# Issue 5/2009 December

# Supporting open source in education and research

http://www.oss-watch.ac.uk

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Online newsletter available at http://www.oss-watch.ac.uk/ newsletters/december2009.pdf

lere we are at the end of the year and it seems like a good opportunity to reflect on what has happened during the past twelve months. Perhaps the key message from us this year has been that community is the lynchpin of sustainability. But building a community doesn't happen easily or by accident - it takes work. So we are delighted to see the fruits of our community building labours starting to appear as Steve Lee tells us about an example of community interaction, Ross Gardler tells us about his new position in The Apache Software Foundation and Peter Cudd from the Maavis project tells us about their efforts to develop an active open development community. We look forward to building on this success in 2010 but until then we'd like to wish you a Happy Christmas!

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



### New website for grandparents uses open source stack

According to the techblog of the forthcoming begrand.net website and socialware for grandparents, a LAMP stack and Drupal are being used for development, along with subversion version control. BeGrand.net is part of the PKS project run through the Department for children, schools and families (DCFS).

http://tech.begrand.net/

### Whitehouse.gov plans to contribute back to open source community

The Obama administration's new media team, which recently switched the Whitehouse.gov site to the open source Drupal platform, is now working with legal counsel to determine how to contribute that code back to the community. 'I can't promise a time line, [as] it's somewhat unprecedented for our organization to take that on, but we feel strongly about it,' said White House new media deputy director Dave Cole. The team also plans to engage open source developers in a discussion of how they can work better with government agencies.

▶ http://www.informationweek.com/news/government/info-management/ showArticle.jhtml?articleID=221900361

### Free Technology Academy opens its doors to students

The Free Technology Academy (FTA), which consists of an advanced virtual campus with course modules that can be followed entirely online, has just opened registration for its first two courses. 'The concepts of Free Software and Open Standards' and 'The GNU/Linux Operating System' will start in January 2010.

▶ http://www.ftacademy.org/announce/3

### Microsoft to open source the .NET Micro Framework



STAY UP-TO-DATE

Microsoft has announced the release of version 4.0 of the .NET Micro Framework, and also that it is open sourcing the product and making it available under the Apache 2.0 licence, which is already being used by the community within the embedded space.

http://bit.ly/4gVJ31r

### Firefox celebrates anniversary with 25% browser market share

Five years after its launch, Mozilla's Firefox holds the no. 2 spot in browser market share. It has more than 330 million users around the world, accounting for 25 per cent of the market. Microsoft's Internet Explorer, currently the market leader, holds 63.26 per cent, while Safari, Chrome and Opera hold the next three spots, with 4.39, 3.89 and 2.32 per cent, respectively, according to Net Applications.

http://marketshare.hitslink.com/browser-market-share.aspx?qprid=0&qpm r = 100 & qpdt = 1 & qpct = 3 & qptime frame = W & qpsp = 566 & sample = 9

### OSS Watch's video channel on YouTube is now live!

Four short fragments from video interviews with open source leaders recorded at ApacheCon 2009 have been uploaded to the OSS Watch video channel on YouTube. with the full interviews to follow soon. The channel will feature video interviews with key open source software stakeholders and recorded events organised or attended by the OSS Watch team.

▶ http://www.youtube.com/user/osswatch

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## Sustainable open source

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

Sustainable open source is an open source project that supports itself. That is the project is able to cover the costs it incurs, which can be significant even in a volunteer driven project. This article examines some of the models by which an open source project can become sustainable.

Reaching sustainability

To be sustainable a project must meet its own costs. Most projects have their initial costs covered by an injection of funding from a parent body or sponsor. However, what happens when this money runs out?

It is unlikely that the original funding stream will remain a viable option indefinitely. At some point either income must be generated or cost savings must be realised. A sustainable open source project is one in which this income or cost saving outstrips the cost of ongoing support and development.

The unfortunate reality of software development is that the vast majority of projects do not become sustainable. This is true of both open source and closed source development projects. In fact it is true of any activity that requires financial support to survive. That is, most new ideas fail to reach sustainability, whilst only a small handful succeed.

It is therefore important to ask ourselves why projects fail to reach sustainability. In some cases this is because the project fails to achieve what it set out to achieve. In these cases one would expect the project to be allowed to disappear. However, in a distressingly large number of cases the project does reach its initial objectives, yet still fails. This is especially true in funded development work

in the HE and FE sector. This kind of failure is usually caused by a failure to plan for success. That is, there is no early plan as to how the project will sustain itself when the initial seed funding runs dry, and consequently no resources are assigned to reaching sustainability.

The conclusion is therefore obvious: to reach sustainability the project must make implementing a sustainability plan one of its initial objectives. It follows then that the sustainability plan should be developed at a very early stage of the project's life. However, in order to draw up this plan it is necessary to understand what options are available to you.

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It is not possible to enumerate all sustainability options in this space, there are as many sustainability models as there are project ideas. However, the following sections outline some common sustainability models for open source software such as:

- Product development
- Non-profit open development
- Consortia
- · Contributions to realize cost reduction
- Education and research funding
- Philanthropists and other funding organisations
- Volunteers

It should be recognised that very few projects fall squarely into one of these models. Most projects are sustainable because they draw on a different combination of factors from each model; similarly there is considerable overlap between models.

▶ Read more about each of these models at http://www.oss-watch.ac.uk/ resources/sustainableopensource.xml



▶ OSS Watch blog

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## Developing communities

Published by Ross Gardler on November 22, 2009

hen I joined OSS Watch a couple of years ago my role was to enhance the community development work we undertake. I, and the rest

of the OSS Watch team, have worked hard to understand how to build viable open source communities in the academic sector. Personally I can attest to having learned a great deal, yet it still surprised me when my colleague, Gabriel, reported on our recent trip to ApacheCon by saying that he observed me bringing community development lessons from my OSS Watch

activity to the experts in the ASF (Apache Software Foundation).

I guess this is one reason why the ASF board recently approved a resolution to create a new Community Development project and appointing me as Vice President of Community Development. I look forward to this new activity in the ASF allowing me to further cross-fertilise between the ASF and the UK HE/FE sector, whilst the launching of a new EC project focussing on a wider engagement of computer scientists in open source projects will allow us to reach out to other software foundations.

▶ http://osswatch.jiscinvolve.org/2009/11/22/developing-communities/

▶ OSS Watch online

http://www.oss-watch.ac.uk

▶ OSS Watch blog http://osswatch.jiscinvolve.org ► Contact OSS Watch info@oss-watch.ac.uk ▶ OSS Watch twitter http://twitter.com/osswatch



### Another example of community interaction

STAY UP-TO-DATE

OSS Watch blog feed

http://osswatch.jiscinvolve.org/feed

Published by stevelee on November 27, 2009

I'm beginning to see the value of small examples of community interaction as illustrations of good open development practice. Mark Johnson started this off with his tweet about his first contribution to Moodle being accepted, and Mark's subsequent presentation at the recent OSS Watch Engaging developers with open source projects workshop. So here is the second such interaction.

This time it's between Paul Walk, Technical Manager at <u>UKOLN</u>, who attempted to download and build Simal, a set of tools for building project catalogues from RDF/XML files which is currently led by OSS Watch, and the Simal development Team. The active Simal development team currently consists of Ross, who instigated the project, and Sander, OSS Watch's newest member, and who spends 50% of his time developing Simal.

Paul hit a wall and so <u>raised a ticket</u> in the project's <u>Google Code</u> 'forge'. The issue was discussed, explored and resolved, as you can follow on the ticket. There's no need to understand all the technical details, just look at the interactions and activities. I'm going to pull out the following points.

- Paul started by creating a ticket. Sometimes on list discussion precedes a
  ticket being created. This depends on the preferences and confidence or the
  person raising the issue. It may also depend on the community preferred
  style or the type of issue being raised.
- All subsequent discussion was on the ticket. Again this depends on the
  preferred style of the project or the particular issue. Some projects discuss
  on the list with outcomes being tracked on the ticket. The advantage of
  having all discussion on the ticket is there is one place of refer to.
- Several members of the team got involved. Here Ross, the most familiar member, gave some informed opinion but left space for Sander to dig into the issue.
- As a bonus, Ross spotted another issue in the information Paul submitted, and quickly fixed it. Rather than creating another ticket to track the new issue, which would have been appropriate for an issue that required discussion, the

revision created when the fix was checked into version control is referenced from this ticket. The checkin comment also references back to this ticket, thus there is an audit trail, both from the ticket system and from the version control system.

- Sander acknowledged the issue on the ticket and explained he could reproduce it. The ticket life cycle is also used to do this, for example by setting the ticket status to 'acknowledged', usually along with an assignment to a particular developer.
- When he had found the problem, Sander created a solution, explained it in the ticket and supplied a patch. The patch is attached to the ticket. The reason Sander created a patch is that he is not yet a committer so his contributions are approved and checked in to version control by someone else. Committership is an earned right and recently Sander has been proposed as a committer, using the process dictated by the project's governance model.
- Ross then asked Paul to verify the proposed solution, which he did. Note
  that this did not require Paul to apply the patch himself or use a special test
  build, as often happens.
- Finally Ross committed the patch, after making a small adjusted and mentioning it on the ticket. This is a simple form of peer review, a vital part of open development. Review allows experienced members to look for problems and for other members to learn.
- Note that the revision number that contains the fix is not referenced from the ticket. That would normally be done to give an audit trail. It was actually checked in on r1743 as you can seen in the r1743 commit comment.
- This fix will eventually find it's way into a release, as defined by the project's release process.

So there you have it, a complete community interaction from problem statement to successful resolution. This time it is a little more complex than Mark Jonson's experience, which I <u>previously de-constructed</u>.

 $\blacktriangleright \ \ \text{http://www.osswatch.jiscinvolve.org/2009/11/27/another-example-of-community-interaction}$ 

### **Guest Post**

# Peter Cudd on the freedoms discovered through open development Published on November 20, 2009

This post is by Peter Cudd BSc PhD, Senior Research Associate and project lead of Maavis at the School of Health and Related Research, University of Sheffield.

Our project, Managed Access to Audio, Visual and Information Services (Maavis), is also being guided in its open development journey by OSS Watch. Open development has been a new experience for me and my colleagues, OSS watch's input has been invaluable in providing insights and giving us a concerted plan to work towards having an active open development community. Our project is at an earlier phase but there have been some real differences to the traditional closed research and development we usually do.

First and foremost is being able to talk openly with anyone about the project and

OSS watch's input has been invaluable in providing insights and giving us a concerted plan to work towards having an active open development community.

what we are doing — this greatly facilitates engagement with new contacts without significant increased workload. This has lead to new partnerships and joint working. For example we have successfully obtained some Knowledge Transfer funding to help create a new version of Maavis and foster the open

development community. Starting from the health and social care designed Maavis the goal is to have one suitable for community based Adult Education. In addition the Barnsley Adult Education Services will evolve their own open source development capability.

Another significant difference is that the impact of competing similar ideas and technology is less than would be the case for a closed approach to research and development, the open development retains more 'nett' validity in pursuing further research and development.

Although we have yet to post a Maavis web page – next on the agenda – we are already on the open development road and feel we are making good progress.

Thanks OSS Watch.

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► OSS Watch twitter http://twitter.com/osswatch

## **Events**



Jan

7

## BCS event - Public Funds in the UK: Open Source for Document and Content Management? London, 7 January 2010

The British Computer Society's Open Source Specialist Group (OSSG) will be holding a one day event to consider "Public Funds in the UK: Open Source for Document and Content Management?" on Thursday 7 January 2010 at the BCS Central London Offices, First Floor, The Davidson Building, 5 Southampton Street, London WC2E 7HA. This event aims to examine the challenges of web and document management in the public sector, and the part that open source can play. Mark Elkins is interested in hearing from people who would be interested in speaking at this event as well as those interested in attending.

http://www.oss-watch.ac.uk/events/2009-12-07\_business/programme.xml

Feb

#### JISC Developer Days, London, 24-27 February 2010

Dev8D is funded by JISC as part of the Developer Community Supporting Innovation project (DevCSI for short). Dev8D is 4 days of 100% pure software developer heaven with elements of an unconference within a conference. It will take place at the University of London Union, Malet Street, Bloomsbury, London, WC1E 7HY Wed 24 - Sat 27 February 2010.

http://www.dev8d.org/

Mar 23-25

### UKUUG Spring 2010 Conference, Manchester, 23-25 March 2010

UKUUG's annual Large Installation Systems Administration (LISA) conference and tutorials will be held in Manchester on 23-25 March 2010 at the Manchester Conference Centre. The call for papers is now open and submissions are invited for tutorials and conference talks.

http://www.ukuug.org/events/spring2010/

Apr 13-14

### MoodleMoot UK, London, 13-14 April 2010

The University of London will be hosting the next MoodleMoot UK to take place 13-14 April 2009. Tickets will be released in the New Year but you can register your interest in advance to make sure that you are the first to know when the tickets become available.

▶ http://moodlemoot.org/

## **Frequently Asked Questions**



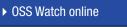
### What is open development?



Open development is an emerging term used to describe the community led development model found within many successful free and open source software projects.

This methodology contrasts with many of the principles of software development normally taught in academia. The model focusses on fast iterations of development and distributed, self managing teams. Contribution to the project is encouraged from all interested parties while a clear governance model is defined to ensure the project does not descend into chaos.

Open source software, strictly speaking, may or may not be developed using an open development methodology. The choice of this or any other development methodology is dependent upon a project's chosen route to sustainability.



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- Contact OSS Watch
- OSS Watch twitter

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#### Which open source licence should we use?



Many projects don't start a new software product, but instead add to or improve an existing software product, in such cases the most sensible licensing choice is probably to use the same licence, indeed in some cases you have no choice.

Many projects are part of (or plan to be a part of) a larger community of projects, such as the Apache Software Foundation, Free Software Foundation, Debian or Ubuntu. Many of these limit the licensing choice available. Get to know the community you wish to integrate your project into and understand how your licence choice will affect your engagement with that community.

Some projects may have commercial partners who wish to commercially exploit the software outputs of the project. If this is the case a licence which allows the chosen commercial exploitation model should be chosen since most licences have a direct impact on the suitability of different exploitation routes.

If there is no clear choice for your project licences, you may choose to license your code under multiple licences, a practice called dual licensing. Projects such as the Mozilla Project use dual licensing to resolve licensing tensions.

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

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