

# The SQO-OSS project

*Quality in OSS context*

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SQO-OSS

- The Free Software Landscape
- The SQO-OSS project
- The platform
- Current status

# The Free Software Landscape

- Anarchic style of development
- Super-linear increase in total source code
- Sourceforge: 137k projects, but...
  - only 20k were active last year
  - only 18k received more than 1000 downloads in their entire lifetime
- OSS organisations with strict (i.e. Mozilla) or loose (i.e. KDE) development models
- Increasing use in real-world applications
  - As a component of larger systems
  - As a business model

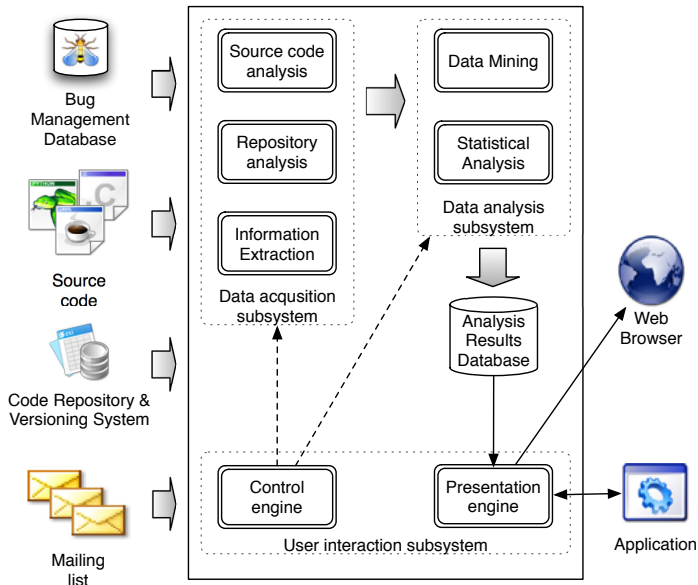
# Quality as a factor for software adoption

- Quality:
  - Conformance to user's expectations
  - Good score on various software quality metrics
- Quality  $\neq$  number of users
  - Linux vs FreeBSD
  - Apache vs others
- OSS is a viable alternative to proprietary software
  - As proven by its increasing use
- OSS projects vary in terms of perceived and actual quality
- SQO-OSS aims to provide quantitative results based on scientific evaluation of source code and other project artefacts

- 2 years, 200 effort-months of work; 6 Work Packages
- Consortium of Academic, Industrial and OSS partners
  - AUEB, AUTH
  - PROSYST, SIRIUS, KDAB
  - KDE
- Use of OSS tools and techniques throughout the project
- OSS software, BSD licensed

- High level goals
  - Promote the use of OSS by providing evidence of its quality
  - Provide metrics for selecting products based on their quality
  - Devise new methods for evaluating the quality of software
- Concrete results
  - Platform for software quality evaluation
  - Plug-ins for concrete metrics
  - Metrics from product data sources
  - Metrics from process data sources
  - List of quality-assessed OSS applications
  - Definition of the taxonomy of software quality assessment techniques and corresponding tools
  - Plug-in between SQA-OSS and a major IDE platform

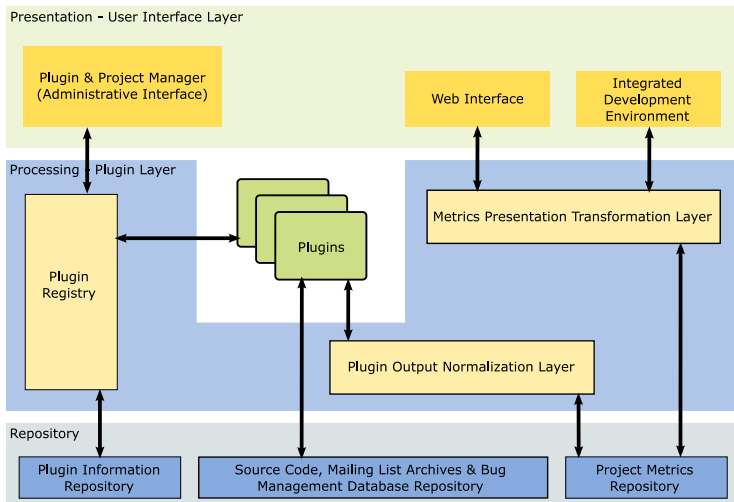
# The SGO-OSS platform architecture



SGO-OSS

SGO-OSS

# Architectural Components



- Finishing requirements
- Prototype building for system design
  - Trying to balance between waterfall and agile approaches
  - Small amount of source available, significant progress on paper
- Results storage schema and parts of plug-in descriptors almost done
- Also a library for uniform access to SVN and CVS, with cmd-line UI
- Working with other projects to avoid duplication

# How can you contribute?

- Subscribe to our Wiki site <https://wiki.sqo-oss.eu>
- Your opinion matters: Please contribute to any section of the wiki you like
- If you are a researcher: Use the SGO-OSS platform as the basis for your research
  - the plug-in specification will be released soon
- Contacts with OSS projects, offer us your repository for analysis
- Spread the word: Tell your boss and your colleagues about us

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<http://www.sqo-oss.eu>

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