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Online newsletter available at:

<http://www.oss-watch.ac.uk/newsletters/february2011.pdf>

Welcome to our February newsletter. In this issue, we bring you an article from Gabriel Hanganu, who approaches open innovation from the perspective of open source software development. Throughout this article, Gabriel uses video interviews with key players in the open source community to illustrate his points, so we encourage you to read the article on our website and watch the videos in context. Talking of videos, we bring you a blog post from Rowan Wilson about Google using its muscle to drive forward adoption of the WebM video container standard. Returning to the theme of innovation, Ross Gardler wraps things up with a blog post, asking 'Open Source: we are buying, but are we engaging?', in which he encourages us all to contribute any local innovations back to the project.

We hope you enjoy reading our newsletter. As ever, all comments are welcome at info@oss-watch.ac.uk.

Elena Blanco, Content Editor, OSS Watch ▶ info@oss-watch.ac.uk

News from OSS Watch



Linux skills in demand

According to a report, IT professionals enjoyed a dramatically improved hiring landscape in 2010, marked by the fewest job cuts in a year since 2000. Linux skills are in particular demand, with job postings seeking Linux knowledge increasing by 47% over 2009, compared to Windows-related postings, which increased by only 40%.

▶ http://www.pcworld.com/businesscenter/article/217545/linux_skills_are_hot_on_improving_it_hiring_front.html

Ubuntu opts for LibreOffice over Oracle's OpenOffice

The Ubuntu developer team has decided to make LibreOffice its default office suite over OpenOffice. This means that Ubuntu will probably be the first major Linux distribution to release a Linux that uses LibreOffice, but it won't be the last: Red Hat's community Linux distribution, Fedora, and Novell's openSUSE have also decided to switch to LibreOffice.

▶ <http://www.zdnet.com/blog/open-source/ubuntu-opts-for-libreoffice-over-oracles-openoffice/8122>

£98 PCs target UK digital divide

Low-cost computers running open source software such as Linux are to be offered as part of a government scheme to encourage millions of people in the UK to get online for the first time. The 12-month trial is part of the Race Online 2012 scheme, which aims to reach out to the 9.2 million adults in the UK who have never used the net.

▶ <http://www.bbc.co.uk/news/technology-12205412>

Russia to switch to open source by 2015

According to a report by the EU's Open Source Observatory and Repository (OSOR), Russian Prime Minister Vladimir Putin has signed a plan to 'switch federal authorities to free software'. The communications ministry is to start the process this year, and by the end of 2014, all federal institutions are to have started the migration.

▶ <http://www.h-online.com/open/news/item/Russia-to-switch-to-open-source-by-2015-1170201.html>

Document Foundation joins OpenDoc Society

OpenDoc Society, the global association that promotes best practices for office applications, has announced that The Document Foundation has become an organisational member, joining such existing members as Cap Gemini, Google, IBM, CWI and the Netherlands Department of Defence. OpenDoc Society brings together those with an interest in the openness and future of documents, to learn from each other and share knowledge and best practices about core technologies, available tools, policy issues, transition strategies, legal aspects and the latest innovations.

▶ <http://www.opendocsociety.org/news/tdf-joins-opendoc-society>

New Zealand company pilots open source academy

An impression that schools and even tertiary institutions are not producing the software developers New Zealand needs has led Wellington open-source specialist Catalyst IT to pilot an 'academy'. The academy's initial intake comprises 17 students from nine Wellington schools. They will spend the latter two weeks of January at Catalyst attending classroom-style workshops and applying what they have learnt to some real open-source projects.

▶ <http://computerworld.co.nz/news.nsf/news/schools-in-for-open-source-advocates>

10 new open source projects to watch

Black Duck Software has announced its 2010 open-source 'Rookies of the Year' list. Working from a list of thousands of new projects launched in 2010, the company evaluated the popularity of each using a weighted scoring system that awards points for 'commits' or changes to software within a project, the number of developers involved, and the number of websites linked to the project. It then audited its findings and normalized the scores.

▶ http://www.pcworld.com/businesscenter/article/216377/10_new_open_source_projects_to_watch.html

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Open innovation in software

Full article can be found at <http://www.oss-watch.ac.uk/resources/openinnovsoftware.xml>

A radical shift in the way innovation takes place is unfolding around the globe. Driven largely by the Internet and the collaborative communities it enables, this new open innovation culture changes everything, from the ways in which science and invention evolve to the development of societies and economies.

This document approaches open innovation from the perspective of open source software development. It looks at the innovation processes that take place naturally in successful open source projects, and at open innovation programmes specially designed to initiate and manage such processes in organizations determined to open up their research and development activity.

If you read this document online you will see that is illustrated with video references from open source and open innovation practitioners, who provide insights and real-life examples of successful open innovation in software development.

The transparency of the processes associated with open innovation contrasts starkly with those employed in closed innovation.

1. The open context of innovation

The transparency of the processes associated with open innovation contrasts starkly with those employed in closed innovation. In the latter, organizations create new products in closed-off laboratories, fiercely guarding their innovations with powerful patent armouries.

However, increasingly companies are opening up their innovation through a combination of [crowdsourcing](#), pooling resources, sharing intellectual property, and offering limited rights to patented technology to allow third parties to work with those innovations. In this new innovation context consumers are no longer passive recipients of products, but co-creators and valuable sources of new ideas.

In many ways, this shift to a more open innovation context has affected the education and research sectors as well as the commercial sector. Increasingly, there are new ways in which academics create, store, analyse and transmit information and research. As described in [Open Source and Research Infrastructure](#), the UK has developed a powerful technical infrastructure for sharing academic knowledge. The critical thing now is to encourage academics to embrace this culture of openness more actively.

A recent [Future of Research report](#) suggests that for UK researchers to remain competitive globally, they need to get used to sharing data and move freely between sectors and countries. In the words of Rufus Pollock, co-founder of the Open Knowledge Foundation, 'the best thing to do with your data will be thought of by someone else'.

The European Union's Lisbon Council has initiated a process of opening up access to research funded through its programmes. The [Open Access Infrastructure for Research project](#) has been tasked with making 20% of the FP7 research outputs available as open access resources, and as much as 80% of EU-funded research is planned to be made publicly available from 2014.

2. Open innovation

For Henry Chesbrough, a professor at the University of California Berkeley, who coined the term, open innovation is a way in which companies do research and development by making greater use of external ideas and technology in their own business, and in turn let others benefit from their unused ideas.

In the classic, technology-push model, the innovation process is usually pictured as a funnel turned on its side, with selected ideas picked from a science and technology base and taken down to the market. Increasingly, however, there is too much knowledge available in too many parts of the world

for companies to continue to innovate successfully on their own.

In Chesbrough's model of open innovation, new ideas are drawn from both inside and outside the organization, so the classic funnel diagram needs to be adjusted

accordingly. Ideas are also allowed to go to market through both the company's own internal processes and external-facing activities, such as licensing, spin-offs and joint ventures.

3. 'Discover' and 'jam' open innovation

Many open innovation processes in companies start from a clearly defined problem or requirement that the innovation process attempts to address.

However, Roland Harwood, co-founder of the NESTA spin-off 100% Open, emphasizes that there are in fact at least two ways in which organizations can open up their innovation processes. Roland distinguishes between so-called 'discover' and 'jam' open innovation approaches. A 'discover' programme usually starts with a 'what' question, such as 'What is the specific idea or technology we need?' In this scenario, requirements are written in a formal brief calling for a technical solution or a specific business partnership.

By contrast, a 'jam' programme normally starts with a 'who' question, such as 'Who are the potential collaborators we can work with to the greatest effect?'. In this case, there is no clearly defined problem – just an area of opportunity that will be defined in collaboration with the partners identified in this process.

4. Examples of open innovation in software

In his [keynote at TransferSummitUK 2010](#), Roland Harwood provided two examples of open innovation in software projects facilitated by [NESTA](#).

The first example was a 'discover' programme that addressed a clearly defined set of requirements put forward by the network operator Orange. Orange was interested in ideas for products and services that would generate revenue in the region of £50m over three years. Eighty-five SMEs and independent innovators submitted ideas, of which six were selected for further development. One of these ideas was 'Last Second Tickets', a software-based mobile service offering Orange customers unsold cinema and theatre tickets at a discounted price.

▶ Article continues at <http://www.oss-watch.ac.uk/resources/openinnovsoftware.xml>

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Rowan Wilson

The march of WebM

Published by Rowan Wilson on January 13, 2011

On Tuesday Google [announced](#) that it would be withdrawing support for the video standard h.264 from its Chrome browser in two months' time. Back in June 2009 we [covered](#) the contortions that Google had gone through to use the open source video codec [FFmpeg](#) in Chrome to decode embedded videos without risking the wrath of the owners of that standard, the [MPEG LA h.264](#) patent pool. Essentially Google used FFmpeg but did not acquire a licence from the patent pool for FFmpeg itself, but instead for its Chrome browser. This was a cunning move but at the time it annoyed some around the open web standards community who felt – with some justification – that Google's move was something of an 'I'm alright Jack' statement to the rest of them. Representatives of the Mozilla project who produce Firefox scalded Google on public lists, as reported in [that previous post](#).

In August 2009, a couple of months later, Google [bought the media compression company On2](#) for about £100m. This was widely interpreted as an initial move to bypass the stranglehold that h.264 had on web video and perhaps produce a genuinely open standard with all necessary patents licensed for use by all. After all, On2 was the company that had contributed its (somewhat outdated) video codec VP3 to the web standards community, a codec which had come to be the basis of open video encoding standard Theora. During the arguments over Chrome and FFmpeg, many had argued that Theora should be the basis for web video and its embedding in the new HTML 5 standard using the new `<video>` tag. At the time Google had pointed out that Theora/VP3 was just not as efficient as h.264, and that its use would mean hosts and users paying for more bandwidth for the same quality video as h.264 provided.

In [May last year](#), Google announced a new video container standard – [WebM](#) – which incorporated three related open media standards. Digital media files typically contain multiple streams of data encoding video, audio and subtitle information. To manage these multiple streams, media files are packaged in what are often called 'container' formats – essentially standards that describe how streams can be packaged together and decoded by playback hardware. Early container formats such as MPEG and AVI did not support complex options such as multiple audio and video streams, or incorporated subtitles. As it became clear that these older formats were unable to mimic the experience end users expected from their DVD players, more complex containers – such as the open standard [Matroska](#) – were developed. Matroska – which enabled multiple audio, video and subtitle tracks in a single file – became popular quickly, in part due to its ability to allow Japanese Anime video files to be exchanged over the internet in a form that satisfied both native Japanese speakers and others who required subtitles or dubbed audio. Google's WebM was a new container format based heavily on the Matroska template. Within each WebM file there is typically at least an audio stream encoded by the open [Ogg Vorbis](#) standard and a video stream encoded by the VP8 standard (a much more efficient progression of the VP3/Theora codec) which Google had acquired with On2 the previous August. In the same announcement, Google, Mozilla and Opera revealed new builds of their browsers which fully support the WebM standard.

So since last year there has been – thanks to Google – an entirely open group of video and audio standards that anyone can use in their web content and encode and decode in their software. The question remained, though, would it get used?

► [Blog continues at http://osswatch.jiscinvolve.org/wp/2011/01/13/the-march-of-webm/](http://osswatch.jiscinvolve.org/wp/2011/01/13/the-march-of-webm/)



Ross Gardler

Open Source: we are buying, but are we engaging?

Published by Ross Gardler on January 17, 2011

We recently completed our 2010 national survey of open source in the UK academic sector (the full report is currently being finalised). This post examines the extent to which suppliers to, and staff of, UK universities and colleges contribute to open source as a matter of course. This kind of engagement is important, since it realises the maximum [benefits of open source software](#).

Our 2010 survey has shown that there has been another significant increase in the number of organisations with a policy to consider open source solutions during procurement. This is due to a combination of factors, such as the government's open source action plan, our own work here at OSS Watch and the sector's success with open source Virtual Learning Environments (Moodle has once again taken a significant share from closed source Blackboard/WebCT).

Alongside this increase in open source friendly policies, we are seeing a smaller, but still significant, increase in the amount of open source in use within these institutions. However, the balance is still firmly with closed source solutions. The reasons for rejecting open source remain fairly consistent with previous years' results. The top three reasons for rejecting open source are lack of support, interoperability/migration problems and lack of staff expertise.

This is a pattern that is also visible in non-academic sectors. Put simply, people are becoming increasingly comfortable with open source as a viable way to develop software, although there is still room for improvement where suppliers are concerned. As a result, new companies are springing up to fill the gap and venture

capitalists are happy to support them as shown by the [increasing level of investment in open source related companies](#).

All this is very comforting. It means that as we move forwards, universities and colleges will be able to satisfy more of their needs using open source supplied and supported by appropriate third parties. However, in some cases, particularly for Higher Education, where IT departments can be large, a reliance on external providers may be a limiting factor when considering the benefits of open source beyond lower licence fees.

One of the key advantages of open source is that enhancements can be made to the software and then submitted upstream. A good open source company will manage this process for you, but in these circumstances the customer remains insulated from the core product in much the same way that they are with closed source software.

This is not necessarily a problem and can certainly bring the benefit of reduced costs that result from a more efficient development process. However, it often makes sense for staff to become actively engaged in the projects, particularly where the product has been modified for local use.

UK universities and colleges already innovate around teaching and research methods. Organisations like the [JISC](#) exist to manage investment of public money for such innovation. Open source provides a means for these innovations to find their way directly into the software in use and thus increase the return on investment in those solutions by making them available to all.

“Where local innovation is taking place, it makes sense to actively engage with the open source community.”

Whilst we are seeing an increase in open source friendly policies and actual use, we are not seeing a similarly strong growth in universities' policies relating to staff engagement with open source software development. Where local innovation is taking place, it makes sense to actively engage with the open source community. For example, Stuart Lee, director of Oxford University Computing Services, [told audiences](#) at the recent FutureCampus event in Kuala Lumpur: "We have to develop our own systems off the shelf for things like tutorial recording." Being able to integrate those systems

with other software in use at the institution is critical to their success; this is what Oxford is doing with its Sakai Virtual Learning Environment and it is certainly reaping the rewards.

Ensuring that local innovations are closely embedded with the upstream project [helps ensure](#) that upgrades of systems are reasonably painless and it enables others to use, maintain and develop the innovative new features. It is therefore important that when procuring open source software solutions you also plan to properly resource collaboration work.

► <http://osswatch.jiscinvolve.org/wp/2011/01/17/open-source-we-are-buying-but-are-we-engaging/>

Events



Feb
10 **FP7 ICT Call Info Day, Bristol, 10 February 2011**

Enterprise Europe Network South West and the Digital Communications Knowledge Transfer Network invite you to a free event to gain an understanding of future opportunities for European R and D funding for ICT within the upcoming Call 8. Attendees will learn how the European funding of 785.5 million euros will be allocated and the likely call contents. They will also have the chance to meet with regional and national support teams and network with potential partners and experienced FP7 participants.

► <http://www.enterpriseeuropesw.org.uk/swr/events/register.asp?eventid=560>

Feb
16-17 **DevCSI Developer Days: Dev8D, London, 16-17 February 2011**

The Developer Community Supporting Innovation project (DevCSI) is holding its annual 'Developer Days' event at the University of London Union, Malet Street, Bloomsbury in London on 16-17 February 2011. The event is free and provides opportunities for software developers to learn new skills, experiment with technology and ideas, share and network amongst their peers and even take on a number challenges.

► <http://dev8d.org/>

Mar
22-24 **UKUUG Spring 2011 Conference, Leeds, 22-24 March 2011**

UKUUG's annual Large Installation Systems Administration (LISA) conference and tutorials will be held in Leeds on 22-24 March 2011. The conference will provide the opportunity to keep abreast with new or emerging technologies, enjoy lively debate and become part of the UK Unix community. The call for papers is now open and submissions for tutorials and conference talks are being accepted.

► <http://www.ukuug.org/events/spring2011/>

Oct
26-28 **LinuxCon Europe 2011, Prague, 26-28 October 2011**

The Linux Foundation is pleased to announce the launch of LinuxCon Europe in 2011. LinuxCon Europe will bring together the best and brightest that the Linux community has to offer, including community developers, system administrators, business executives and operations experts. It will feature speakers from across Europe and around the globe, innovative and abundant programme content, and opportunities for attendees to connect with peers. For this year only, attendees will be offered the opportunity to also attend the Embedded Linux Conference Europe (ELCE) at no additional cost.

► <http://events.linuxfoundation.org/events/linuxcon-europe>

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Frequently Asked Questions

Q Can I distribute my open source application via an app store?

A This depends mainly on the licence of your application and the developer agreement that the specific app store has put in place. In general, more permissive licences like BSD and Apache are less problematic. For more information, read our [briefing note on app stores](#) and feel free to [contact us](#) if you have more questions afterwards.

Find answers to your questions at: <http://www.oss-watch.ac.uk/about/faq.xml>

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