

Collaborative Software Development Using R-Forge

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A key factor in open source software development is the rapid creation of solutions within an open, collaborative environment. The open source model had its major breakthrough with the increasing usage of the internet. Online communities successfully combined not only their programming effort but also their knowledge, work and even their social life.

The consequence was an increasing demand for centralized resources e.g., to manage projects or source code. The most famous of such platforms—the world’s largest open source software development web site—is SourceForge.net.

For a decade, the R Development Core Team as well as many R package developers have been using development tools like Subversion (SVN) or Concurrent Versions System (CVS) for managing their source code. A central repository is hosted by ETH Zürich mainly for managing the development of the base R system. Now, the R-project wants to provide infrastructure for the entire R community.

R-Forge (<http://R-Forge.R-project.org>) is a set of tools based on the open source software GForge—a fork of the open source version of SourceForge.net. It aims to provide a platform for collaborative development of R packages, R related software or other projects which are somehow related to R. It offers source code management facilities through SVN and a wide variety of web-based services.

Furthermore, packages hosted on R-Forge are built daily for various operating systems, i.e., Linux, MacOSX and Windows. These package builds are downloadable from the project’s website on R-Forge as well as installable directly in R via `install.packages()`.

In our talk we show how package developers can get started with R-Forge. In particular we show how people can register a project, use R-Forge’s source code management facilities, provide their packages with R-Forge, host a project specific website, and finally submit a package to CRAN.