

# CentOS 7

**Graham Morrison** finds the ultimate upgrade path for his own low-end-box, a distro ideal for servers and offices built from Red Hat's super-audited source code.

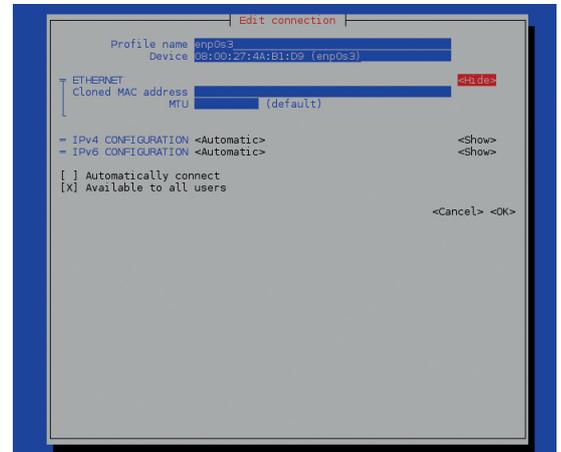
## DATA

**Web** [www.centos.org](http://www.centos.org)  
**Developer** CentOS Project  
**Licence** Mostly GPL

Reviewing Linux distributions is like reviewing music. Should the reviewer be an old school devotee? A potential new listener, or just interested in seeing what's happening? Should they care that an artist split from a boyband. Or that one distribution is very similar to another distribution. What about KDE versus Gnome, mods versus rockers, GNU versus open source? On the one hand you have to say whether something works, or whether it's worth your time and investment, or whether a work has accomplished whatever it set out to do. On the other hand, there is always going to be a hardcore of fans who will love any new output, regardless of any criticism, and they may have a point. A review seldom tells the whole story. CentOS, for example, inherits nearly all of its options, installation, software and updates from Red Hat Enterprise Linux, but that doesn't mean we shouldn't take a look. Quite the opposite. We've been using it for years and it's a vitally important distribution. Version 7 might just be the best yet.

CentOS, then, would be like an old 1960's cover band. Tough, reliable, surviving against the odds, and still holding on to a renegade attitude that brought initial success. That success came when it flew in the face of Red Hat by building its own packages out of Red Hat's much flaunted Enterprise Linux; the commercial Linux distribution at the heart of Red Hat's rampant business model and success. Not only did this give the wider community one of the most

You can choose between Gnome 3 and KDE for your desktop, making CentOS a good choice for offices and parents.



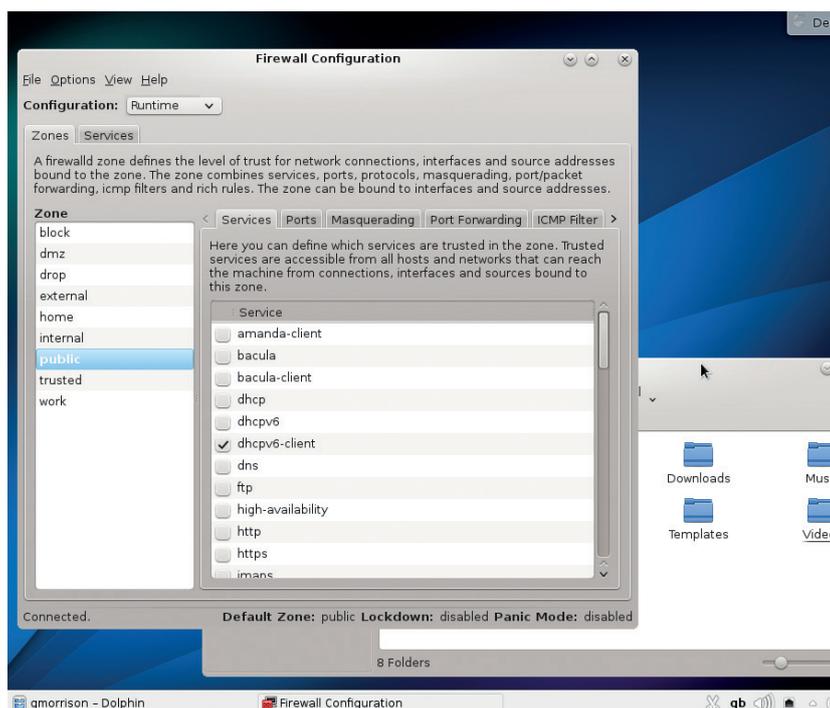
The new graphical installer and command-line utilities make CentOS easier to administer.

secure Linux distributions you could choose, along with assured updates handed down from Red Hat, it gave Red Hat a trial of conscience. If Red Hat was to embrace open source in the way it said it wanted to, it would have to put its faith in Free Software and accept its free competitor, even if that meant ignoring its own worried sales people.

## The Prefab Four

For many years, the two co-existed in what seemed like passive tolerance. CentOS carved out a significant niche for itself, sitting between the cutting edge of Fedora and the besuited sobriety of Red Hat Enterprise Linux. In particular, it's been able to capitalise on the insane demand for cheap online servers, low end boxes and racks of virtualisation, allowing beleaguered sysadmins to get their hands on enterprise-level security and updates without the associated support costs. Red Hat, meanwhile, continued to make money from its 'Value Add' and many of us thought this would be the way things would continue.

All this changed in February when Red Hat announced it was going to hire many of the core CentOS developers and pay them to continue developing CentOS, not Red Hat. It marked a significant change in strategy, and the hugely anticipated CentOS 7 is the first release since the merging of the waters. It comes bound to a wide array of ISO images, from a Live CD with either Gnome or KDE, through a 362MB network install disk, up to a monster 6.6GB DVD containing everything. It's great to have the option of grabbing an install medium that's not going to place too many additional demands on your network, or CentOS's servers, so we went for the



## What does Red Hat think?

We recently had the opportunity to talk to Jan Wildeboer, Red Hat's EMEA evangelist, and he had a few insightful words to say about the new working relationship with CentOS, especially when faced with the question of whether CentOS lost Red Hat any sales.

"I always said, both internally and externally, that's the record industry argument. With pirated music taking revenue away, where else would it come from? But just because somebody copies a song 20 times doesn't mean they would have bought 20 CDs. And that's wrong, and I think from my evangelism perspective, the customer who uses CentOS over RHEL is a user or a customer that we failed to deliver our Value Add message to."

"There are a few things that make CentOS important. First thing is, of course, CentOS has a user community that helps us in making our product better. We listen to them. On the other hand, CentOS being re-built from our sources is a sign that everything is just as it should be at the middle of the company. The third thing is that CentOS has never been Red Hat Enterprise Linux - there will always be differences here and there - they're not binary compatible."



Jan Wildeboer is a rather inspirational voice of reason.

full-fat install for our system.

For an operating system built for servers, installation is a graphical breeze. This is thanks to the updated Anaconda installer, and it looks fantastic. As usual, you can select the quantity of software you want, as well as the graphical environment. You can't multi-select between Gnome and KDE, for example, but that's an easy job post-install, and there's no sign of Fedora's commitment to Gnome 3. We've only ever used CentOS on a server and without a GUI, so this shouldn't affect most installations. You can also create a user-account and password while the files are being transferred to your drive, even if the placing of the 'Done' button in the top left is a little incongruous.

### Starship Enterprise

The default file system is now XFS. This is significant because it puts scalable data requirements and the storage market at the heart of the operating system, ahead of the regular desktop and . But it also marks the tearful end of ext3's and ext4's dominance in favour of more esoteric or tailored file systems. But if XFS is good enough for NASA's Advanced Supercomputing Division, it's good enough for us. The scalable aspect creeps into other parts of this release. There's now support for Linux Containers which may bring us even cheaper low-end-boxes and certainly provides an excuse to mention Docker. These may all be the side-effects of Red Hat's cloud ambitions, but you can't help to notice CentOS's own advert for Cloud-instance SIG in the installer, suggesting that there's more going on than a straightforward rebuild of RHEL 7.

We're now used to systemd, so its inclusion is no longer a shock. For our own servers, we're grateful for the for the new firewall daemon as our own IP tables hacking leaves a lot to be desired. 3D graphics drivers are included by default (non-proprietary, of

course), which is especially helpful if you run CentOS within a virtual machine. And we liked the inclusion of Network Manager's curses interface. But these are all features you'll find in RHEL. What we're really looking at is CentOS as a free alternative, and after years of use in some important installations, we have every confidence in the operating system, more so now that much of its development is guided by Red Hat. That means potential users can start with CentOS and move on to Red Hat, which was never a clear path previously, or stay with CentOS with Red Hat's blessing. It also gives safe harbour to Fedora fans looking for something less entropic.

There is, of course, much we haven't said. In use, we've found our server easier and more intuitive to maintain and the cloud-bias will keep the sales people happy. But what's important is that CentOS is stronger than ever, and the new release has a desktop bias that may win it new corporate friends whilst safely corralling Red Hat's cloud juggernaut into its packages. Without the finances to pay for support, CentOS is our choice for a long-term supported Linux operating system. With in-place upgrades (yet to come) and a ten year lifespan, there's nothing quite like it. Maybe not so much a cover band, then. Maybe more like the Rolling Stones. 🎸

**"If XFS is good enough for NASA's Supercomputing Division, it's good enough for us."**

### LINUX VOICE VERDICT

We love CentOS, and version 7 feels even better for both features and for its closer ties to Red Hat. Highly recommended for cheap servers everywhere.

