

**SIXTH FRAMEWORK PROGRAMME  
PRIORITY 2  
INFORMATION SOCIETY TECHNOLOGIES**



**FLOSSWORLD**

**Free/Libre and Open Source Software: Worldwide  
Impact Study**



**D38: Workshop Report East Asia 2**

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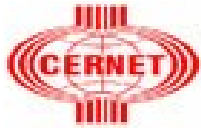
Pop Ramsamy (FUNDECYT)



# **REPORT**

## **FLOSSWORLD 2<sup>nd</sup> WORKSHOP “East Asia”**

**“26 and 27 October, 2006”**



## **CONTENTS**

- 1. Attendees**
- 2. Workshop agenda**
- 3. Report**
- 4. List of presentations**

## 1. Attendees

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## 2. WORKSHOP AGENDA

<b>DAY 1: 26 Oct 2006, Lecture Hall, Main Building, Tsinghua University</b>	
	<b><u>Session 1. FLOSSWorld in China.</u></b> <i>Moderator: Maoke Chen – Tsinghua University</i>
9:00 – 9:05	- Introduction <i>Maoke Chen</i>
9:05 – 9:10	- Welcome speech <i>Prof. Xing Li</i>
9:10 – 9:20	- Executive summary of FLOSSWorld (China) <i>Maoke Chen</i>
9:20 – 10:00	- FLOSSWorld Results and Analysis <i>Rishab A. Ghosh</i>
10:00 – 10:20	- FLOSS Development in China <i>Prof. Shouqun Lu</i>
10:20 – 10:40	Photo, coffee break
	<b><u>Session 2. Officially Supported FLOSS Activities</u></b> <i>Moderator: Maoke Chen – Tsinghua University</i>
10:40 – 11:20	- China Linux Key Technology Analysis and Core Community Development <i>Lecturer: Chunyan Yang (Cosoft Union)</i>
11:20 – 12:00	- OSS, IPv6 and China Next Generation Internet <i>Lecturers: Xing Li (CERNET)</i>
12:00 – 14:00	Lunch
	<b><u>Session 3. FLOSS Activities Supported by Enterprises and Persons</u></b> <i>Moderator: Maoke Chen – Tsinghua University</i>
14:00 – 14:30	- Red Hat: Enterprise OSS Strategy and its Advantages <i>Lecturer: Haifeng Jin (Red Hat, Co.)</i>
14:30 – 15:20	- What can an individual do for FLOSS? <i>Lecturer: Hui Long (Huihoo.org)</i>
15:20 – 15:30	Coffee break
15:30 – 16:00	- OpenSUSE and OSS Community <i>Lecturer: Alex Lau (Novell)</i>
16:00 – 16:30	- Open Source, Open Standards and Innovation <i>Lecturer: Dennis Ding (Sun Microsystem)</i>
	<b><u>Session 4. FLOSS Activities in HEI</u></b> <i>Moderator: Maoke Chen – Tsinghua University</i>
16:30 – 17:10	- OSS Communities and their Impacts in HEI <i>Lecturer: Pin Tao (Aka, Tsinghua University)</i>

<b>DAY 1: 26 Oct 2006, Lecture Hall, Main Building, Tsinghua University</b>	
17:10 – 17:50	- OSS Communities in Lanzhou Univeristy <i>Lecturer: Guanghui Cheng (Lanzhou University)</i> - Kiosk: an OSS Case Study <i>Lecturer: Jie Zhang (Lanzhou University)</i>
18:00	Reception

<b>DAY 2: 27 Oct 2006, Lecture Hall, Main Building, Tsinghua University</b>	
	<b><u>Session 5. Comparison</u></b> <i>Moderator: Maoke Chen – Tsinghua University</i>
9:00 – 9:10	- Introduction of Speakers <i>Lecturer: Maoke Chen (Tsinghua University)</i>
9:10 – 10:00	- Activities of Japan OSS Community <i>Lecturers: Jun Iio (MRI, Japan)</i>
10:00 – 10:40	- OSS Survey with Search Engine <i>Lecturer: Zuoda Liu (Tsinghua University)</i>
10:40 – 11:40	- Discussion and questions
11:40 – 12:00	- Closing speech <i>Maoke Chen (Tsinghua University)</i>
12:00	Lunch



### 3 . REPORT

Below a summary of the presentations and contributions of workshop attendees, organized in as much as possible in terms of the set of questions of the report template.

#### **The skills development study/ capacity Building**

##### **Questions for workshops and discussions:**

What role do informal open source communities, universities and other HEIs, and businesses play in the development of skills related to the software sector?

How important are secondary skills (such as knowledge of licensing legal issues, teamwork and management) to software development, and how and where are these skills best learnt?

How do attributes such as demographics and gender affect interest from participants?

What is the impact on businesses – such as better skills and cost savings – of skills learnt through (unfunded) participation in open source communities? What are the specific benefits to small and medium enterprises (SMEs)?

What is the consequent impact on employment generation and employment levels?

How, if at all, should universities and formal HEIs respond to maximize the skills provided in their environments, to best incorporate further skills learnt informally through open source communities?

How, if at all, should governments respond?

## Description and process

Persons from enterprises, higher education insititutes and Chinses OSS communities have discussed the issues on FLOSS skill development. In summary, we can categorize Chinese OSS communities into 4 classes.

### 1. *NGO having official background*

Ms. Chunyan Yang, deputy chief secretary of the Cosoft Union, introduced the overall situations of Chinese OSS community and its technological development. Actually, Cosft can have such a position to make a such an overall comment. Hosting a platform for OSS activities among enterprises and individuals, Cosoft have made a great success in building a online community for OSS collaboration.

However, such a situation is not a result of marketing selection. Instead, Cosoft platform is an approach of a state-supported R&D project in the framework of 863 Plan, which is a high technology development plan set up by the Chinese government since 20 years ago. After the project has ended, the platform remains working, and becomes a nation-wide community, open to the public ranther than the partners of that project only.

Cosoft represents the typical OSS community with official background, having a well-maintained platform, abundant funding and resources, and good connections with both governments and enterprises. The activities of Cosoft could be summarized as follows:

- providing repositories for FLOSS developers
- maintaining online forum for FLOSS discussions among both users and developers
- organizing software developing contests.

LUPA is another OSS community with official background. Unlike Cosoft, LUPA was set up by some enterprises collaborating with universities, and then got official support from local government agencies. Besides repositories and online forum, LUPA also sponsors Linux training courses in colleges and universties.

### 2. *Communties having educational background*

Dr. Pin Tao, an associate professor of Department of Computer Science and Technology of Tsinghua University, was one of the founders of the Aka OSS community, which is very famous among the student circle in Chinese universities. Dr. Tao reviewed the history of Aka community and concluded some common features of OSS communitis born from universities.

Typically, these class of communitis are not very rich in funding and human resources, in comparison to the first class. Volunteers are contributing in the community affairs. The most attractive advantage of university communities reflects in their power of colleting young generations. Directly intracting with the student unions, student sci-tech associations, and independently organizing trainings and promotion events, university communities often run very well without significantly high cost. Actually, they also get money for enterprise trainings, but generally doing this without profit.

University communities often create new ways to disseminate the concepts and knowledges of OSS, e.g.

- publishing newsletters or small journals, also within the OSS-license framework
- organizing seminars and lectures
- organizing salons and discussing forums

Sometimes, university OSS community also get support from overseas. The most typical example is the Lanzhou University, whose student OSS community gets support from enterprises like IBM, and also from the international Real-Time Linux community. Prof. Nicolas Mc Guire has giving lectures on RT-Linux design directly to graduate and senior undergraduate students in that university for several years. He's also leading a research group in this area, collaborating deeply with the local experts.

### 3. *Enterprise-initiated communities*

OSS-related software vendors have variety of ways of promoting their products and public impacts. For instance, Red Hat emphasizes its technological superiority, while Sun Microsystems initializes a new movement towards Open Standards. Building a community can also play parts in enterprise marketing strategies, and Novell takes this strategy.

Alex Lau, senior programmer/engineer from Novell (China) introduces the community of OpenSUSE. It seems that enterprise-initialized community, can get double-win for both enterprise itself and the OSS users. Users can get information and helps via such community, which is well interacted by volunteer experts, employees and the users, and this may lower the cost of post-sell service for the enterprises. On the other hand, the community also becomes a good platform for the enterprise to get feedback and even new ideas from the public.

#### 4. *Individual-initialized communities*

There are some communities, really initialized by small-office-home-office (SOHO), i.e. individuals. A typical sample in China is the Huihoo.org. With very limited funding and resources, the most active role they plays for China OSS is disseminating the rational of OSS to the public.

The survey result shows that Chinese OSS developers are very young (avg. 25.49 years old, with standard deviation 4.61). This age structure implies that the most active developers are those who just finished their college degrees and have had 2 – 3 years experiences in real job. It could be asserted that the OSS development in China is tightly connected with the process of Internet popularization, because the earliest communities are just born in universities around 1998-1999, such as Aka community. Therefore, we can conclude that communities born from universities, though they have no fixed sources of funding, have made significant contributions to China OSS movement.

Another statistics worth indicating is the importance of OSS skill for career. 44% developers answered that OSS plays the role of core skills for their career while another 44% said it is useful. Recently, the communities having official background are growing very rapidly and we believe that this reflects how important the public think of for the OSS skills. The NGO with official background will become the most important force for the career-related OSS training.

## Inter-regional differences in software development

### Questions for workshops and discussions:

What local free software projects can be observed in target countries?

How do these local projects differ between regions and countries?

How much do target countries participate in major global open source projects?

Are projects in target countries funded differently from each other, or from Europe? E.g. the existence of “prizes” or “bounties” for writing specific software modules (sponsored by Shuttleworth in South Africa, Red Hat in India) is not seen in Europe.

What is the demographic composition (including gender break-up) of the free software community, how developers in target countries think, what motivates them and how do they structure their activities – does this differ from country to country, and does it differ from Europe? Comparisons with previous studies such as FLOSS, FLOSS-US, FLOSS-Japan.

How are local Open Source activities in target countries related with other institutions (public administration, companies, schools, universities, etc.)?

What is the present and possible future impact of Open Source activities on the labour market, education, governance, and the economy of developing countries?

### Description and process

Jun Iio, senior researcher from MRI, Japan, introduced the FLOSSWorld survey in Japan. In comparison to the result for China, 2% responding developers in Japan are female, while this rate achieved 11% in China. Only Malaysia has more higher portion of female developers according to the surveys.

On the other hand, China is a large country and regional diversity within this country is worth investigating. Unfortunately, however, the survey samples are not enough for making such an observation, esp. for the government surveys. Therefore, we utilize the search engine technology to investigate the real situation of the OSS usage among different provinces. We collect server information from government and HEI web sites and classify them according to the types of operating system and the web server software. Although government web sites are not definitely hosted by themselves, the utilization of operating system and httpd servers can partly reflect their acceptance of open source software.

Mr. Zuoda Liu, who conducted the online survey based on search engine approaches, presented the results to the audience. The search-based survey covered 7563 government web sites, distributed among 34 provinces of China, including Taiwan. Among them, 47% web sites are running on Windows Server 2003, 35% on Windows Server 2000, while 14% on Linux and the rest 4% on other operating systems, including Solaris, FreeBSD, AIX and so forth. In comparison between the East China and West China regions, one cannot see significant differences in their distribution patterns of web site operating system. A deeper observation on GDP per capita vs. OS pattern in different provinces, one cannot conclude that the open source OS are more used in developed regions. There must be two potential explanations for the situation: one is that the pirate version software may widely used in undeveloped regions; another is that the undeveloped regions web site hosts are often concentrated in relatively developed cities.

The search-based survey anyway describes an objective big picture for the adoption of OSS in China. In the government web sites, less than 20% are using open source systems. This rate gets more higher for academic and educational sites, but also not high enough, with 25% and 30%, respectively. This

observation conforms to Prof. Shouqun Lu's speech, where he stated that FLOSS culture and products have not popularly adopted in China, e.g. only LAMP architecture only occupies 17% web server market in China in the end of 2005.

## **Government authority**

### **Questions for workshops and discussions:**

What, and how large, is the role of government in the ICT sector in target countries?

What is the degree of IT use in government authorities?

What are the main hindrances to increased and effective IT use in government? E.g. cost, availability of support, choice of vendors...

What is the awareness of open source and open standards?

What is the behaviour towards open standards and interoperability in practice?

What is the extent of open source usage?

What policies do local and regional government authorities want to adopt?

What is the relation between international, national, regional and local policies and actions towards open source and open standards/interoperability?

### **Description and process**

As is discussed before, regional government departments not very often directly contribute to OSS promotion, but some of them are enthusiastic in support NGO to disseminate the OSS knowledges and materials, supporting activities of OSS communities. However, up to now, according to the OSS adoption in practice of e-government, government is not the biggest driving force for OSS in China for the time being.

Another role that government can play is, as a neutral body, an information advertisement for the development of OSS market and technological approaches.

## **4. LIST OF PRESENTATIONS**

1. *Overview of Survey Results* – FLOSSWORLD\_regional conference China.odp
2. *Executive summary of FLOSSWorld (China)* – FLOSSYWorldBeijing2006-cmk.ppt
3. *China, FLOSS, World* – ChinaFLOSS-lshq.ppt
4. *Activities of Japan OSS Communities* – Activities\_of\_Japan\_OSS\_Community.odp
5. *OSS Impact to HEI* – FlossWorld\_AKA.ppt
6. *Red Hat Superiorities and Strategies* – oss2-redhat.pdf
7. *Role of Individuals in OSS Communities* – Huihoo.ppt
8. *Open Source, Open Standards and Innovation* – Open Source Open Standards and Innovation-dennis.pdf

9. *Search Engine Based Online Data Mining – OSS.ppt*