

2015

THE YEAR OF LINUX

This year is set to be the best ever for Linux – and that's not just our opinion. Some of the biggest players in Free Software think so too...

There's a long-running joke in the Linux world, that the next year will be the year of "Linux on the desktop". At first it was a serious proposition: back in the early 2000s, it looked like the operating system was poised to take a significant chunk of desktop marketshare. Microsoft was struggling with major security problems in Windows, Apple's Mac OS X had barely gotten off the ground, and there was clearly room for something better.

So why didn't Linux dive in and win millions of users? Well, it did, just in another way. Microsoft started to take security more seriously, and OS X emerged as a shiny Unix-like OS that appealed to many geeks. Linux was still the best all-round operating system, we reckon, but the desktop PC market was no longer so appealing. As the end of the decade came closer, users were flocking towards mobile devices such as smartphones and tablets – a

market where Linux dominates thanks to Android – and the server space became even bigger thanks to "cloud" computing, software/platform/infrastructure as a service, and the growth of web apps.

So Linux is, today, by far the most prevalent and important operating system in the world. It's a long way from being on every home desktop PC, but the next 12 months have plenty in store, and so for our first issue of the year we want to look ahead at the goodies to come. But we don't just want to wax lyrical about our favourite projects here; we also want to hear from some of the biggest names in Linux and Free Software about what they're most looking forward to.

But before we hear from the horses' mouths, so to speak, let's have a quick look back at 2014, a year crammed with big developments for our favourite operating system...

Highlights of 2014

There were plenty of ups and downs last year.

Last year got off to a corking start, with videogames giant Valve announcing 14 new models of Steam Machines – pre-built computers running the Linux-powered SteamOS platform. For much of its life, Linux hasn't been taken seriously as a gaming OS, but Valve's announcements changed this perception enormously. We're still a while away from seeing Steam Machines in every shop, but the future is looking bright for triple-A titles on Linux.

Meanwhile, Red Hat, one of the big players in Linux for businesses, snapped up the free CentOS distro. For years, CentOS had been providing a free and community-supported rebuild of Red Hat's Enterprise Linux product, and Red Hat had tolerated its existence without saying much about it. But it became clear that CentOS can benefit the company: sure, CentOS users aren't paying any money directly to Red Hat's coffers, but they could upgrade to the paid enterprise product at a certain point.

From Red Hat's perspective, it's better if people are using CentOS rather than a completely different distro such as Debian.

In early February, the Debian project had a vote on which init system it should use in the next release of the distro. And guess

what? Systemd won, to the surprise of many. Debian is a conservative distro, so the decision to replace a large chunk of the base system caused arguments that extended well into the rest of the year.

March was a great month. The Linux Foundation decided to offer its "Introduction to Linux" online course, which previously costed a whopping \$2,400, for free. Another big development was Broadcom's release of the video driver source code for the VideoCore IV GPU, as used in the Raspberry Pi. April had some downers though: Heartbleed, the internet-breaking vulnerability in the widely used OpenSSL library, led some to question whether open source is really more secure. We'd say it is, of course, but just because something is open source, it doesn't mean that lots of eyeballs are going through the code. If only

all those big companies affected by Heartbleed had supported OpenSSL development, either with

money or patches, maybe things would have been different. In the same month, Canonical cancelled its Ubuntu One cloud storage service.

Still, in May the ever-diligent OpenBSD team announced LibreSSL, a fork of the OpenSSL codebase, and immediately started ripping out some of the horrendously old and complicated code chunks. Meanwhile, the Chinese government decided to ban the usage of Windows 8, while the Razor-Qt and LXDE desktops merged to form LXQt.

Game on

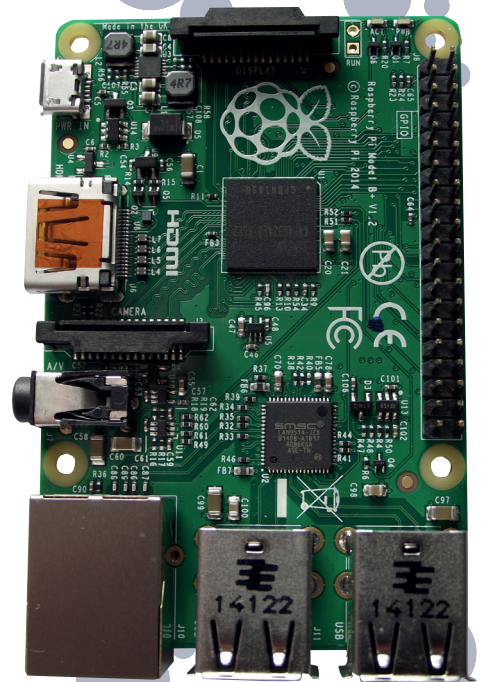
June was a good month for gamers: over 500 games, fully supported on Linux, were now available on Steam. *Krita*, KDE's peerless drawing application, announced a new crowdfunding project to implement new features, and as July came in, we were all greeted by a new Raspberry Pi model, the B+. KDE 5 was released and it was announced that 97% of the world's supercomputers run Linux. Not bad at all!

And it was a good time for open standards: governments, schools and

"The Heartbleed vulnerability led some to question whether open source really is more secure."



The Heartbleed OpenSSL vulnerability was such a big deal, it even got its own logo thanks to security company Codenomicon.



The Raspberry Pi Model B+ was a very welcome upgrade, with more USB ports, more GPIO pins, and better power management.

other institutions in Valencia, Geneva and Toulouse announced that they were no longer paying the Microsoft tax, and had moved to Free Software. The UK government surprised us all by demanding that public documents should be in open formats such as ODF.

In September, the NHS dumped Oracle in favour of an open source solution, while Netflix users could now watch films on Linux (via Chrome and Ubuntu).

But another downer came in October: the Shellshock bug, which affected a *Bash* vulnerability that had been in the code since 1989. It was another sobering reminder that FOSS only works when people are studying the code. Adobe also announced that it was dropping Reader support for Linux, but given the program's bloat and unreliability, few people really cared.

November and December wrapped up the year with some announcements: Mozilla ended its relationship with Google, and decided to move to Yahoo as its default search engine. The Jolla tablet was crowdfunded, Debian was forked into the non-Systemd-requiring Devuan distro, and HP launched an EliteBook laptop with SUSE Enterprise Linux pre-installed.

What the big names say

We asked prominent developers and project leaders in the FOSS world what they thought of 2014, and what they're most looking forward to this year.

Boudewijn Rempt

Lead developer of Krita, a powerful graphics editor for KDE.

LV What was your biggest highlight of 2014?

BR: Oh gosh! We had so many – we released *Krita* in Valve's Steam app store, we did a really successful Kickstarter for the Krita Foundation, and we had a booth at Siggraph! [computer graphics conference] And then we got a five-star review in an artists' magazine, *ImagineFX*, so *Krita* is getting noticed outside the FOSS world too.

LV What are you most looking forward to in 2015?

BR: The next release of *Krita*, with all the Kickstarter features... our next Kickstarter,

full support for creating animations, and the port to the Qt 5 graphical toolkit. No, I'm lying, I'm not looking forward to that port, but by March it'll be done.

LV What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

BR: GNU/Linux will probably be fine: the kernel is well-funded, has a broad contributor base and, yeah, it'll do fine. FOSS in general too, apart from the usual patents challenge. I think the big challenge is all the divisiveness. All the hate people feel when someone comes up with a new idea. It's taking the fun



out of working on FOSS! If only everyone who feels the need to write a hateful mail or post would pledge to also write one love letter to a project of choice, maybe it'd balance out?

Ben Nuttall

Education, development and outreach for the Raspberry Pi Foundation.

LV What was your biggest highlight of 2014?

BN: Personally speaking, I'd say attending PyConUK. With the Raspberry Pi Foundation running the education track, introducing kids and teachers to open computing; Carrie Anne's keynote thanking the community for its efforts; and the wealth of presentations and lightning talks all rounding up to demonstrate what a great time this is to be involved in making a change through open source in education and industry.

LV What are you most looking forward to in 2015?

BN: FOSS is more than just a warm tingle, or knowing you're sticking it to The Man, it's a viable alternative. We've seen such growth in activity and community engagement in the FOSS community over the last few years, with more people using Linux in different flavours, and open source software libraries being ever more prevalent. We're seeing fantastic examples of what can be achieved in the free & open source world, and in many

areas what we have is pushing the limits of the proprietary alternatives, we're at a tipping point where I see FOSS being the preferable option in more and more cases. That's exciting, and I'm looking forward to what comes in 2015.

LV What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

BN: We still suffer from a lack of choice for consumers. In the high street, people have the choice between buying a Windows laptop and a Macbook, there's just no awareness of an alternative. The addition of Apple is a huge step forward in diversity – now people know there isn't just one type of computer with one interface they should expect everywhere. However in the mobile phone market, when smartphones arrived, Linux (though Android) ended up taking the majority of market share without anyone even noticing.

Proprietary software vendors know they're losing out to FOSS, especially in areas like



web servers where Linux is king. They know they're slipping behind and they're worried. What they do to combat that could be good for everyone, if they become more open or start using open standards, or it could be competitive. In recent months we've seen Microsoft open source the .NET core and welcome contributions on GitHub, and we've seen them make Docker available for Windows. A concern could be that with open source tools available, it takes an edge off the attraction for some to use Linux.

Matthew Miller

Works for Red Hat as the Fedora Project leader.

LV What was your highlight of 2014?

MM: The Fedora 21 release. It was a full year since Fedora 20, and it was my first release as Project Leader, so I was quite anxious. But so many people put in amazing, great work and it all came together into one of the best Linux distro releases ever.

LV What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

MM: Without a doubt, the anti-freedom agenda of media companies. Patent-encumbered software and DRM in HTML standards sets us on a direction that will be very hard to recover from, and all of the real money is on the wrong side in this fight.

LV What are you most looking forward to in 2015?

MM: Fedora 22 and Fedora 23, of course!



Philip Newborough

Lead developer of CrunchBang Linux.

LV What was your highlight of 2014?

PN: Gnome 3.14. I've been watching Gnome 3 with a keen interest and I've tried each new release. I found the early releases unusable, but the latest releases have shown real promise. When 3.14 was released in September, I adopted it as my daily desktop. I'm loving how the Gnome developers make the desktop so simple to use, it's minimal, yet still super-powerful.

LV What are you most looking forward to in 2015?

PN: There are a couple of things that come to mind. Debian Jessie: I'm running it on a couple of machines and it looks like being the best Debian release yet. Windows 10: It's about time that Microsoft brought virtual desktops to the masses.

LV What are the biggest challenges facing GNU/Linux and FOSS?

PN: Civility. I think the community really struggled in 2014 and at times, I felt embarrassed to be a part of it. Debate is important, but there is no excuse for



threatening behaviour and/or abuse. Therefore, I think the biggest challenge will be to keep the debates open, but keep them civil. If things continue as they have in 2014, we'll lose talented developers and we'll stop attracting new ones. That would suck.

Italo Vignoli

Handles media relations at The Document Foundation, makers of LibreOffice.

LV What was your biggest highlight of 2014?

IV: I can list a few: major release of LibreOffice 4.2, new board of directors in place (with second generation TDF members), UK Government decision to standardise on ODF, major release of LibreOffice 4.3, and the Bern LibreOffice Conference.

LV What are you most looking forward to in 2015?

IV: We are looking forward to other major releases of LibreOffice, to the availability of the software on Android, to other significant projects of companies and public administrations migrating to LibreOffice, and to a further growth of the ecosystem.

We are also looking forward to another great LibreOffice Conference in the city of Aarhus in Denmark, and to a large number of events in the other geographies.

LV What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

IV: Getting recognised for its real value, not only among people with a decent technical background but also among desktop users.

It's a pity to look at users who have Windows-related problems being stuck because they do not know about the possibility of switching to GNU/Linux or have been discouraged.

FOSS developers should improve their communication strategies and skills, to



grow their penetration among basic PC users who are bombarded by proprietary software messages (and who are locked-in without even realising it).

Jos Poortvliet and Frank Karlitschek

FOSS advocates from the KDE and OwnCloud teams.

What was your highlight of 2014?

JP: In the KDE world, we moved to deliver Frameworks 5, which is already having a big impact on the Linux desktop with many projects porting to Qt and we hope, ready to take advantage of KDE technology in the future. Of course, Plasma 5, and just before the year was over, the first KDE applications built on Frameworks 5 also saw the light. These will mature over 2015 and move to more platforms, with GCompris leading for Android.

I think the move to a single standard desktop/mobile toolkit for Linux is extremely important for its future as a viable platform.

Note that the toolkit isn't the desktop – Gnome is doing great as a desktop team, moving user experience forward and I applaud them for that! But for app development, it is good if there is one clear choice, with other more specialised options always around to keep some healthy competition and pressure.

What are you most looking forward to in 2015?

FK: OwnCloud is moving forward with distributed and federated cloud technology,

tackling the very core issues around privacy and security on the web.

Self hosting and control are super important but they always face the challenge of being disconnected – and the power of the web is that it connects people. Many projects work on these issues of course but OwnCloud is going fast and big: this technology is being used to connect over 500,000 students from three separate German universities that each run (and control!) their own OwnCloud instances.

What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

JP: The challenges are big: to put people back in charge of their digital life requires lowering the barrier to using open technologies. Hardware seems to play an ever-increasing role in this, with many projects working to release open hardware. There are significant hurdles to be taken, both for the wider maker movement as well as for projects like OwnCloud and KDE. We, the software and the hardware guys and girls, need to work together more, leverage each other, yet remain practical. I think the



super extreme projects (like the Purism project and Librem 15 laptop) show the way, pave it even, but it is the more down to earth ones which change the world.

The barrier we fight is twofold: technical difficulties and network effects. Nothing new, of course. Frankly, the legal, political and commercial forces against 'all things open' don't scare me: look at where we are today compared to one or two decades ago! Open platforms are inherently stronger and, over time, seem to win out. There's no reason to assume this will change.

Lucas Nussbaum

Debian Project Leader, and Debian developer since 2005.

What was your highlight of 2014?

LN: During 2014, Debian made a series of hard decisions about how to deal with the transition from our historical init system (sysvinit) to a more modern one (Systemd). While this sounds fairly technical, those decisions required us to question our deep beliefs about what Debian is supposed to be, and how Debian is supposed to work. This resulted in some of the most difficult discussions and decisions in Debian's history.

What are you most looking forward to in 2015?

LN: The release for Debian Jessie, in Q1 2015! I am very confident that this release will reassure all our users that we have made the right decisions, and that Debian is stronger than ever.

What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

LN: With the increasing move of our computing to cloud infrastructures, we give up the control of our computing to the managers of our those infrastructures. Our terminals (laptops, desktops) might now be running entirely on Free Software, but this is increasingly irrelevant given that most of what actually matters gets executed on a remote closed system that we don't control. The Free Software community needs to work to help users keep the control of all their computing, by developing suitable alternatives and facilitating their deployment.



debian

Lennart Poettering

Lead developer of Systemd, and formerly of PulseAudio and Avahi fame.

LV What was your biggest highlight of 2014?

LP: Well, I figure the decision from Ubuntu to adopt Systemd, too, so quickly after Debian made its decision.

LV What are you most looking forward to in 2015?

LP: Hmm, that's hard to say. I just contributed my share to the Gnome *Builder* Indiegogo campaign, so I guess I am looking forward to the progress *Builder* will make over the year!

LV What are the biggest challenges that face GNU/Linux and FOSS in

the upcoming year?

LP: I figure our biggest challenge is to make sure our way of open source becomes more relevant again, given the threat from "over-the-wall" open source done by Google and similar companies. These companies maintain projects where no real open source community exists, but only the most superficial things you have to do to call something "open source" are done, like they do for Android for example.

We also need to make sure that Linux with its classic userspace can compete with Android, and be an attractive alternative [to regulated app stores] where everybody participating is equal.



Simon Steinbeiß

Lead developer of Xubuntu, the Xfce-based Ubuntu spin-off.

LV What was your biggest highlight of 2014?

SS: My personal highlight of 2014 was definitely the release of Xubuntu 14.04 Long Term Support. I've been around in the Xubuntu project for several years and to me, this is the best release to date. I'm fully aware of the superlative and that this might sound corny coming from the project leader (although I wasn't leader for 14.04), but an incredible amount of effort that had been put into the Xubuntu project by its team members during previous cycles has come together in this release.

We also decided to take a leap of faith and ship several development versions of Xfce, as the 4.12 release date is still in the not-so-clear future. Some of our team members, including myself, have also helped the Xfce project upstream by submitting patches or maintaining abandoned parts of the desktop environment. While we're still a small team, we have several stable contributors and are able to get our stuff done very effectively. It has to be mentioned though that we'd love to grow and new contributors are more than welcome!

All in all, I would say 2014 was a terrific year for Xubuntu and the overwhelmingly positive feedback we received from the community for the 14.04 release gave us the energy to push forward in 2015.

LV What are you most looking forward to in 2015?

SS: I'm personally looking forward to the 4.12 release of Xfce, which is sort of overdue. I'm pretty confident it won't take too much longer and then starting the port to *GTK 3* is definitely one of the things I'm looking forward to as well, even if it'll probably mean a loss of stability in the beginning. The instability I see ahead is related to *GTK 3* being a moving target still – the toolkit is changing quite significantly with each release, breaking theming or deprecating function calls – and porting not being an easy task, especially with the larger components like *Thunar* (the file manager) or the panel.

In terms of Xubuntu, I'm looking forward to new contributors joining our ranks and helping us to make Xubuntu (and Xfce) even better.

LV What are the biggest challenges that face GNU/Linux and FOSS in the upcoming year?

SS: I'm not sure the challenges have changed too much in the recent years, at least from my perspective. There is an ongoing trend of fragmentation, flame wars etc that is very detrimental to the public reception of GNU/Linux or FOSS but also to the developer community itself. We've seen



some very extreme controversies take place in 2014 (for instance Systemd) and I can only hope that this will not be among the biggest challenges of 2015.

Other challenges I see ahead are related to Android/Google and its dominance. As it is the dominant operating system in the mobile space, ChromeOS is also gaining traction, and the traditional Linux desktop seems to become less relevant as Google is using the same lock-in mechanism with its ecosystem that made Apple so big and ubiquitous. Obviously ChromeOS doesn't satisfy the daily needs of many (especially power) users, but the seamless integration of mobile systems in the desktop (notifications, SMS replies etc) is a point where Linux will hopefully catch up at some point in the near future.

To come in 2015

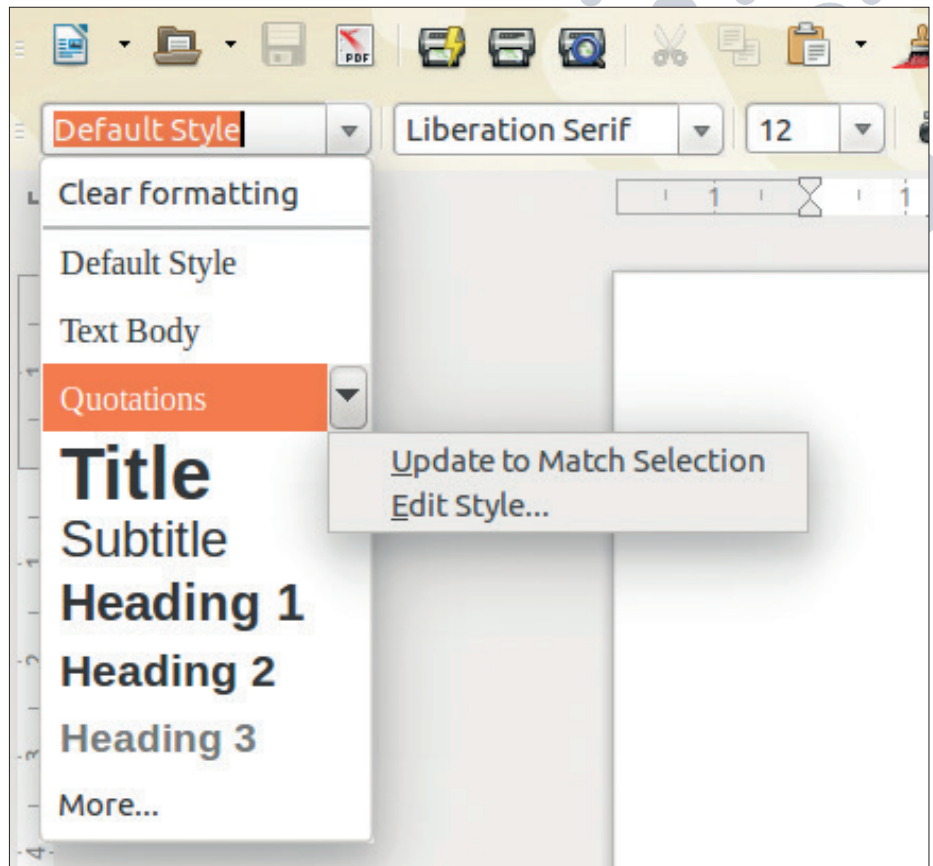
New distro releases, software updates, and much more...

Even if you don't use Ubuntu, a new release of that distribution is always a major event in the Linux world, given how many other distros are based on it. Ubuntu 15.04 (aka the Vivid Vervet) is due to arrive in late April and should include Systemd by default, making it the last of the major desktop-oriented distros to switch. This change hasn't been received well by everyone, but it brings Ubuntu – and its siblings Kubuntu, Xubuntu, Lubuntu and co – into line with OpenSUSE, Fedora, Arch, Debian and others.

Kubuntu users will have KDE Plasma 5 as the default desktop; it was also available in 14.10, but only as a technical preview. It doesn't look like Xfce 4.12 will arrive in time for the next Xubuntu release, nor will LXQt be ready for Lubuntu, so both of those distros will have relatively low-profile releases.

Fedora 22, meanwhile, is scheduled for late May, and will sport DNF as a new package manager, replacing Yum. It looks very unlikely that Wayland will replace X.org by default though. Debian 8 (codenamed Jessie) isn't pencilled in for any particular date, in true Debian fashion, but we can expect it before summer, all being well. New features include the aforementioned switch to Systemd, the inclusion of the MATE and Cinnamon desktops in the package repositories, and container support via the increasingly popular Docker.

The KDE team might squeeze a Plasma 5.2 into the end of January, featuring a new KWayland Server component, easy



LibreOffice 4.4 will provide a quick way to edit styles, from within the styles menu itself.

configuration of the SDDM display manager, and support for undoing Plasmoid actions (e.g. recovering deleted Plasmoids).

Gnome 3.16, later in the year, will build on the superb work that's gone into version 3.14, most notably with the addition of a

new application for reading and managing eBooks.

So long, Microsoft Office...

Due for release at the end of January (but more likely to slip into February), LibreOffice

On our wishlist

There's so much that we, at Linux Voice HQ, would love to see this year. Imagine a Raspberry Pi Model C, for instance, with a better CPU and more RAM (512MB is pretty limiting for some jobs). Sure, we appreciate that the Raspberry Pi Foundation doesn't want to clutter up the market with many different models, so that some projects only work on some boards and not on others – and that the Pi has never been marketed as a replacement for a desktop computer. But the Pi makes for such an awesome, silent, low-power server and NAS device (when hooked up to a USB hard drive), and it could run many services in parallel with more RAM.

We'd also love to see a final consumer version of the Oculus Rift virtual reality headset. The current developer model (DK2) has received very positive feedback, so we'd be in heaven if it were made available to the masses before the end of the year.

Providing, of course, that it had extensive Linux support, and then there's one game we're absolutely bursting to play on it, which would also need to be ported to Linux... *Elite Dangerous*!

On a more technical level, we'd really like distributions to work together more closely on a cross-distro packaging solution. Lennart Poettering talks a bit about this on page 42. Having different distros with different goals is great – that's software freedom. And having well-checked repositories is also important. But there needs to be a simpler way for third-part app developers to distribute their software than to package up for Ubuntu 14.10, and Fedora 21, and Fedora 22, and OpenSUSE X, and RHEL Y, and so forth. Sure, you can make cross-distro binaries by statically linking in every library, but that's wasteful.

Anyway, what's on your Linux and FOSS wishlist

for this year? Are you waiting for a certain distro to be released? A new version of your favourite app? Or a long-standing bug to be fixed? Let us know: letters@linuxvoice.com.



David Braben has given no firm schedule for a Linux port of *Elite Dangerous*, so we may have a while to wait. Dang!

4.4 is one of the most ambitious versions yet, and has seen work across all areas of the suite. From an end-user perspective, one of the biggest changes is the revamped toolbars: in *Writer* and *Calc*, the toolbars have been reorganised to remove lesser-used features, and add newer ones in their place. Not everyone will be happy with this, but on the whole we think it's a good thing, as we've often found ourselves scratching our heads with the default toolbars.

Also in *Writer*, a new Master Document Templates feature is available, which helps in the creation of frameworks for large documents, such as books with multiple chapters. Graphical shape objects can have text boxes embedded inside them – which is much more elegant than the previous, clumsy approach of adding text boxes on top and trying to keep everything together.

Calc, meanwhile, will have a new Statistics Wizard, along with an AGGREGATE function for better *Microsoft Excel* compatibility. The presentation component of *LibreOffice*, *Impress*, will also support password-protected documents for editing – that is, you can make a document read-only unless the viewer knows the password.

Under the hood, much work has been done on file format support: you'll be able to insert media in RealAudio, RealMedia, AC3, ASF and Ogg Opus formats, and import files from *Adobe PageMaker* *MacDraw*. *LibreOffice* 4.4 will also be able to connect directly to *SharePoint 2010* and *2013*. An especially useful addition is the ability to digitally sign

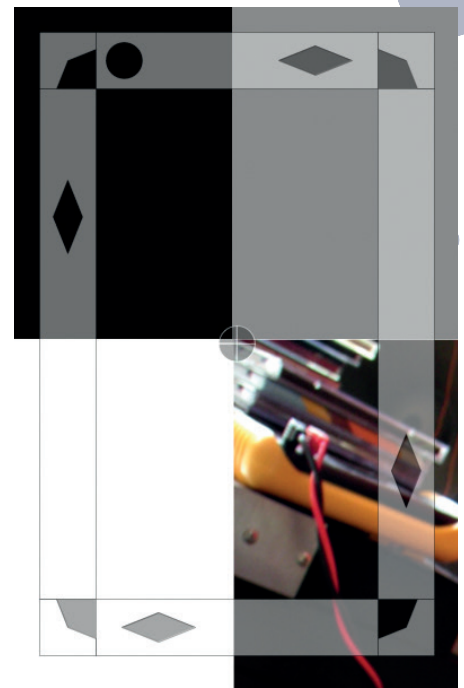
PDFs as they're generated in the suite, and two new fonts have been added – Caladea and Carlito – which work as drop-in replacements for Microsoft's Cambria and Calibri.

Kernel goodies

Version 3.19 of the Linux kernel should be ready by the time you read this, and it packs in a bag of improvements across the board. On the graphics front, the DRM subsystem features Intel Skylake graphics support – Skylake being the processor architecture that's due to be the successor to Broadwell later this year. The AMDKFD driver has been merged into the mainline kernel, and support has been added for GM204 Maxwell GPUs, as used in GeForce GTX 970 and 980 graphics cards.

Meanwhile, in filesystem land there have been plenty of improvements: SquashFS, the compressed filesystem, now includes LZ4 compression, which has lower CPU and memory requirements than Zlib compression. F2FS, the Flash Friendly File System originally developed by Samsung for use on solid-state devices, has a new "fastboot" mount option for snappier boot speeds.

Btrfs users will find improved RAID 5 and 6 support, while OverlayFS, the union filesystem merged in kernel 3.18, will support multiple read-only layers. This



Gimp 2.10's unified transformation tool will let you scale, rotate, shear and add perspective at the same time.

for higher bit-depth images and non-destructive editing. It will also be possible to preview filter effects directly on the canvas, instead of the little filter window, while a unified transformation tool should make it into the release.

But that's just the start: if we're very lucky, we may even see *Gimp 3.0* before the year is out, which will be ported to *GTK 3*. This will bring it in line with the *Gnome 3* and *Cinnamon* desktops, and make it look much better on HiDPI displays. Other features planned for post-2.10 releases

are script recording and playback, better text handling, and automatic layer boundary management. We can't wait!

Also in the realm of desktop software, *Firefox 35* is due out in January or February, and will include improvements to the *Firefox Hello* real-time communication client. It will be easier to start conversations with people over WebRTC and keep track of multiple chats. Also, the browser will default to using HTML5 video when accessing YouTube, which may finally mean the death of Flash for many users. Not that we're complaining – we've all had enough of that bloated, crash-prone, binary blob of evil.

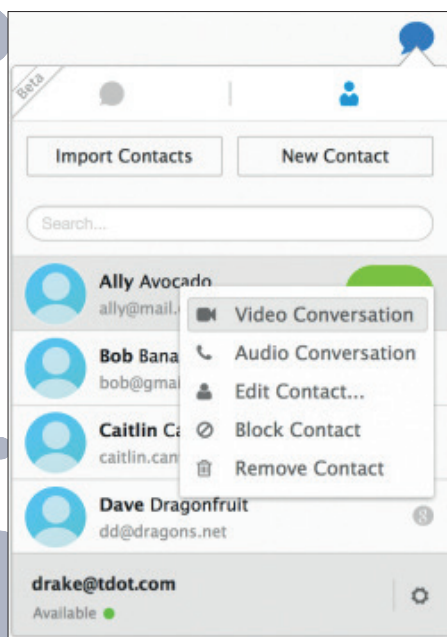
The number of Linux users has never been higher; adoption of open formats looks set to continue; and the software is getting better all the time. The future's bright. ■

"Adoption of open formats looks set to continue, and the software is getting better all the time."

means you can mount multiple volumes into the same directory. Then there are input driver updates (which should benefit Google Chromebooks), USB audio support improvements, merging of support for ARM's CoreSight debugging architecture, and much more. If you're running a rolling-release distro like Arch, you should get kernel 3.19 fairly swiftly – otherwise it will be in the next round of distro releases.

Keep an eye on...

Maybe, just maybe, we'll see a new version of *Gimp* this year. The developers are keen to stress that there's no timeframe for version 2.10, which should fully support GEGL (the Generic Graphics Library, which has been under development since the year 2000) and all the niceties it brings, such as support



Firefox Hello lets you set up free voice and video calls without accounts – you just share a simple URL.