

▶ <http://www.oss-watch.ac.uk>**IN THIS ISSUE:**

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Online newsletter available at  
▶ <http://www.oss-watch.ac.uk/newsletters/september2009.pdf>

**W**elcome to the September edition of the OSS Watch newsletter. This month our blog has been busy considering how you can contribute to an open source project and we are also pleased to be able to tell you about a forthcoming OSS Watch workshop that will look at engaging developers and encouraging them to submit changes that they make back to the project. The workshop is happening on 9th October so why not book your place today?

Elena Blanco, Content Editor, OSS Watch ▶ [info@oss-watch.ac.uk](mailto:info@oss-watch.ac.uk)

# News from OSS Watch

## Microsoft launches the CodePlex Foundation

Microsoft has launched a non-profit organisation, the CodePlex Foundation, aimed at *"enabling the exchange of code and understanding among software companies and open source communities"*. It has been formed to address the problem that *"commercial software companies [...] under-participate in open source projects"*, in the context of a general change in business practices where *"more commercial companies are willing to participate in open source projects"*. Exactly what the organisation will do is not clear; it intends to devote its first 100 days to clarifying this, and asks for interested parties to participate.

▶ <http://codeplex.org/index.aspx>

## TomTom launches OpenLR under an open source licence

TomTom, the world's leading provider of navigation solutions and digital maps, is launching their dynamic location referencing technology under the GNU Public License v2. The technology, OpenLR, is being proposed by TomTom as an open standard in an open source framework and will be discussed in detail during the ITS World Congress 2009 in Stockholm between 21-25 September.

▶ <http://www.tomtom.com/page/openLR>

## Stanford scientists create open source camera

Stanford photo scientists are developing a camera with open source firmware based on Linux. Initially designed for computation photography research use the camera provides custom on board software access to features such as focus, exposure, shutter speed, flash. It is hoped it will be available in a year from now.

▶ <http://community.zdnet.co.uk/blog/0,1000000567,100136900-2000331765b,00.htm>

## JISC Services Case Study - OSS Watch in the FE Sector

JISC, OSS Watch's funders, wrote a case study on OSS Watch considering the expertise and benefits that OSS Watch can provide to the FE sector. That case study is reproduced on the OSS Watch website.

▶ <http://www.oss-watch.ac.uk/resources/cs-osswatch.xml>

## OSS Watch twitter

We are pleased to announce that OSS Watch now has a twitter account. So if twitter is your thing you can keep up to date with our various feeds, including our recommended reading list by receiving our tweets.

▶ <http://twitter.com/osswatch>

## Updated Linux Foundation study reveals 10% increase in Linux kernel developers

After 16 months, The Linux Foundation has published an update to its April 2008 study on Linux kernel development. The new report reveals that a net of 2.7 million additional lines of code have been added to the Linux kernel in those 16 months along with a 10 percent increase in the number of developers contributing to each kernel release. This level of activity has resulted in an average of 5.45 patches being accepted per hour, an increase of 42 percent since the original study.

▶ <http://www.linuxfoundation.org/publications/whowriteslinux.pdf>

## Xerte project wins Learning Technologist award at ALT-C

The Xerte project team has won the ALT-C 09 Learning Technologist of the Year Award for their open source suite of elearning tools. Using Xerte developers and content authors are able to create interactive learning materials which also have good accessibility features.

▶ <http://techdis.ac.uk/blog/?p=135>



▶ <http://www.oss-watch.ac.uk/rss/osswatchnews.rss>

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# Open source: facing a skills shortage

This is an edited version of the full report. You can read the full report here:  
<http://www.oss-watch.ac.uk/resources/skills.xml>

Open source software has emerged as one of the most important IT movements in recent times. Evidence of this can be seen in all sectors in the UK, but a severe shortage of skills in this area could limit its future.

## 1. Open source in the public sector

In the European Union, the use of open source has, for many years, been seen as an appropriate means of providing maximum economic value. A survey conducted by Maastricht University in 2005 concluded that nearly 80% of European local governments were using it, consciously or unconsciously.

The UK government defined a policy in 2004 that aimed to deliver value for money by ensuring that procurement in the public sector considers open source alongside closed source. It also stated that software resulting from publicly funded research should be sustained through commercialisation and/or open source licensing. This policy was re-iterated in 2009, in the Open Source, Open Standards and Re-Use: Government Action Plan. Action 1 of the plan is “[to] develop clear and open guidance for ensuring that open source and proprietary products are considered equally”. The document also states that, “Where there is no significant overall cost difference between open and non-open source products, open source will be selected on the basis of its additional inherent flexibility.”

## 2. Open source in the commercial sector

The for-profit sector is adopting open source even more readily than the public sector. For example, a survey of nearly 1000 IT staff in the UK, Germany, France and North America, commissioned in 2008 by Actuate, revealed that 54 per cent of UK businesses responding to the survey felt that the benefits of open source outweighed any negative aspects. This is a significant increase over 45 per cent in 2007.

This growth seems set to continue. IT research firm Gartner recently predicted, “By 2012, 80 per cent of all commercial software will include elements of open-source technology”. The firm quickly revised this figure to 90 per cent, stating that open source technologies

*“provide significant opportunities for vendors and users to lower their total cost of ownership and increase returns on investment. ... “*

## 3. Open source in education

The adoption of open source software in the education sector has been similar to that in the public sector, and is also on the increase. A national survey of all 615 further education (FE) and higher education (HE) institutions in the UK, conducted by OSS Watch in 2006, found, for example, that only a quarter of institutions mentioned open source explicitly in their policies. This figure increased to over half when the survey was repeated in March 2008.

However, a look at the current landscape of software actually installed on servers and desktops in FE and HE reveals that most of it is still closed source. But this will change, as an increasing number of institutions plan a move to open source. For desktops, some 10% of all institutions will stop using solely closed source, and a similar number will consider using open and closed source on equal terms. For servers, around 15% of FE institutions will do something similar, while the change in HE will be smaller.

## 4. Skills shortage

We have seen that the use of open source in the UK is growing in every sector. But all is not well in this increasingly open future. In research conducted for Actuate, six in every ten respondents mentioned ‘serious problems finding the right IT skills to implement and manage open source solutions’. The OSS Watch survey found that a lack of staff expertise was the main reason for not adopting open source on the server, and the secondary reason for not adopting open source on the desktop. As more open source is adopted across all sectors, this skills shortage will become more acute, since there are currently very few educational or training organisations offering courses that focus on open source, open standards and open development.

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

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## Advice for project bids

Last month we looked at the part that OSS Watch can play in helping implement the JISC open source policy. This month we’d like to follow on from that with some advice for those involved in submitting project bids.

OSS Watch offers specialist services to projects, which help to strengthen JISC bid submissions by focusing on sustainability at the earliest possible stage. We also seek to help already funded open development projects to remain healthy with respect

to community engagement. These services allow the project team to get the most from existing open source software and develop new software, and to build a diverse community with excellent opportunities for achieving sustainability.

To find out more about the services that OSS Watch can offer both at bid-preparation stage and during the life of the project please have a look at our “Advice for project bids” document.

▶ <http://www.oss-watch.ac.uk/resources/adviceforprojectbids.xml>

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# Contributing to an open source project

Published by Steve Lee on August 12, 2009 in development, e-learning and community.

STAY UP-TO-DATE

▶ OSS Watch blog feed

▶ <http://osswatch.jiscinvolve.org/feed>

OSS Watch spends a lot of effort actively promoting the practice of open development as an effective means of achieving project sustainability. There are also important benefits

for users who are developing tools based on an open source project and today I came across a great example that illustrates how to engage with the community and reap the rewards. Mark Johnson is employed by Tony Whitmore at Taunton's college to develop their Moodle VLE. What makes his work particularly interesting in terms of open development is that where appropriate he works directly with the Moodle community. He has now had his first patch accepted into the main Moodle code and so congratulations are in order. The issue was a small accessibility problem and you can follow the process on the Moodle ticket. The main points that I want to emphasise as being important for similar community interactions are:-

- Once the problem was found Mark investigated it and when he could reproduce it and describe it he raised a ticket to alert the community of the issue.

- A discussion followed with a possible problem being suggested by the Moodle developer who picked up the ticket (Tim Hunt). This was followed by a request for either more information or further investigation.
- Mark then tried harder to track down the problem, keeping Tim updated, until he eventually located the source. He then created a solution. Note, Mark was not an expert on the code in question but developed an improved understanding through digging deeper. In general the community will provide any help you need to do this.
- Mark then submitted a patch allowing Tim to see his solution and review it.
- Tim graciously confirmed the error and accepted Mark's patch into the Moodle code. It will appear in Moodle 2.0.

An alternative scenario is that Mark simply made a local fix to their Moodle code. Doing that would miss out on the opportunity to engage with and learn from the development community. Worse that fix would have to be reapplied each time a new Moodle release is installed, something that could involve costly merging of changes. However the actual result is that Mark now has better understanding of the code, Moodle has bug fix and

“Mark also has a good standing with the Moodle community, something of benefit to him personally as well as his employers.”

both parties have a positive interaction to look back on and that will hopefully encourage further work together. Mark also has a good standing with the Moodle community, something of benefit to him personally as well as his employers. This small bug and subsequent resolution neatly illustrates how to engage as a user with the community and some of the key benefits of practising open development. No bug is too small to bring to the attention of the community. Perhaps you have an outstanding bug you could submit right now? ■

▶ <http://osswatch.jiscinvolve.org/2009/08/12/contributing-to-an-open-source-project/>



# OSS Watch workshop - Engaging developers with open source projects

Published by Gabriel Hanganu on August 28, 2009 in event, development and community.

Keeping a low barrier to entry for external contributors is particularly important in an open source project. New developers might emerge from the project's user

base, but may also come from elsewhere, drawn in by the technical challenge, kudos, or opportunity to improve or publicize their programming skills. Often the amount of disruption generated by these developers contributing 'from the wild' is feared by projects with little practice in open source development.

Karl Fogel writes in Producing Open Source Software:

*"Opening up means arranging the code to be comprehensible to complete strangers, setting up a development web site and email lists, and often writing documentation for the first time. All this is a lot of work. And of course, if any interested developers do show up, there is the added burden of answering their questions for a while before seeing any benefit from their presence".*

Moreover, once new contributors have been attracted to the project, they have to be given as many reasons to stay on as possible. Ensuring that their contribution is valued and rewarded is important to their successful integration in the community, and crucial to maximising the project's

sustainability. As mentioned in an OSS Watch community building document:

*"Developers will only remain if their leader can make the project a place they want to keep coming back to. This means rewarding hard work by giving credit where it is due and, for those who want it, responsibility for more significant pieces of work".*

David Neary pointed in an earlier Gnome blog post at a number of interesting governance success stories from online communities including Blender, Inkscape, Drizzle, Subversion and Maemo. A recurring point in these stories was the issue of making the community grow by smoothing the entry path to new contributors.

In one of these governance stories an external contributor submits a software patch to Inkscape, an open source SVG graphics editor. The committers responsible with that feature check the code and license and accept the patch. Bryce Harrington, the Inkscape developer who tells the story, goes on: *"Following our policy to 'Patch first, ask questions later', we integrated the new feature as soon as practical, without wasting time arguing about it on a mailing list. We figure that the best way to evaluate an idea is to code it up and see how it works in practice. A working feature now is better than a perfect implementation that still isn't done".*

And further down: *"... maintaining a low barrier to entry for new developers is vital; we don't want anyone to give up*

*on contributing out of fear their contributions won't be accepted".*

A noteworthy document in this respect is David Neary's check list of community barriers to entry. Online communities, David writes, fail to reach a critical mass because potential new members trying to engage with the project encounter some form of difficulty that takes too much effort from their part to overcome. One of the main tasks of the community manager is to identify and iron out these hurdles as much and as early as possible.

A new contributor is likely to encounter three types of obstacles, David thinks: 1. Technical (related to product architecture, programming language, tools, documentation, website); 2. Social (related to project infrastructure, governance model, behavioural norms in the community, relationship between employees and community, transparency of community processes, corporate hierarchy, product plans, management of confidentiality); and 3. Legal (related to licensing issues trademarks, patents).

I personally am of the opinion that it is the social barriers, rather than the technical ones, as David believes, that are the most significant and the most critical to resolve. Nevertheless, his check list largely resonates with OSS Watch's view about the importance of encouraging external participation for the sustainability of the project, as mentioned in this governance model document:

▶ Continued on back page

*"Since it is not possible for a project to be all things to all people, the goal of a sustainable project is to be as complete a solution as it can be for its core stakeholders, whilst still being of interest to other interested parties. The project must be ready to accept input from unexpected quarters, and must be able, wherever possible, to accommodate their needs. Doing so significantly increases the pool of resources the project can draw upon in its quest for sustainability".*

To further address these crucial aspects of community building OSS Watch is organizing a workshop on 'Engaging developers with open source projects' on 9 October in Oxford, where open source developers who have been directly involved in HE academic projects will talk about their experiences. We hope to see some of you there. ■

▶ <http://osswatch.jiscinvolve.org/2009/08/28/oss-watch-workshop-engaging-developers-with-open-source-projects/>

## Events



- Sept 29** **Open Source Search event, 29 September 2009. Cambridge**  
Why not join Open Source Search at the Friends Meeting House in Cambridge for a chance to hear informal presentations from users and developers of open source search systems, followed by ad-hoc discussion and hacking. It is open to any and all members of the open source search communities - whether developers or users. Tickets for the day are free but advance registration is essential. ▶ <http://searchevent.org/>
- Oct 1-2** **IDABC event: The Power of Communities, Paris. 1-2 October 2009**  
Public administrations using open source software need to learn how to work with and to participate in the communities that develop and maintain such software. The IDABC Open Source Event taking place 1-2 October 2009 in Paris will focus on European Public Administrations investing in Open Source Communities: how and why? It will highlight key aspects of FLOSS sustainability and present seven practical cases, closing with a panel discussion. The event is open and free for registered visitors. ▶ <http://www.osor.eu/events/open-world-forum-2009-1>
- Oct 9** **OSS Watch workshop - Engaging Developers with Open Source Projects, Oxford. 9 October 2009**  
Why should software developers who create local customisations of open source software take the further step of submitting their changes back to the main project? OSS Watch is holding a workshop in Oxford on 9 October 2009 to explain why and how developers engaged in customisations of open source software should make these contributions. Some examples of projects that benefited from this type of engagement of their developers with open source software will be presented by people directly involved in these processes. The event is free, and open to all. ▶ <http://www.oss-watch.ac.uk/events/2009-10-09/programme.xml>
- Oct 15** **Open Source Schools seminar - innovation for local authority and national agency staff - Bletchley Park. 15 October 2009**  
To be held at Bletchley Park on 15 October 2009, this Open Source Schools seminar is about open source as a catalyst for innovation in education and presentations will showcase how open source software and principles can empower local authorities to go beyond existing provision. Places are free for those working in a local authority or national educational organisation. ▶ <http://opensource.schools.org.uk/innovationseminar>

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## Frequently Asked Questions

**Q** Would you speak at our event?

**A** Almost certainly yes. We are always keen to talk to people about the issues surrounding open source software, and will do our best to schedule in any speaking requests. We speak mainly at UK events, but regularly travel across the EU and have attended events in the US in the past.

**Q** Can you recommend some software?

**A** We do not recommend software but we will help you evaluate software. The reason for this is that it is not practical for us to have a full and in-depth understanding of all the open source tools available, neither can we invest the time required to fully understand your specific needs. What we can do is help you evaluate the viability of a given open source solution in your specific circumstances. That is we will help you understand what support options are available, we can help evaluate the sustainability of the project and we can help plan your engagement with the project and support providers.

For more answers to your questions visit: <http://www.oss-watch.ac.uk/about/faq.xml>

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