04 comes out in April. In the mean time, the Clementine project is hosting the Pear OS ISO images, though we wouldn't recommend people install a distro that won't be supported.

For people now at a loss with the passing of Pear OS, or who like the screenshot, we humbly suggest you take a look at Elementary OS. It's less Apple-like than Pear,

but still has a similar look and feel. Not only that, but it's a much better open-source citizen. Not only does it produce its own desktop environment, but it's also helping in the development of the Shotwell photo manager. Elementary OS also has a substantial development team, and doesn't just rely on a single person, so its unlikely to disappear overnight.

STEAMOS AND THE COMMUNITY

Valve's gaming distribution has dominated the news recently, and we won't rehash everything here. Instead, we're going to talk about some smaller aspect of development. The original installer was a bit of a pain to use and required UEFI. This wasn't a huge problem, because it was only a beta release aimed at experts.

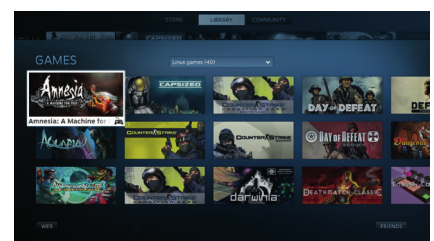
However, as it's built on Linux, the whole platform is open for tweaking. A group of users including directhex and ecliptik took to github to create a new version of the OS with support for non-UEFI devices, DVD installing, and other basic features. They called their project 'Ye Olde SteamOSe'. Valve has now pulled these improvements into a new version of Steam OS, making it easier to get up and running.

In further Steam news, Valve has provided all Debian developers with free access to all Steam games. Debian is known for its strong adherence to the principles of free software, so it's not clear how many of the developers will take up this offer of commercial software, but we think it's a nice gesture either way.

How free is Valve?

Valve is a relative newcomer to the Linux world, and its background in proprietary software has led some people to question how well they'll fit into the open source ecosystem. It's too early to tell exactly, but the early signs are about as favourable as they can be for a proprietary software company. It's worth remembering that Valve's history lies firmly in the

PC game modder community, which shares a tinkerer philosophy with the open source and free software community.



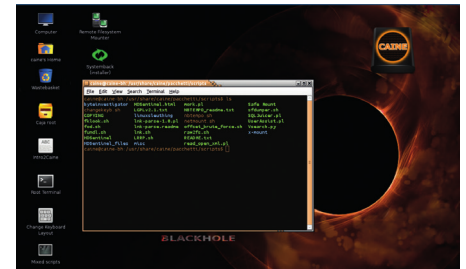
There are 302 games available for SteamOS, and it hasn't even made it out of Beta yet.

System Rescue CD & Caine

Not a lot of people know about these super rescue distros.

Hardware failures are always difficult, but they're a lot less difficult now than they were a few years ago, thanks to the advent of live distros. Almost every distro now comes with a live version that can be put into use should your hard disk fail, or some other calamity befall your system. However, there are a few Linuxes that are specially designed to help in this case, and two of the more popular got an update earlier this year: System Rescue CD and Caine.

The first of these is pretty much the standard in rescue discs, but the latter has some interesting uses. Caine is designed for computer forensics – think CSI but with computers. There's a large cross over between this and extracting information from a breaking system. While System Rescue CD remains our favourite for most repair jobs, Caine comes into its own when you're more interested in pulling data off a system than repairing it. It's also got some useful tools for investigating phones.



It's worth getting to know your way around a rescue distro before you have a system failure, so you'll know what to do when things go awry.

Gobo: rethinking the file structure

Everything you know about the Linux filesystem is wrong.

The Linux filesystem is more or less the same in just about every distro. This means you can switch between them and still know where to find things. You'll even find your way around BSDs and Unixes without any major problems. Is this standardisation holding back the evolution of the system though? Does it still make sense to split bits of programs up into **/bin**, **/etc** and **/usr/share**? Is **/opt** really useful? Is **/var** still relevant with modern hardware? The answer to all questions may well be yes, but can you really be sure without trying out some alternatives? The answer to that is definitely no.

Gobo Linux is a distro that's thrown out the old filesystem paradigm and invented its own. The root directory has six folders:

/Depot, **/Files**, **/Mount**, **/Programs**, **/System** and **/Users**. Perhaps **/Programs** is the best example of how it differs. It doesn't use a package database for package management because it doesn't need one. The file hierarchy holds all the information. For example, the program bash is held in **/Programs/Bash/<version-number>/** where there's a separate folder for each installed version. **/Programs/Bash/Current** is a link to the folder containing the latest version. Packages, then, are just archives that can be unpacked into this structure. Alternatively, any software you compile yourself can simply be copied into the correct place.

The project has just sprung back to life, and is working on its first new version since 2008. We applaud this bold experiment!

```

QEMU
----- WELCOME TO GOBOLINUX -----
Welcome to the GoboLinux live-CD environment. This is a fully-functional
GoboLinux system running directly from this CD-ROM, from which you can
also install GoboLinux into your hard drive.

* To enter the graphical environment, type in:
startx

* The GoboLinux installer can be used in text or graphic mode.
In graphic mode, just click on the "Install GoboLinux" icon.
To install using the interactive text-based installer, type in:
Installer

* For more information, visit http://gobolinux.org

gobo@LiveCD ~]cd /Programs/Bash
gobo@LiveCD /Programs/Bash]ls
4.2 Current
gobo@LiveCD /Programs/Bash]_
  
```

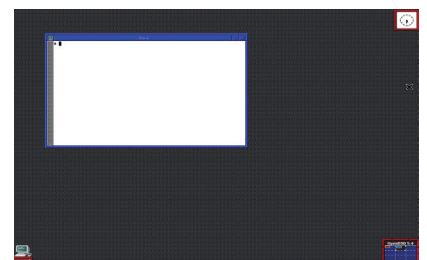
GoboLinux wouldn't start on our hardware, but ran fine in Qemu.

OPENBSD AND CASH

Asking 'How much money does it take to create a distro?' is a bit like asking 'how long is a piece of string?' Both can be as little or as long as you like. If you really wanted, you could create a new distro based on something like Ubuntu or Fedora in a weekend with no budget, but it probably wouldn't add much to the already existing sea of distros.

On the other hand, the OpenBSD foundation is hoping to raise US\$150,000 this year (that's about £91,000 in old Imperial money). \$20,000 is needed just for electricity in the build farm. This all has to come from donations since the foundation doesn't have any commercial interests. It looked like it may be the end of the road for this security-centered Unix when, late last year, a campaign to raise funds for the power bill failed. Early this year, though, a final donation drive caught the attention of the internet and \$100,000 flowed into the foundations coffers in just the first three weeks of the 2014 with donations from Google, Facebook and the MPEX Bitcoin Securities Exchange amongst others.

This is good news not just for BSDers, as OpenBSD projects – most notably OpenSSH – are included in most Linuxes. The work by Theo de Raadt and the rest of the team help keep us all safe regardless of the kernel we use.



OpenBSD's may not be pretty, but it is secure (and other desktops are available).