

FLOSS Project Registration Strategies

Alexander Lokhman

Tampere University of Technology
`alexander.lokhman@tut.fi`

During the past decade open source software has gained increased popularity. A huge number of projects have been developed, published and widely used. Nevertheless, the idea that open source software is created and maintained by a loosely connected community working across the Internet remains suspicious. What is often overlooked however is that communities need support of different kinds. For instance, communities need basic environment to support project sources and documentation, as well as to monitor and to manage contributions, and to communicate with other members. In order to achieve this, community leaders (or supporting companies) often produce a website which contains information about the project. The website may also include facilities for issue tracking, managing communication between members (e.g. mailing lists, IRC, forums, chats, etc.), and access to source code.

Frequently it is difficult for community leaders to run and/or to support specified software (such as code repositories), and the best possible solution is to use external services. These services are mostly free, provide variety of features, and perform better than the locally installed. Moreover, well known code sharing services attract big number of developers all over the world which may bring more contributors to the managed project.

In our research we have identified three main strategies for OSS project registration using various code sharing services available. First identified is *Centralized scheme* which tends to become the most widely used scenario of project registration because of ease of support and single community concentration. Project source code is hosted in one forge, whereas other forges have stable link to the main one (usually via project website address). Centralized scheme is used by MySQL, PHP, Spring, Python, and many other successful OSS communities. *Syncing scheme* is not as popular as Centralized scheme but still it is adopted by many projects, which primarily use modern revision control systems (e.g. Apache HTTP Server). The main idea is to host source code in one forge and synchronize the repositories in other forges with the main one. The last *Doubling scheme* method is the rarest type because of the problems which this method entails, since the source code is copied to each forge repository.

Despite the fact that each strategy has its own technical features, from marketing perspective all bring enough effect for project promotion. However, marketing perspective and technical limitations are not the only forces for choosing suitable approach for project registration. Such dimensions of software engineering process as requirements, design, maintenance, and quality assurance applied to particular project may also bring new constraints.