

The State of Open Source in Higher and Further Education

Stuart Yeates

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OSS Watch

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## Key messages...

The State of Open Source in Higher and Further Education

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These are the points to take away from this talk:

- Open source is making progress in education from the top down.
- Open source is making progress in education from the bottom up.
- A number of key bodies include open source at a policy level.



#### In this talk

The State of Open Source in Higher and Further Education

- OSS Watch
- Top-down
- Bottom-up
- Key Partners



# 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 website

The State of Open Source in Higher and Further





# Promoting awareness and understanding

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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.



#### **OSS** Watch activities

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- 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



### Policy framework in the UK

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- Government Open Source Software Trials: final report http://www.cabinetoffice.gov.uk/egovernment/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=4681l
- BBC use of open source http://www.bbc.co.uk/opensource/
- OSS Watch http://www.oss-watch.ac.uk/

Also linked to the EU regulations on fiscal issues.



### UK government initiatives

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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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#### Issued in 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.



# JISC open source policy (1): services

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Issued in September 2005 as an implementation of the UK government policy.

- Advice and guidance must be neutral and unbiased.
- Project funding process must not discriminate between between open source and closed source software, unless the purpose of the projects or services specifically requires it.
- Value for money over the expected lifetime of the system must be compared.



# JISC open source policy (2): software development

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- Projects must maintain an IPR register.
- Ownership of code in joint projects must be established before work begins.
- 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): engaging the community

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- Projects must state in their bid ... 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.



## Institutional Open Source Policies

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A few institutions and/or units have them

Contributing code back to projects

Integration with institutional decision making

Focus on software engineering good practice, project
management and value for money rather than open source



### Top-down vs Bottom-up

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That was the top-down. Now for the bottom-up.



### Your experiences...

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What have your experiences with open source in education been?



# The *Traditional* Place of Open Source in Education

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Used by pockets of technically-oriented people in predominately large technically-oriented departments and institutions. Physics, mathematics, computer science and *computer centres*.

Often used to provide services across institution:

- Network connectivity
- Email
- Webservers
- File stores



### New Niches for Open Source in Education

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- Thin Clients
- Browsers
- Office Suites



# OSS Watch Survey of Open Source in Higher and Further Education

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- Followed up a 2003 survey
- 114 institutions (18%)
- Answered by ICT Director
- All the usual issues with surveys apply
- Full report in production as we speak



### Survey Results

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- 76% of higher education institutions routinely consider open source
- 77% of further education colleges routinely consider open source
- Most think a hybrid open source / propriety mix is best for them in the long term.



### Survey Results - Servers

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- more than 40% of HE and FE institutions use open source operating systems, web servers and databases.
- 40% of higher education institutions are using open source mail servers
- 14% of further education colleges are using open source mail servers
- 56% of further education colleges are using the Moodle virtual learning environment (completely new since '03)



## Survey Results - Desktops

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- more than 20% of HE and FE institutions use OpenOffice.org on the desktop (down slightly since '03)
- more than 50% of HE and FE institutions use Mozilla/Firefox on the desktop (doubled since '03)
- 33% of HE and 16% of FE institutions Thunderbird on the desktop
- In almost all cases there was also use of propriety alternatives.



# Survey Results - Motivations - HE

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- Lockin (=)
- Interoperability (=)
- Migration between systems
- Total Cost of Ownership
- Migration between existing systems



# Survey Results - Motivations - FE

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- Total Cost of Ownership
- Lockin
- Migration between systems
- Migration between existing systems
- Bug fixes and support



# **Key Partners**

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- BECTA
- BBC
- EU



#### **BECTA**

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- Working to change the procurement model
- Moodle
- BETT



#### **BBC**

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- Significant producer of educational content
- Very influential in the non-commercial sector
- Moving in the right direction



# European Funding for Open Source in Education

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- A broad range of projects
- Often little obvious coordination
- Not necessarily driving use in individual institutions



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