CALIBRE
Coordination Action for LIBRE software

EUROCONTROL

Introduction to Open Source Software

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Agenda

- Definitions, examples and possibilities
- Adoption tasks and managing risks
- Is open source right for you?
- Your questions and answers

Definition of OSS

- As old as software itself
- Formalized by Richard Stallman in Mid-1980s as “Free Software”
- Freedom:
  - To run the program, for any purpose,
  - To study how the program works, and adapt it to your needs,
  - To redistribute copies,
  - To improve the program, and distribute your improvements.
- Access to the source code is a precondition for these freedoms.
- Ambiguity of the word "free" led to "open source" in 1998 - www.opensource.org

Adapted from http://www.gnu.org/philosophy/free-sw.html

Server Examples

- Server operating systems – Linux, *BSD
- Groupware – phpBB, TikiWiki
- Database servers – PostgreSQL, MySQL
- Web servers – Apache
- Email servers – Postfix, Qmail
- Messaging servers – Gaim, Jabber
- Anti-virus and anti-spam tools – Clam AntiVirus, SpamAssassin
- CMS and Blogs – Plone, Geeklog, Wordpress
- Application servers – Zope, JBoss
- Concurrent Versioning – CVS, Subversion

Desktop Examples

- Desktop environments – Gnome, KDE
- Office productivity suites - OpenOffice
- Desktop databases – MySQL
- Web clients - Firefox
- Email clients – Thunderbird, Evolution
- Messaging clients – Gaim, Jabber
- Anti-virus and anti-spam tools - Clam AntiVirus, SpamAssassin
- Imaging & graphics tools - GIMP
- Developer editors, environments and tools – NetBeans, Eclipse, Emacs, Ant, xUnit .....

OSS Possibilities

OSS distribution terms create the *potential* for:

- Leveraging open source code to build better applications faster and cheaper
- Leveraging open source communities to design, develop, debug, document, support, maintain and evolve software collaboratively.
- Empowering the consumer by creating more opportunity for competition and less opportunity for vendor lock-in.
- Lowering the cost of software acquisition, freeing up resources for more effective use.
- Creating new business models based on skill and service – not code – as the core asset of the software firm

OSS Adoption

- Based on *Open Source for the Enterprise* by Woods and Guliani (O'Reilly 2005)

  “Using open source software means taking on the burden of overcoming the lack of productization.”

Understand Your Problem

- How important is the system?
  - Experimental
  - Low-priority
  - Operational
  - Mission-Critical
- What is your risk-tolerance level?
- How will you measure success?

Understand Yourself

What is the skill level of your staff in terms of:

- OSS development tools
- Hosting
- System administration and operations
- OSS infrastructure
- Programming languages
- OSS community skills

Understand the Product

- Finding software – sourceforge, freshmeat, apache, tigris, IBM, Sun, Mozilla, openoffice...
- Evaluating the maturity of the software
  - Product: age, platform support, momentum, popularity, design quality
  - Use: setup cost, usage cost, end-user support
  - Integration: modularity, collaboration, standards, developer support
  - Community: Leadership, culture, vitality, commitment

Plan for Support

- Internal or external?
- Bundled support
- 3rd party support
- Community support
- Mix, match, bargain and exchange – OSS lowers switching cost but not institutional momentum!

OSS May Be Right for You...

- If you can match the right products (maturity, functionality) to the right problem (skill, importance)
- If you can reduce TCO through reducing licensing cost and vendor lock-in
- If you can improve TVO through modification and/or redistribution
- If you can create value by build value by creating a learning culture and collaborating with a community
- If you need, or want, to share your software

Questions and Answers