



Open Source Software Workshop 21.10.2010

“Open Source Software and Technology Transfer”

Vegar Lein Ausrød – Technical Student CERN 2009/2010

Problem definition

How can a TTO best foster dissemination of OSS?

Procedure

Focused on three aspects:

- Leadership and governance structure
- Motivation to contribute
- License

Two cases

ROOT

Tool for analyzing huge amount of data

Leadership: Strong central leadership
Structure: Core team at CERN
License: LGPL
Users: 100 %

Quattor

Remote management of large computer clusters

f

Leadership: Flat structure with one coordinator
Structure: Quattor working group
License: EU data grid and Apache
Users: 50 sites

Procedure

In depth interviews and follow up questions with four different positions within each case:

- 1 Leader
- 2 Core developer
- 3 Random user/developer
- 4 User/developer from industry

f

Findings - leadership and governance structure

ROOT

Strong core - hierarchy

“There is no flat structure; there is really a hierarchy with these two guys at the top, which the consequence of that is if you would have a personal friction with any of the two, you would have a problem.”

Industry contributor

Quattor

Distributed power- flat structure

“Quattor is one of the better communities to work with. I think it comes back to the lack of control (...) In Quattor everybody seems very willing and open to suggestions. That openness and lack of control has contributed to an engaging community.”

Industry contributor

Findings - motivation

ROOT

Private incentives

"I mean I have my own library, and I use my library around here, but I am not going to argue with some ROOT developer how to include certain stuff. Because I don't know what they are up to."

Private person

Quattor

Collective incentives

"We have created a community where people in some sense are friends. The people like to work together in a friendly atmosphere. I think there are a lot of people having pleasure working in this kind of atmosphere. It is always good to say that you do a good job in a community."

Leader

Findings - motivation

ROOT

Private incentives

“So it is very important to realize even though it is open source, it is not given you more freedom. You still have to do the things that are requested by your main user. And make sure that you don’t break anything.”

In house developer

Quattor

Collective incentives

“We have created a community where people in some sense are friends. The people like to work together in a friendly atmosphere. I think there are a lot of people having pleasure working in this kind of atmosphere. It is always good to say that you do a good job in a community.”

Leader

Findings - motivation

ROOT

Private incentives

“So it is very important to realize even though it is open source, it is not given you more freedom. You still have to do the things that are requested by your main user. And make sure that you don’t break anything.”

In house developer

Quattor

Collective incentives

“There is a whole lot of work by open sourcing it. And its extra work over and above what we all ready have done, (...) it’s about making sure that the community is working and viable so we all depend on it.”

Industry contributor

Conclusion so far...

Leadership and governance structure influence the motivation of leaders as well as contributors.

f

Findings - license

Academic

"I prefer these things to be whatever license."

In house developer

Industry

"Otherwise I couldn't use it. I wouldn't be allowed to use it."

f

Industry contributor

Potential actions from a TTO

Potential actions:

- Are you impact- or revenue driven?
- Licensing guidance
 - Clear overview of the licensing picture
 - Avoid GPL license
- Funding
 - Fund extra positions within the core team
 - Fund workshops
- General
 - Program dissemination friendly code
 - Create awareness

The end...

Thank you!

Questions?