

# Engaging with open source

Randy Metcalfe

OSS Watch

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These are the points to take away from this talk:

- *open source* is more than a copyright licensing paradigm
- good policy helps to embed best practice
- open source is **not** a panacea
- institutional engagement with open source can contribute to a successful ICT strategy

# In this talk

Engaging with  
open source

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- OSS Watch
- Open source is...
- The policy framework in the UK
- Practical engagement issues

# OSS Watch: the UK open source software advisory service

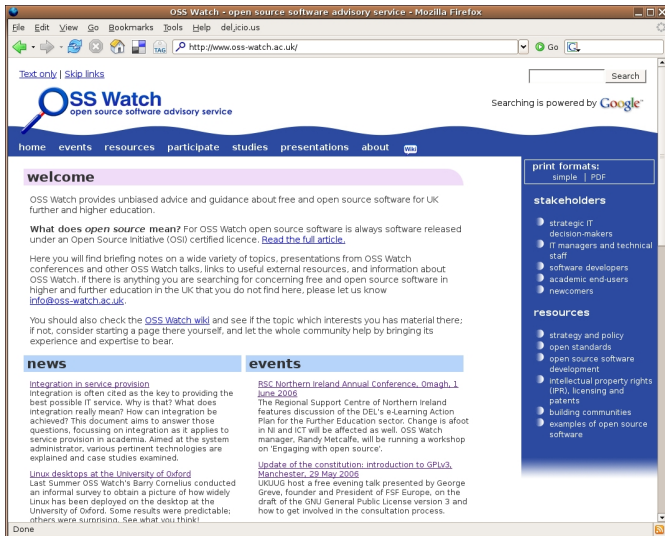
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**OSS Watch** provides unbiased advice and guidance on free and open source software for UK higher and further education.

- strategic IT decision-makers
- IT managers and technical staff
- software developers
- academic end-users

**OSS Watch** is funded by the Joint Information Systems Committee (JISC) and based within the Research Technologies Service at the University of Oxford.



**OSS Watch**  
open source software advisory service

home events resources participate studies presentations about

## welcome

OSS Watch provides unbiased advice and guidance about free and open source software for UK further and higher education.

**What does open source mean?** For OSS Watch open source software is always software released under an Open Source Initiative (OSI) certified licence. [Read the full article.](#)

Here you will find briefing notes on a wide variety of topics, presentations from OSS Watch conferences and other OSS Watch talks, links to useful external resources, and information about OSS Watch. If there is anything you are searching for concerning free and open source software in higher and further education in the UK that you do not find here, please let us know [info@oss-watch.ac.uk](mailto:info@oss-watch.ac.uk).

You should also check the [OSS Watch wiki](#) and see if the topic which interests you has material there: if not, consider starting a page there yourself, and let the whole community help by bringing its experience and expertise to bear.

## news

**Integration in service provision**  
Integration is often cited as the key to providing the best possible IT service. Why is that? What does integration really mean? How can integration be achieved? This document aims to answer those questions, focussing on integration as it applies to service provision in academia. Aimed at the system administrator, various pertinent technologies are explained and case studies examined.

**Linux desktops at the University of Oxford**  
Last Summer OSS Watch's Barry Cornelius conducted an informal survey to obtain a picture of how widely Linux has been deployed on the desktop at the University of Oxford. Some results were predictable; others were surprising. See what you think!

## events

**RSC Northern Ireland Annual Conference, Omagh, 1 June 2006**  
The Regional Support Centre of Northern Ireland features discussion of the DEL's e-Learning Action Plan for the Further Education sector. Change is afoot in NI and ICT will be affected as well. OSS Watch manager, Randy Metcalfe, will be running a workshop on 'Engaging with open source'.

**Update of the constitution: introduction to GPLv3, Manchester, 29 May 2006**  
UKUUG host a free evening talk presented by George Greve, founder and President of FSF Europe, on the draft of the GNU General Public License version 3 and how to get involved in the consultation process.

print formats:  
simple | PDF

## stakeholders

- strategic IT decision-makers
- IT managers and technical staff
- software developers
- academic end-users
- newcomers

## resources

- strategy and policy
- open standards
- open source software development
- intellectual property rights (IPR), licensing and patents
- building communities
- examples of open source software

# Promoting awareness and understanding

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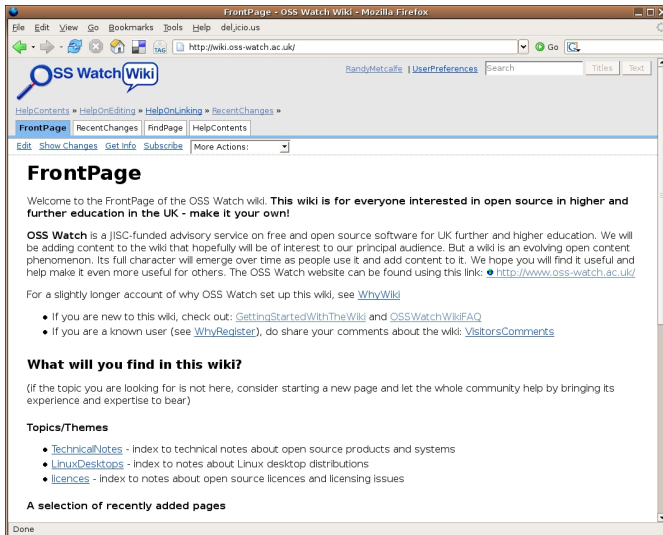
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OSS Watch is *not* an advocacy group. There are many other groups across the world who fulfil the advocacy function, e.g.:

- Free Software Foundation
- Open Forum Europe
- SchoolForgeUK
- and many more

OSS Watch's role is to promote awareness and understanding of the legal, social, technical and economic issues that arise when educational institutions engage with free and open source software.

- Website <http://www.oss-watch.ac.uk/>
- Wiki <http://wiki.oss-watch.ac.uk/>
- Briefing notes and guidance materials
- Conferences and workshops
- Consultation
- Research
  - national survey on open source software use in HE and FE
  - JISC study on models for sustainability in open source projects



FrontPage - OSS Watch Wiki - Mozilla Firefox

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## FrontPage

Welcome to the FrontPage of the OSS Watch wiki. **This wiki is for everyone interested in open source in higher and further education in the UK - make it your own!**

**OSS Watch** is a JISC-funded advisory service on free and open source software for UK further and higher education. We will be adding content to the wiki that hopefully will be of interest to our principal audience. But a wiki is an evolving open content phenomenon. Its full character will emerge over time as people use it and add content to it. We hope you will find it useful and help make it even more useful for others. The OSS Watch website can be found using this link: <http://www.oss-watch.ac.uk/>

For a slightly longer account of why OSS Watch set up this wiki, see [WhyWiki](#)

- If you are new to this wiki, check out: [GettingStartedWithTheWiki](#) and [OSSWatchWikiFAQ](#)
- If you are a known user (see [WhyRegister](#)), do share your comments about the wiki: [VisitorsComments](#)

### What will you find in this wiki?

(If the topic you are looking for is not here, consider starting a new page and let the whole community help by bringing its experience and expertise to bear)

#### Topics/Themes

- [TechnicalNotes](#) - Index to technical notes about open source products and systems
- [LinuxDesktops](#) - index to notes about Linux desktop distributions
- [licences](#) - index to notes about open source licences and licensing issues

**A selection of recently added pages**

Done



*Open source* is not a self-certification scheme.

Either your software is released under an Open Source Initiative (OSI) certified licence or it is **not** open source software.

There are, at present, 58 OSI certified licences.

The first question you should ask of any software claiming to be *open source* is, what licence is this software released under?

All certified licences meet the 10 criteria of the Open Source Definition <http://www.opensource.org/docs/definition.php>

# Why OSI?

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The OSI is **not** a legislative body. Its authority resides entirely in the fact that the open source community

- recognizes it as the maintainer of the Open Source Definition (OSD)
- is willing to participate in the OSI certification process
- has not set up a viable alternative

# OSD criteria

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- free redistribution
- source code
- derived works
- integrity of the author's source code
- no discrimination against persons or groups
- no discrimination against fields of endeavour
- distribution of licence
- licence must not be specific to a product
- licence must not restrict other software
- licence must be technology-neutral

# Open source is about freedom

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- The freedom to run the program, for any purpose
- The freedom to study how the program works, and adapt it to your needs
- The freedom to redistribute copies so you can help your neighbour
- The freedom to improve the program, and release your improvements to the public, so that the whole community benefits

## The Free Software Definition

<http://www.gnu.org/philosophy/free-sw.html>

# Free vs Free

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In many languages we distinguish between two very different senses of *free*.

In French, we have *libre* and *gratuit*.

In English, we sometimes mark this distinction by pointing out the difference between *free speech* and *free beer*.

Free and open source software is **not** about free beer!

# Open source is a development methodology

Key features of open source development may include:

- Programmer commitment, because the programmer is also the user
- Rapid change, because programmers want to see results
- Unconstrained specifications, because there is no external client
- Collective maintainance of the code
- Response to change, dictated by (perhaps unexpected) users

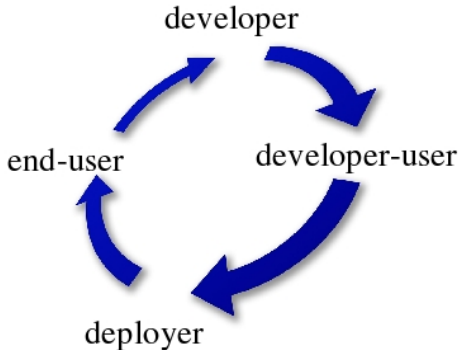
Eric Raymond famously characterised this apparent new development paradigm in his monograph *The Cathedral and the Bazaar*.

# Open source is about community

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Those who *merely* deploy open source software are also part of the open source community.



It's the community, not the code, that's important.

# Open source is a business model

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Any business whose business model depends upon the use or development of open source software is an open source business.

This leaves plenty of room for many different types of businesses:

- consultation
- business process analysis
- implementation support
- bespoke module development
- ongoing support contractor
- training
- hosting
- and more!



# Policy framework in the UK

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- Government Open Source Software Trials: final report  
[http://www.cabinetoffice.gov.uk/e-government/policy\\_guidance/index.asp](http://www.cabinetoffice.gov.uk/e-government/policy_guidance/index.asp)
- Open Source Software: Use within UK Government  
<http://www.govtalk.gov.uk/policydocs/>
- Becta report - Open Source Software In Schools  
[http://www.becta.org.uk/corporate/press\\_out.cfm?id=4681](http://www.becta.org.uk/corporate/press_out.cfm?id=4681)
- BBC use of open source  
<http://www.bbc.co.uk/opensource/>
- OSS Watch <http://www.oss-watch.ac.uk/>

Office of Government Commerce software trials: Sept 2003  
- October 2004. Key conclusions:

- Open Source software is a viable and credible alternative to proprietary software for infrastructure implementations, and for meeting the requirements of the majority of desktop users; no significant obstacles were noted for the adoption of Open Source in infrastructure developments
- Adoption of Open Source software can generate significant savings in hardware and software costs for infrastructure implementation, and reduce the licensing costs and hardware refresh requirements for desktop implementation

# UK Government open source policy(1)

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The second and current version of the UK government policy was issued on 28 October 2004:

- UK Government will consider OSS solutions alongside proprietary ones in IT procurements. Contracts will be awarded on a value for money basis.
- UK Government will only use products for interoperability that support open standards and specifications in all future IT developments.
- UK Government will seek to avoid lock-in to proprietary IT products and services.

# UK Government open source policy(2)

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- UK Government will consider obtaining full rights to bespoke software code or customisations of COTS(Commercial Off The Shelf) software it procures wherever this achieves best value for money.
- Publicly funded Research and Development projects which aim to produce software outputs shall specify a proposed software exploitation route at the start of the project. At the completion of the project, the software shall be exploited either commercially or within an academic community or as OSS.

Becta study conducted in 2004-5, published immediately after the May election on 13 May 2005:

- Our study indicates that OSS can be implemented successfully as a networking solution within the technical infrastructure and with obvious cost benefits. It is important to adopt a strategic approach to financial planning in which any savings are then allocated to best meet the wider educational aims of the school.
- The use of office-based OSS such as StarOffice and OpenOffice offers a cost-effective alternative to proprietary office software.

# BBC use and development of open source

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The screenshot shows the BBC OpenSource website in a Mozilla Firefox browser window. The browser's address bar shows the URL <http://www.bbc.co.uk/opensource/>. The website has a navigation bar with links for Home, TV, Radio, Talk, Where I Live, and A-Z Index, along with a search box. The main content area is titled "bbc.co.uk/opensource" and features a "BBC open source" section. This section explains that the site provides information about and links to BBC open source projects, which are developed by the BBC and released as open source. It also mentions that the site doesn't cover all open source projects to which the BBC has contributed, but only those that the BBC has initiated and managed itself. A "Recent Projects" section lists various projects, including AFFEditPack, Flash Tools, ID3v2 Chapter Tool, BAP tools, CPAN modules, Apache Modules, Dirac, Media Lounge, Ty-Anytime Java API, Kamelia, Media Dispatch, MXF File Test Engine, and Video Shot Change Detector. There is also an RSS feed link and a disclaimer stating that the BBC is not responsible for the content of external websites. The footer contains links for About the BBC, Help, Terms of Use, and Privacy & Cookies Policy.

BBC - OpenSource - Mozilla Firefox

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## bbc.co.uk/opensource

### BBC open source

This site provides information about and links to BBC [open source](#) projects. It lists projects developed by the BBC where the source code has been released as open source. The site doesn't cover the many open source projects to which the BBC has contributed, but only those that the BBC has initiated and managed itself.

For the BBC, open source software development is an extension of our Public Service remit. Releasing open source software helps our audience get additional value from the work they've funded, and also get tools for free that they couldn't get any other way. It also allows people outside the BBC to extend projects in such a way that may in future be used in the BBC.

### Recent Projects

- [AFFEditPack](#)
- [Flash Tools](#)
- [ID3v2 Chapter Tool](#)
- [BAP tools](#)
- [CPAN modules](#)
- [Apache Modules](#)
- [Dirac](#)
- [Media Lounge](#)
- [Ty-Anytime Java API](#)
- [Kamelia](#)
- [Media Dispatch](#)
- [MXF File Test Engine](#)
- [Video Shot Change Detector](#)

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Done

The *JISC Policy on Open Source Software for JISC Projects and Services* was initially drafted by Sebastian Rahtz and Stuart Yeates of OSS Watch. It is based on

- UK government open source policy
- well-established best-practice in software engineering and management of intellectual property rights (IPR)
- current IT best-practice within JISC and higher and further education more broadly

It was confirmed by the principal JISC committee in February 2005, but not published on the JISC website until September 2005.

[http://www.jisc.ac.uk/index.cfm?name=about\\_policy](http://www.jisc.ac.uk/index.cfm?name=about_policy)

# JISC open source policy(1)

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- Advice and guidance to the communities JISC serves must be neutral and unbiased, and must not discriminate between open source and closed source software products.
- Calls for funding, the bidding process, the award of funding, the administration of awarded funding and the evaluation of funded projects and services must not discriminate between open source and closed source software, unless the purpose of the projects or services specifically requires it.
- Where open source and closed source software are evaluated against one another, value for money over the expected lifetime of the system must be compared.



## JISC open source policy(2)

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- Projects must maintain an IPR register, listing all contributors to their software and who owns the copyright on contributions.
- The ownership of code which is to be developed in joint projects must be established before work begins.
- Copyright of software, documentation, design materials, user interface and source code must be released under an OSI-approved open source licence, unless the bid explicitly argues why this should not be the case and proposes an alternative licence.

# JISC open source policy(3)

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- Projects must state in their bid whether they foresee the project continuing beyond the timespan of funding, and if so whom they see participating in the project.
- Projects should engage with end users and other parties to encourage and build self- sustaining communities.
- Projects should accept bug reports, patches, translations and feedback from contributors outside the project.

**All** institutions in the UK will engage with open source software to a greater or lesser extent in the next two years.

In October 2003, the open source virtual learning environment (VLE) Moodle did not even register on OSS Watch's initial national scoping study. By March of 2006

- **56% of further education colleges** reported they are using Moodle.

It seems certain that market forces alone provide a sufficient explanation for this transformation.

# Considering open source alternatives - policy and procurement

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policy



reality



# Evaluating open source solutions

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Some tools are readily available:

Business Readiness Rating <http://www.openbrr.org/>

Open Source Maturity model

<http://www.navicasoft.com/pages/osmm.htm>

Top Tips for Selecting Open Source Software

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

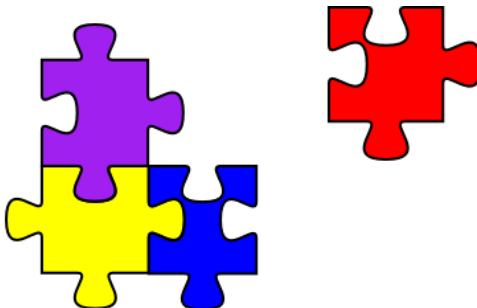
Strathclyde study: investing in software and services

[http://www.insight.strath.ac.uk/projects/sw\\_service](http://www.insight.strath.ac.uk/projects/sw_service)

# Institutional IPR - participation and employment practices

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joining the community

## Learning Activity Management System

- began as proprietary software
- full code acquired by MacQuarie University
- re-released as open source software under GPL
- Dual licence and support/consultation exploitation route
  - LAMS Foundation <http://www.lamsfoundation.org/>
  - LAMS International <http://www.lamsinternational.com/>

Unclear yet whether LAMS is a success.

These are the points to take away from this talk:

- *open source* is more than a copyright licensing paradigm
- good policy helps to embed best practice
- open source is **not** a panacea
- institutional engagement with open source can contribute to a successful ICT strategy



# Further Information

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For more information on open source software development and deployment, visit <http://www.oss-watch.ac.uk/> or write to [info@oss-watch.ac.uk](mailto:info@oss-watch.ac.uk)