Open Source at DLR

The German Aerospace Center (DLR) is a large governmental research organization with approximately 8000 employees at 20 sites. Between 2000 and 3000 persons are developing software in part of their work. Most of them do not have any specific education in software development but only some programming skills. Especially, their knowledge about Open Source and adjacent topics is very limited.

The lack of knowledge about licensing led to many issues because employees and management were confronted with making decisions. Often, software was not published due to fear of license violations or existing Open Source software was not used because of potential negative consequences.

Information Resources and Education

Open Source Brochure

The DLR Open Source brochure is a reference book for all employees, which answers the most basic questions related to Open Source Software licenses.

For the distribution of unmodified and modified Open Source Software, the brochure lists all obligations of the most important licenses that are used at DLR. Licenses are grouped as follows:

- with strong copyleft,
- with weak copyleft,
- without copyleft, and
- with special rights.

Trainings

Regular trainings are part of the education program of DLR since 2012. The trainings took place in different DLR locations across Germany (see Table). Several additional customized trainings took place for specific teams.

The curriculum of the training consists of several topics about Open Source with focus on legal concepts and issues, such as copyright and liability, as well as Open Source licenses, including a detailed discussion of some widely used licenses. Prior the trainings, half of the participants (50%) had some very limited knowledge about legal aspects, around a quarter has no knowledge, and another quarter has some knowledge based on previous experiences.

Knowledge Sharing

Wikis

In 2013, a central Wiki installation was introduced for DLR, which became the focal point for the DLR Open Source community. It provides a single point of access for information and allows anybody of DLR to share their knowledge and experiences.

The information about Open Source is in the DLR Open Wiki section, which also covers any other “Open” topic such as Open Data, Open Standards, Open Access, and Open Science. The DLR Open Wiki section provides pages for topics, tools, literature, questions, and events as well as a separate section about how to get involved. Questions and their answers often are the basis for new pages on topics or tools.

Since asking a question is a much lower hurdle to take than starting a page, this section became the entry point for many contributors.

Knowledge Exchange Workshops

Since 2013, so-called knowledge exchange workshops (german: WissensAustausch-Workshops; WAW) are held at DLR. These workshops are interdisciplinary and aim on long-term exchange of knowledge on overlapping topics for the establishment and expansion of professional networks.

We learned the following:

- Open Source software is already widely used at DLR but mainly as more general tools and libraries, which have been included into internal development processes and software projects.
- Research topic specific software was mainly developed in-house. On the other hand, exactly this specialized tools were seen as candidates to be published under an Open Source license.

As a major result of all workshops, the participants identified the lack of an official DLR process on how to publish Open Source software. One of the action item of the workshops therefore was to start the development of such a process.