

# FOSS Development Tools

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# Agenda

- Overview of FOSS development
- Benefits of this model
- Case study on tools

# Overview of Free software development

- Distributed model
- No formal hierarchy
- Cathedral and the Bazaar
- Geographically spread
- Complete freedom

# Benefits of Free Software development

- Quality vs features
- Reliability
- Stability
- Auditability
- Cost
- Flexibility and Freedom
- Support and accountability

# Development Tools

- Mailing Lists
- Version Control
- Bug tracker
- Testing
- IRC/Real-Time chat systems
- RSS feeds
- Wikis
- Website

# Mailing Lists

- Spam prevention
- Identification and filtering
- Archiving

## Softwares

- Mailman - <http://www.list.org/>
- SmartList - <http://www.procmal.org/>
- Ecartis - <http://www.ecartis.org/>
- ListProc - <http://listproc.sourceforge.net/>
- Ezmlm - <http://cr.yip.to/ezmlm.html>
- Dada - <http://mojo.skazat.com/>

# Version Control Systems

## Vocabulary

- commit
- log message
- update
- repository
- checkout
- working copy
- revision, change, changeset
- diff
- tag
- branch
- merge
- conflict
- lock

# Popular Version Control Systems

## Major types

- Centralized
- Distributed

## Centralized

- Concurrent version control system (cvs) - <http://www.nongnu.org/cvs/>
- Subversion (svn) - <http://subversion.apache.org/>

## Distributed

- Git - <http://git-scm.com/>
- Mercurial (hg) - <http://mercurial.selenic.com/>
- Bazaar (bzd) - <http://bazaar.canonical.com/en/>



# Bug Tracker

- Issue tracking
- Workflow
- Helps in Release
- Integration with mailing lists

## Popular ones

- Bugzilla - <http://www.bugzilla.org/>
- Mantis - <http://www.mantisbt.org/>
- Trac - <http://trac.edgewall.org/>
- Redmine - <http://www.redmine.org/>

# Testing

- Developer Unit tests
- Tied with issue tracker
- Test suite

## Popular ones

- Apache Jmeter - <http://jakarta.apache.org/jmeter/>
- Selenium - <http://seleniumhq.org/>
- WebTest - <http://webtest.canoo.com>
- Hudson - Build and Test - <https://hudson.dev.java.net/>
- Etc!

# Others

## Internet Relay Chat

- Real Time Chat
  - Archives
  - Bots
  - Freenode
  - Pidgin, Xchat, lot more ...
- 
- Wiki - mediawiki, moinmoin, etc
  - RSS Feeds
  - Website - Drupal, Joomla, etc

# Redmine Demo

Home My page Projects Administration Help

dev.styleesen.org

Logged in as styleesen My account Sign out

Search:  Jump to a project...

## Home

This gives me a collaborative environment for my experimental projects!

### Latest projects

- geekcafe (12/09/2009 06:45 AM)  
GeekCafe!  
SVN repository - <http://dev.styleesen.org/svn/geekcafe>
- ue (11/23/2009 03:06 AM)  
Uni-erp - builds an ERP system
- svn-sqlbackend (11/22/2009 02:05 AM)  
An SQL based backend implementation for Subversion version control system.
- articles (09/11/2009 12:47 PM)  
Various articles written by styleesen.
- presentations (09/11/2009 12:18 PM)  
Presentations given by styleesen in various places.

# References

- My experiences with Free software development
- <http://www.producingoss.com/> - Producing OpenSource Software

# Thank You

Thank You!  
Questions please  
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