

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



**SIXTH FRAMEWORK  
PROGRAMME**

**FLOSSWORLD**

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



Track 2 Study Report – Malaysia  
(Referred to as D28b in the work packages description in the proposal)

Project Reference: 015722

Kind of Project: Specific Support Action

Start Date: May 2005

End Date: June 2007



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This report is available in <http://flossworld.org>

This report has been funded by the European Commission under contract number FP6-IST-015722.

## **Disclaimer**

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# Chapter 1

## Executive Summary

This report shows the main results of the analysis performed, in the context of the FLOSS-World project, of some quantitative aspects of libre (free, open source) software in Malaysia. The sources of the analysis have been an exhaustive data retrieval of several facts related to libre software in that country (such as a list of Linux user groups, magazines focused on libre software, etc.) and a detailed, quantitative data mining of sites hosting libre software development (forges).

There is no Malaysian local forge equivalent to SourceForge but the Open Source Competency Centre (OSCC) Knowledge Bank, which is owned and managed by Malaysian Administrative Modernisation and Management Planning Unit (MAMPU), Prime Minister's Department, facilitates OSS development activities as part of the Malaysian Public Sector OSS Master Plan. OSCC has around 2016 registered users and 26 active projects initiated mainly by Public Sector agencies. The main focus of OSCC Knowledge Bank is to enable the sharing of source codes, knowledge and experience to facilitate and support greater adoption and development of OSS within the Public Sector agencies. In addition, OSCC also serves as a one stop reference centre that bridges the private sector, R&D and public sector communities together in an effort to match the supply and demand of OSS. To this effect, there is a repository of 250 OSS solutions and 201 OSS service providers. Malaysian developers also use Sourceforge to develop their projects. There are around 3189 registered users in SourceForge that the team identified as Malaysians and 94 projects that appear to be Malaysian-driven. However, not all registered users are developers.

Regarding the mailing list, there are a considerable number ( 12 ) LUGs in Malaysia, and there are 11 Media mainly from computer magazines and also from main stream newspapers with weekly computer columns covering OSS news and articles in the country. Majority are written in English, but there are Bahasa Malaysia and also Chinese languages articles from the press

Looking at the authorship of source code, most of the projects are developed by individuals. Followed by enterprises, who sustain the second biggest group.

In the *OSCC* Knowledge Bank, Source Code Management Tools are not applicable. On the other hand, SourceForge developers use the version control system (CVS) provided by this platform to develop the software for the project. We can find 108 projects with this active CVS repositories and they all sum up to 60,365 commits done in SourceForge.

There are 3 general mailing lists in *OSCC* but they do not have much movement with only 17 different email addresses within them.

Regarding to source code information, Malaysian developers seem to prefer to develop in *shell script* and *php* more than in other programming languages. These two languages represent 87% of the total lines of source code.

## Chapter 2

# Introduction

Within the context of the FLOSSWorld project, this report is devoted to the quantitative study of libre software development in Malaysia (peninsular and east). The information presented here is based mainly in public data found in the repositories of libre software projects hosted in the analyzed area, in SourceForge (the largest hosting site for libre software projects) and in a survey completed with the help of the partners in FLOSSWorld.

The data found in repositories (usually identified by the local partners in the project) has been downloaded, stored in a database, and later carefully mined and analyzed (using a semi-automatic process that has been complemented by human validation). Most of the data used was obtained from source code, source code management systems and mailing list archives. In addition to repositories in the region, SourceForge has also been analyzed, as the largest hosting site, worldwide, for libre software projects. The details of the methodology used are specified in a separate document, also produced by the FLOSSWorld project, the “Metodology report”.

In the following chapters, the main results produced by this methodology are shown. Before that, in this chapter, some details about the methodology itself are discussed.

### Geographic area

Malaysia<sup>1</sup>, is a federation of thirteen states and three federal territories in Southeast Asia. The country consists of two geographical regions divided by the South China Sea. Whose capital is Kuala Lumpur, situated at Peninsular Malaysia.

1. Peninsular Malaysia is located south of Thailand, north of Singapore and east of the Indonesian island of Sumatra.
2. East Malaysia is located on the island of Borneo and shares borders with Brunei and Indonesia.

### Map

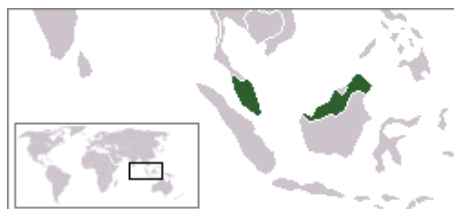


Figure 2.1: Malaysia World Map

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<sup>1</sup><http://en.wikipedia.org/wiki/Malaysia>

**Languages** The official language used in Malaysia is Bahasa Malaysia and the country has an area of 329,847  $km^2$ . Its population is estimated in 26,920,000 people. Its GDP is estimated in \$308.8 billion (\$12,700 per capita).

**Time zone**

The Malaysian time zone is UTC+8 that happens to be the same time zone as China.

**Internet top level domain.**

The Malaysian TLD<sup>2</sup> (Domain Name System Top Level Domain, which is .my) is an important indicator to recover information from Malaysian email addresses. If someone has a Malaysian TLD, she is supposed to be a Malaysian user or developer.

## 2.1 Summary of results

The Malaysian FLOSSWorld partners have identified one Malaysian OSS Repository named *OSCC Knowledge Bank*. For technical reasons, the spider analysis did not work as expected in OSCC. But manual inspection showed that it hosts 26 projects.

Table 2.2 lists a relation of the number of projects and users registered in the forges. The world’s most popular forge, SourceForge, has been added to the table as many Malaysian developers and Malaysian-driven projects have been found there. The number of registered users at SourceForge gives the estimation of Malaysian developers identified as such in SourceForge<sup>3</sup>. The 94 projects in SourceForge that are Malaysian-driven have a majority (i.e. more than 50%) of Malaysian developers in their teams.

Forge	Forge name
<a href="http://oscc.org.my/">http://oscc.org.my/</a>	OSCC Knowledge Bank

Table 2.1: Malaysian forges

Forge	Registered Users	Projects
Sourceforge	3189	94
OSCC	2016	26

Table 2.2: Registered users and projects in Malaysian forges (data 16th April-May 2007). SourceForge has been included for completeness (data June, 2006).

It is important to point out that not all registered users are active developers in Sourceforge and OSCC Knowledge Bank. For example, many of them could register and not join a development project. Since OSCC Knowledge Bank was established for the purpose of sharing information, source code and software programs among agencies and does not make use of all the tools for developers, it cannot be taken as an apple-to-apple comparison with Sourceforge. Therefore, the relevant data for SCM, Committers and Commits for projects in OSCC Knowledge Bank will not be available currently. In Phase II of the Malaysian Public Sector OSS Master Plan, OSCC Knowledge Bank will provide more tools to facilitate and support increased development activities.

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<sup>2</sup>Methodology report - Chapter Methodology - Section Global forge’s analysis

<sup>3</sup>Methodology report - Chapter Methodology - Section Global forge’s analysis

Forge	SCM repos	Committers	Commits	MailingLists	Releases	SLOC
OSCC	NA	NA	NA	3	21	116,065
SourceForge	108	183	60,365	ND	ND	ND

Table 2.3: Information sources that could be extracted from Malaysian forges (April-May 2007).

The next section describes the set of difficulties arisen during the data retrieval process. These difficulties explain the *ND* (No-Data) and *NA* (Not-Applicable) values that appear in some cells of the table 2.3.

In the results shown in table 2.3 the field *SCM repositories* (Source Code Management repositories) presents the number of non empty<sup>4</sup> repositories. Field *Releases* shows the number of software releases which could be found and analysed.

## 2.2 Problems and constraints found

The data retrieval process presented two main problems:

1. Links to version control systems: Malaysian partners provided some links projects, but sometimes it was not enough to find links to the matching software repositories<sup>5</sup>. Thus we spent some time looking for specific links we needed. After introducing some extra procedures, the spidering tool was able to find extra information.
2. Empty software repositories: Some projects which did have a CVS or SVN repository, did not store any sources code in them. In this cases, some manual research and tests helped to clarify that repositories where actually empty.
3. Access denied: We found problems in the *OSCC Knowledge Bank* with the access to the projects. The spidering tool needs anonymous access to code repositories and software releases in order to accomplish its job and *OSCC* was not granting it. This is why a good part of the work had to be done manually.

## 2.3 Methodology details

This section presents a brief description of the different tools used in the data retrieval process. Two forges have been analysed, SourceForge and *OSCC*. This is why data comes from several different sources. Analysis was carried out on January of 2007 and the following tools were used:

1. CVSanaly<sup>6</sup>: CVSanaly was used to retrieve data from Sourceforge's repositories. This was not possible in *OSCC* because Source Code Management systems are not enabled.
2. PyTernity<sup>7</sup>: Concretely, PyTernity was run on *OSCC* files after downloading them by hand.

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<sup>4</sup>Non Empty repository: There is a valid SCM account for this project, there is source code in it and at least one commit has been made

<sup>5</sup>CVS or SVN

<sup>6</sup>Methodology report - Chapter Tools - Section CVSanaly

<sup>7</sup>Methodology report - Chapter Tools - Section PyTernity

3. SLOCCCount<sup>8</sup>: SLOCCCount was run on *OSCC* projects. In fact it was run on the same files as PyTernity.
4. Spider<sup>9</sup>: The Spider tool was run on *OSCC's* URL but it could not detect any useful list of URLs linking to mailing lists or software repositories. In this case, this is possibly due to some anti-spidering measures in *OSCC*.

## 2.4 Contributions

This report has been drafted by the GSyC/LibreSoft team of the Universidad Rey Juan Carlos (Madrid, Spain, coordinated by Jesus M. Gonzalez-Barahona). The URJC team performed the data retrieval, mining and analysis, and produced its final version. In addition to the general collaboration by all partners, the Malaysian FLOSSWorld partners MIMOS Berhad, MAMPU, and Open Source Competency Center (OSCC) have provided information about libre software developing sites, feedback about the drafts of the report, much other useful information, and generic help with issues specific to their region (including assistance with language issues). The coordinator of FLOSSWorld (UNU-MERIT) has also provided specific assistance and feedback during all the stages of preparation of this report.

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<sup>8</sup>Methodology report - Chapter Tools - Section SLOCCCount

<sup>9</sup>Methodology report - Chapter Tools - Section Spider

# Chapter 3

## Results

### 3.1 General information

Malaysian partners collaborated with us providing different sources of useful data for the report<sup>1</sup>. Most of this information was obtained through a survey ran by our Malaysian partners. There is a summary of the results of this survey in table 3.1. Notice that these numbers are not total, but just the results of the surveys.

<b>Region</b>	<b>Communities</b>	<b>Developers</b>	<b>Lugs</b>	<b>Media</b>	<b>Projects</b>	<b>Platforms</b>
Malaysia	17	123	12	11	41	17

Table 3.1: Data collected by Malaysian partners

Where *Communities* means group of users interested in libre software, *LUGs* are Official Linux User Groups (with a physical address), *Media* are any kind of journal magazine related to FLOSS and *Platforms* are web sites which provide any kind of support to the libre software world, such as forges. Also, in figure 3.1 there is a comparison of the information obtained from all the countries studied in FLOSSWorld.

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<sup>1</sup>Methodology report - Chapter Data Sources - Section Primary Data Sources

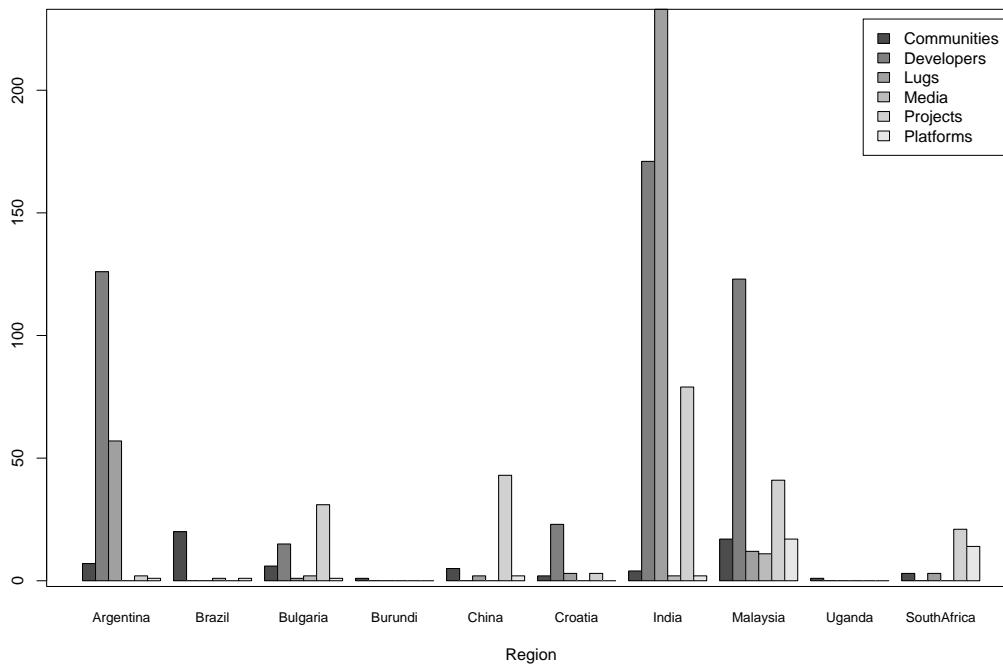


Figure 3.1: General information obtained from surveys (comparison among countries)

Most of the data of this category has been retrieved by our partners.

There are 11 Media that publish free software articles in Malaysia. Most of them are magazines but there are main stream newspapers that have weekly Computer columns that publish news and articles about Free Software in all the 3 languages ie English, Bahasa Malaysia and Chinese.

### 3.2 Forges information

SourceForge and OSCC Knowledge Bank are widely used in Malaysia. OSCC Knowledge Bank is owned and maintained by MAMPU, Prime Minister's Department and is part of OSCC MAMPU, an official reference centre dedicated to Open Source Software. The OSCC Knowledge Bank was meant more for sharing information, experience and facilitate development activities rather than primarily for source codes collaboration. The top downloads are OSS Tips and Tricks and Info, followed by MySpamGuard, MySurfGuard and MyNetWatch. These are OSCC products that were developed by combining OSS projects, customised and packaged for use by the government agencies. Therefore, the Knowledge Bank is not intended and expected to mimic development activities recorded in Sourceforge.net.

### 3.3 Source Code Management systems information

The following tables show a couple of relationships between two of the best indicators about the activity of a free software project, committers (developers) and commits (changes made in the project).

However SCM tools in OSCC Knowledge Bank are not enabled. The Knowledge bank hosts the software releases. These releases have been used for the source code and authorship study. But there is no data available for committers and commits analysis.

All the source code related data studied in this section, such as commits and committers data, has been obtained in the CVS systems of the Malaysian projects in SourceForge. Looking at them, it appears that the number of committers and the number of commits is not proportional. It is also possible to notice that there is only one project which is in both tables, this project is *arias* which has one of his developers into the top 5 of developers with the most commits done.

Table 3.2 shows the relation of the top 5 committers in *SourceForge*, with projects and number of commits.

Project	Committer	Commits
texcatalogue	graham	29201
texlive	karl	22523
phpwb	hd2000	11459
texcatalogue	robin	6443
arias	jflehtner	5031

Table 3.2: Top 5 Project, Committer and Commits

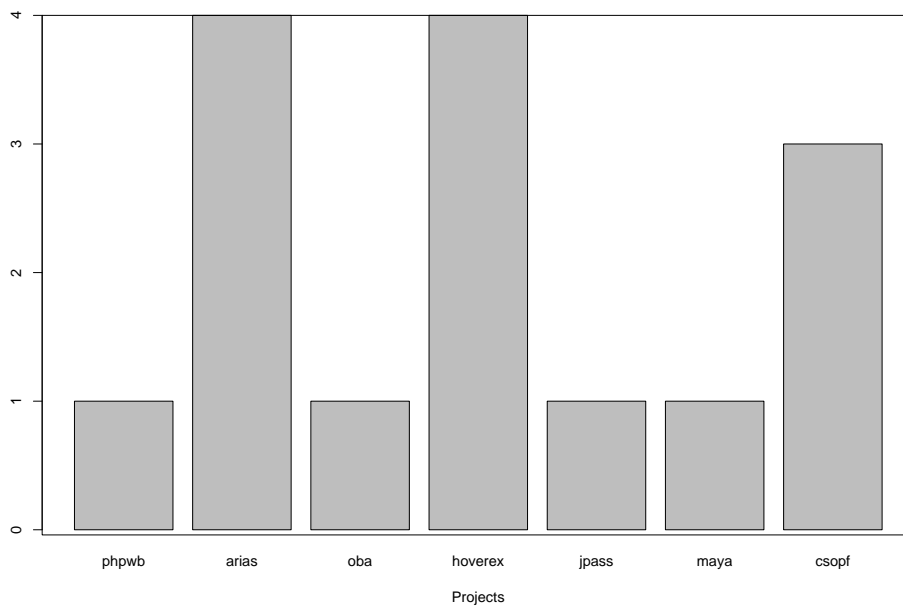


Figure 3.2: Committers per project in *SourceForge*

Table 3.3 shows the relation of the 5 projects with the most developers in *SourceForge*. It also tells how many developers each one has one project. Below the top 5, the rest of them have only 1 or 2 developers at maximum.

Project	Num committers
hoverex	4
arias	4
piscesworks	3
csopf	3
greatestcharts	2

Table 3.3: Top 5 Projects in number of committers

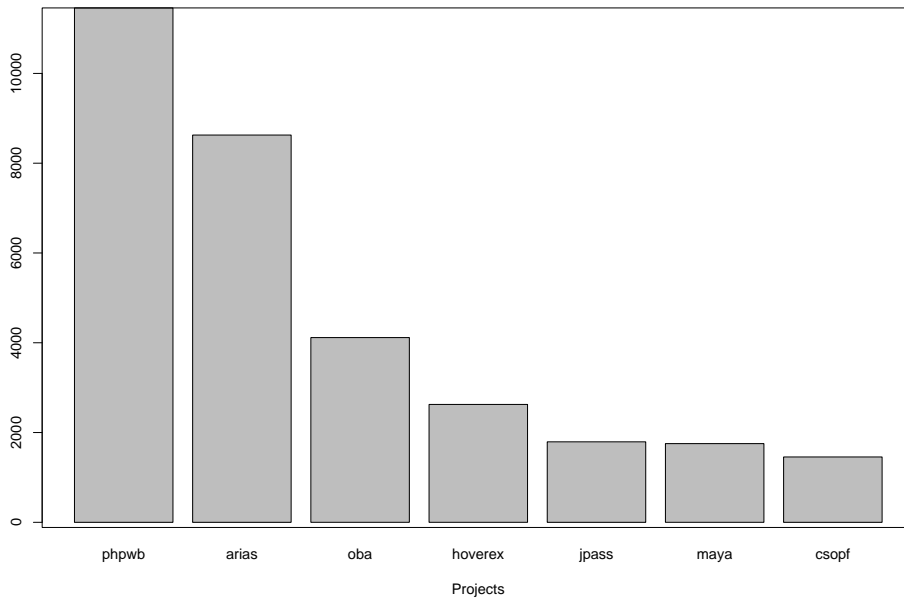


Figure 3.3: Commits per project in *SourceForge*

Table 3.4 shows selected projects from *SourceForge* ordered by number of commits. Notice that 4 out of the 7 projects with the most commits have just one developer.

Project name	Number of committers	Number of commits
phpwb	1	11459
arias	4	8627
oba	1	4115
hoverex	4	2626
jpass	1	1793
maya	1	1753
csopf	3	1456

Table 3.4: Project, Number of committers and number of commits

Figure 3.4 shows a distribution of commits per project in the *SourceForge* forge.

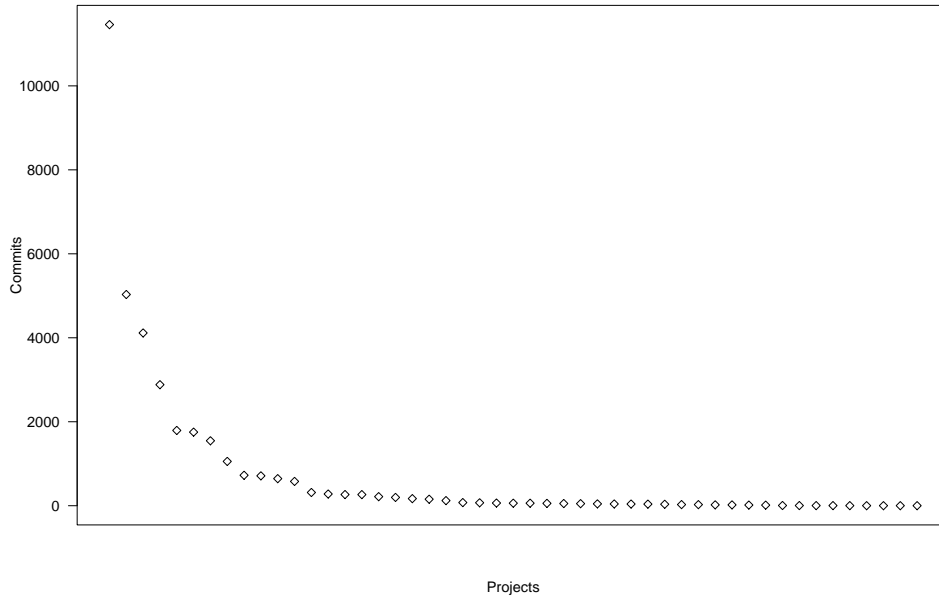


Figure 3.4: Distribution of commits per project in the *SourceForge* forge

### 3.4 Source code information

During the source code data retrieval the team gathered data from 21 projects, all of them from *OSCC*. This data shows the use of 31 different programming languages being *sh* (shell script) the most popular representing 53.03% of the total. We also calculated the average effort in projects with the basic COCOMO model, which is 1.31 developer/year.

Table 3.5<sup>2</sup> and figure 3.5 show results from applying the basic COCOMO model for cost estimation, to releases obtained from *OSCC*.

Table 3.5: Top 5 projects by effort

Project	Num Lines	Effort D/Y (D/M)	Schedule	Avg num of developers	Cost
jre_1.0.5.06_i586	60,026	14.73 (176.79)	1.49 (17.86)	9.9	\$ 1,990.206
Mynetwatch	39,871	9.59 (115.05)	1.26 (15.17)	7.58	\$ 1,295.184
DBD-mysql-2.1028	5,062	1.10 (13.17)	0.55 (6.66)	1.98	\$ 148.313
dansguardian	1,671	0.34 (4.11)	0.36 (4.28)	0.96	\$ 46.320
sanya-web	1,593	0.33 (3.91)	0.35 (4.20)	0.93	\$ 44.052

<sup>2</sup>Unfortunately these software releases were obtained by hand and the team could not determine the exact name of the projects. However, the name of the software package is shown in the first column of the table.

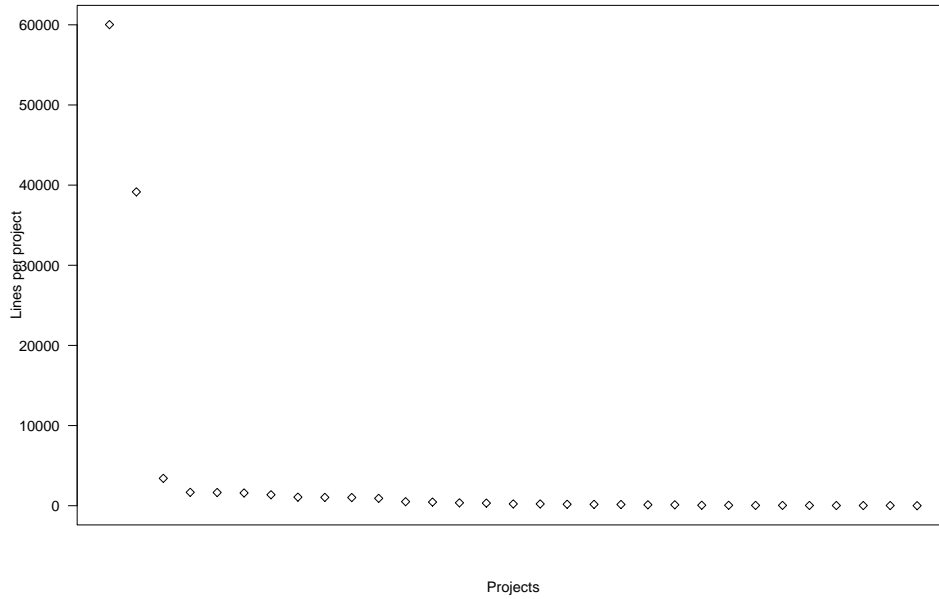


Figure 3.5: Lines of code in *OSCC Knowledge Bank*

Also, table 3.6 and figure 3.6 contain information regarding the percentage of use of programming languages in *OSCC*.

Programming language	No. of lines	Percentage
SH	61,872	53.308%
PHP	40,298	34.7201%
Perl	5,585	4.8119%
Java	4,002	3.448%
C	3,820	3.2912%
Awk	170	0.1464%
Python	167	0.1438%
C++	118	0.1016%
Pascal	33	0.0284%
Total	116,065	100%

Table 3.6: Programming languages used in *OSCC Knowledge Bank*

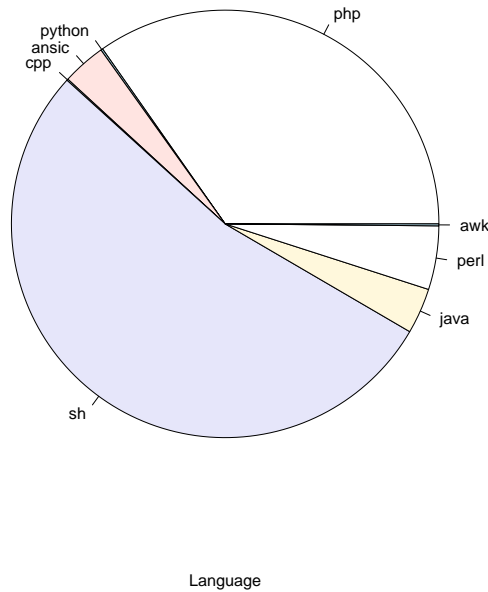


Figure 3.6: Programming languages used in *OSCC Knowledge Bank*

### 3.5 Mailing list information

There were only 3 mailing lists in OSCC Knowledge Bank. Developers of all projects use forums to communicate among them and talk about changes or bug fixing. These 3 mailing lists are meant for general interest topics like news, announcements and discussions for users. All of them have very low traffic. This is because communication is mainly done via Email, face-to-face meetings and telephone. Also, the first phase of the OSS programme focused on laying the foundation which includes others putting in place the enabling environment such as policies and guidelines, trainings and promotions, infrastructure and R&D, and implementing pilot projects as showcase. Efforts were just started to catalyse growth of critical mass of local public sector OSS community of developers. As Phase II implementation progresses, OSCC expects to see more development activities and greater collaboration among developers at source code level.

Table 3.7 is a relation between the sending email address and the number of messages sent.

Email	Posts
mailing-list@oscc.org.my	20
oscc-discuss@oscc.org.my	13
megat@oscc.org.my	5
izam@oscc.org.my	2

Table 3.7: Top 5 email addresses and messages

### 3.6 Authorship information

There are different types of authors in each project. Some of them, work for companies that are interested in participating in the project. Some of them are individual volunteers. Others are R&D Institutes or Universities. The results in this section have been obtained from software releases in *OSCC* (not from SCM repositories), by analysing copyright attributions in source files. Different authors identified have been classified into categories. Table 3.8 and figure 3.7 show these results.

Type	Number
Individual authors	86
Team-Groups	6
Universities	3
Enterprises	9
Foundation or public entities	1
Unknown	3

Table 3.8: Number of different authors by category identified in *OSCC* software releases

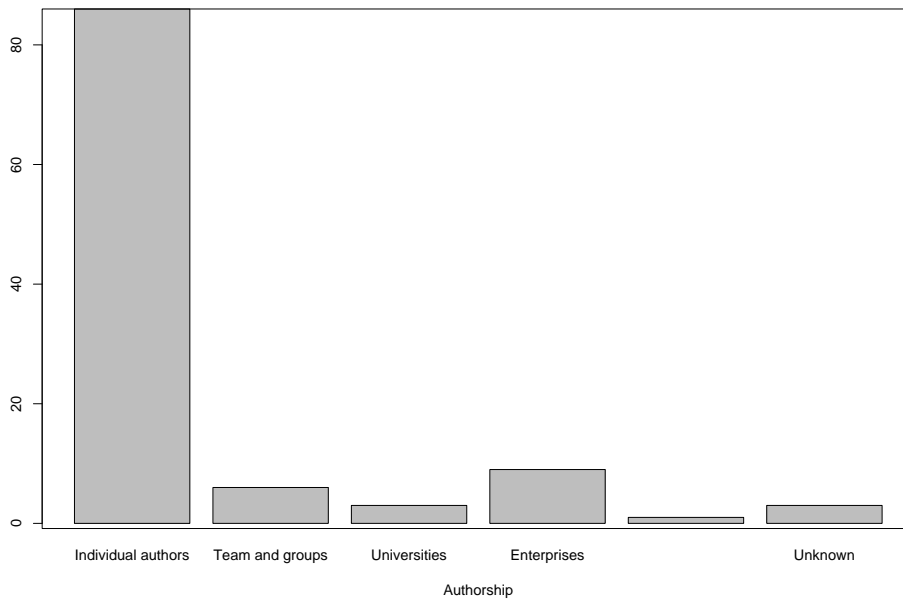


Figure 3.7: Authorship data (in software releases from *OSCC Knowledge Bank*).

# Chapter 4

## Appendixes

### 4.1 General information

#### LUGs (raw data)

Table 4.1: Malaysian LUGs

Name	Size	Web
Malaysian Debian User Group(MyDebian)	large < 100	<a href="http://groups.yahoo.com/group/mydebian/">http://groups.yahoo.com/group/mydebian/</a>
Malaysian Linux From Scratch(MyLFS)	large < 100	<a href="http://tech.groups.yahoo.com/groups/mylfs">http://tech.groups.yahoo.com/groups/mylfs</a>
Malaysian Snort User Group	n/a	<a href="http://www.my-snort.org">http://www.my-snort.org</a>
Malaysian Open Source interest group	n/a	<a href="http://www.my-opensource.org/">http://www.my-opensource.org/</a>
Mypenguin99	very large < 1000	<a href="http://groups.yahoo.com/group/mypenguin99">http://groups.yahoo.com/group/mypenguin99</a>
Malaysia Slackware Community	large < 100	<a href="http://www.slackware.org.my/">http://www.slackware.org.my/</a>
Malaysian BSD User Project (MyBSD)	n/a	<a href="http://www.mybsd.org.my/">http://www.mybsd.org.my/</a>
MNCC OSSIG	n/a	<a href="http://ossig.mncc.com.my">http://ossig.mncc.com.my</a>
Malaysian Gnome Advocacy Mailing List	n/a	<a href="http://mail.gnome.org/mailman/listinfo/gnome-my-list/">http://mail.gnome.org/mailman/listinfo/gnome-my-list/</a>
Malaysia Debian User groups	large < 100	<a href="http://groups.yahoo.com/group/mydebian/">http://groups.yahoo.com/group/mydebian/</a>
Malaysian Gentoo User Group	large < 100	<a href="http://groups.yahoo.com/group/mygentoo/">http://groups.yahoo.com/group/mygentoo/</a>
Malaysia Linux Club	< 200 (151)	<a href="http://tech.groups.yahoo.com/group/LinuxMalaysia">http://tech.groups.yahoo.com/group/LinuxMalaysia</a>
KIOSS-UTM	< 100 (20)	<a href="http://tech.groups.yahoo.com/group/kio-ss-utm">http://tech.groups.yahoo.com/group/kio-ss-utm</a>
Penang Linux User Group	< 100 (18)	<a href="http://members.tripod.com/penanglug">http://members.tripod.com/penanglug</a>
Kuching Open Source	N/A	<a href="http://www.kuchingosc.org">http://www.kuchingosc.org</a>
Open Source Competency Centre	2016	<a href="http://www.oscc.org.my">http://www.oscc.org.my</a>
Free Open Source Foundation Malaysia	N/A	<a href="http://foss.org.my">http://foss.org.my</a>
Kuantan Linux User Group	< 100 (52)	<a href="http://tech.groups.yahoo.com/group/tklug/">http://tech.groups.yahoo.com/group/tklug/</a>

## Communities (raw data)

Table 4.2: Communities

Name	Size	URL
Malaysian Debian User Group(MyDebian)	large < 100	<a href="http://groups.yahoo.com/group/mydebian/">http://groups.yahoo.com/group/mydebian/</a>
Malaysian Linux From Scratch(MyLFS)	> 100 (124)	<a href="http://tech.groups.yahoo.com/groups/mylfs">http://tech.groups.yahoo.com/groups/mylfs</a>
Malaysian Snort User Group	n/a	<a href="http://www.my-snort.org">http://www.my-snort.org</a>
Malaysian Open Source interest group	n/a	<a href="http://www.my-opensource.org/">http://www.my-opensource.org/</a>
Mypenguin99	very large < 1000	<a href="http://groups.yahoo.com/group/mypenguin99">http://groups.yahoo.com/group/mypenguin99</a>
Malaysia Slackware Community	large < 100	<a href="http://www.slackware.org.my/">http://www.slackware.org.my/</a>
Malaysian BSD User Project (MyBSD)	n/a	<a href="http://www.mybsd.org.my/">http://www.mybsd.org.my/</a>
MNCC OSSIG	n/a	<a href="http://ossig.mncc.com.my">http://ossig.mncc.com.my</a>
Malaysian Gnome Advocacy Mailing List	n/a	<a href="http://mail.gnome.org/mailman/listinfo/gnome-my-list">http://mail.gnome.org/mailman/listinfo/gnome-my-list</a>
Malaysia Debian User groups	large < 100	<a href="http://groups.yahoo.com/group/mydebian/">http://groups.yahoo.com/group/mydebian/</a>
Malaysian Gentoo User Group	large < 100	<a href="http://groups.yahoo.com/group/mygentoo/">http://groups.yahoo.com/group/mygentoo/</a>
Malaysia Linux Club	< 200 (151)	<a href="http://tech.groups.yahoo.com/group/LinuxMalaysia">http://tech.groups.yahoo.com/group/LinuxMalaysia</a>
KIOSS-UTM	< 100 (20)	<a href="http://tech.groups.yahoo.com/group/kioss-utm">http://tech.groups.yahoo.com/group/kioss-utm</a>
Penang Linux User Group	< 100(18)	<a href="http://members.tripod.com/penanglug">http://members.tripod.com/penanglug</a>
Kuching Open Source	N/A	<a href="http://www.kuchingosc.org">http://www.kuchingosc.org</a>
Open Source Competency Centre	2016	<a href="http://www.oscc.org.my">http://www.oscc.org.my</a>
Free Open Source Foundation Malaysia	N/A	<a href="http://foss.org.my">http://foss.org.my</a>
Kuantan Linux User Group	< 100 (52)	<a href="http://tech.groups.yahoo.com/group/tklug/">http://tech.groups.yahoo.com/group/tklug/</a>
Malaysia Free and Open Source Group	N/A	<a href="http://www.my-opensource.org/">http://www.my-opensource.org/</a>
Malaysia PHP Community in Malay	N/A	<a href="http://www.php.net.my/">http://www.php.net.my/</a>
Malaysia PHP-Nuke Community in Malay	N/A	<a href="http://www.phpnuke.com.my/">http://www.phpnuke.com.my/</a>
Malaysian XOOPS Community	N/A	<a href="http://www.xoopsmalaysia.org">http://www.xoopsmalaysia.org</a>
Planet MYOSS	N/A	<a href="http://myoss.bytebot.net/">http://myoss.bytebot.net/</a>

## Media (raw data)

Table 4.3: Media

Name	URL
Computer World	<a href="http://www.computerworld.com.my">http://www.computerworld.com.my</a>
Continued on next page	

Table 4.3: Media

<b>Name</b>	<b>URL</b>
Tech and U	<a href="http://www.ctimes.com.my">http://www.ctimes.com.my</a>
Majalah PC	<a href="http://www.karangkraf.com.my/e-majalah/MajalahPC/">http://www.karangkraf.com.my/e-majalah/MajalahPC/</a>
In-Tech Star	<a href="http://www.thestar.com.my">http://www.thestar.com.my</a>
My OSS Magazine	<a href="http://mag.my-opensource.org">http://mag.my-opensource.org</a>
Chip Magazine	<a href="http://www.chip-sean.com">http://www.chip-sean.com</a>
Malaysian Business	<a href="http://beritapublishing.com.my">http://beritapublishing.com.my</a>
Komputer, Utusan Malaysia	<a href="http://www.utusan.com.my">http://www.utusan.com.my</a>
Ilmu & Maklumat, Berita Harian	<a href="http://bharian.com.my">http://bharian.com.my</a>
Nanyang Press	<a href="http://nanyang.com.my">http://nanyang.com.my</a>
Sin Chew Press	<a href="http://sinchew.com.my">http://sinchew.com.my</a>

## 4.2 Repositories information

### SourceForge (raw data)

Table 4.4: SCM results for SourceForge Malaysian developers

<b>Project name</b>	<b>Committer</b>	<b>Commits</b>
phpwb	hd2000	11403
ulxmlrpcpp	ewald-arnold	4870
arias	jflechner	3837
xmlrpccom	harryf	3747
phpmywebhosting	udomueller	3716
cobalt	csvgr	2466
arias	dcmwai	1751
xmlrpc_minus_c	giraffedata	1740
maya	sameon	1697
hoverex	lf3t-hn4d	1047
phpmywebhosting	ckvsoft	885
wobaseframework	fastjackds	883
etestingsjsu	march_ma	823
mayavi	prabhu_r	821
uothello	flobo	806
saxdotnet	kwaclaw	774
xfile	dzone	725
eigenmath	gweigt	679
himalaya_minus_tools	calimlim	662
xmlrpc_minus_c	emk	579

Continued on next page

Table 4.4: SCM results for SourceForge Malaysian developers

<b>Project name</b>	<b>Committer</b>	<b>Commits</b>
testimony	ctasada	578
xmlrpcstream	omulvihill	578
hoverex	basic_sf	467
xmlrpc	gregerohlson	463
patterntesting	vmassol	420
py_minus_xmlrpc	shilad	416
mywebdns	pasaff	398
xfiles	herko_ter_horst	396
cobalt	rboyatt	390
testimony	petterw	387
liquidmaya	chapman	383
kmayan	bitwit	378
phpxmlrpc	ggiunta	328
phpmyweb	rkinder	325
patterntesting	ojojo	324
marblenmadness	astroboy76	320
cobalt_minus_rom	iceblink	316
openmagic	merlinm	300
arias	js9s	285
aptesting	mistik	280
rezohello	dutoite	279
glshuffle	rvb	277
arobase2000	fviallon	270
arobase2000	polizzi_gilles	257
glmayan	bitwit	253
liquidmaya	geohar	252
google_minus_hack	pratheepan_r	249
hoverex	sofmz	248
ooba	aaronbata	237
strutsblobapp	sullis	235
google_minus_taglib	ethauvin	227
xmlrpcpp	cmorley	227
cgoban1	wms	207
php_minus_booba	zboczuch	182
mayatomgc	sashang	176
arobase2000	gyllou	169
kde_minus_ms	najmi_zabidi	155
phpxmlrpc	milosch	148
uohello	jchoelt	134
hoverex	exiang	132
xmlrpcdebugger	cebartling	132
liquidmaya	colindoncaster	111
glmayamodel	jluetkens	109
mayavi	prabhu	108

Continued on next page

Table 4.4: SCM results for SourceForge Malaysian developers

<b>Project name</b>	<b>Committer</b>	<b>Commits</b>
booba	zuhanh	101
liquidmaya	deverly	100
liquidmaya	berj	87
booba	crimel	86
shuffler	jesjones	86
kobayashimaru	alexannika	84
himalaya_minus_tools	alin74	79
ooba	taf2cs	79
obj2hbm	acg6764	79
xmlrpc	franzhoepfinger	77
arobase2000	joscelin	77
booba	lina-ourima	76
liquidmaya	pleprince	71
greatcharts	harmenschaap	70
phpxmlrpc	edd	69
bali_minus_blocks	niplash	64
xmlrpc4sw	dstump	62
greatcharts	bennett78	62
vbgenlib	deadparrot	62
kebasdata	kedai	60
liquidmaya	maurizio	57
xmlrpc_minus_c	sbone	55
xmlrpcflash	dopelogik	54
saxdotnet	jeffrafter	53
oo_minus_l10n_minus_my	bustamam	52
mariasite	mbusik	52
xmlrpcstream	curvepusher	50
rotobaseball	jpuls	49
photobank	relgar	49
phpbind	koguma	49
glshuffle	sbeyer	49
xindice_minus_xmlrpc	khward	48
testimony	mbillian	48
googlesvcs	datamgmt	48
kobaltintranet	dryw-filtiarn	46
malayalam	sajith_vk	46
cgoban1	arburgers	45
huffman	dritchardson	44
dinhuff	personaje	43
dothello	niouf	42
xfiler	fuqiangx	42
munsyi	sharuzzaman	42
cobalt_minus_rom	thockin	40
ze_minus_cme	abuzaim	40

Continued on next page

Table 4.4: SCM results for SourceForge Malaysian developers

<b>Project name</b>	<b>Committer</b>	<b>Commits</b>
liquidmaya	rjpieke	39
xdox	kedai	38
php_minus_booba	spiacy	38
cobaltfp	atopian	36
openmagic	flarelocke	36
aspxmlrpc	jjohn	36
bali_minus_mailer	niclash	35
booba	mdimitrova	33
cgoban1	ksonney	33
googleticker	renaudga	32
aspxmlrpc	benles	31
googleinc	jaya	30
booba	dekana	29
patterntesting	jmj_in	27
pygoogle	bluecoat93	27
dhcpdconf	ee4mez	27
mayacalc	kers	27
xmlrpcpp	rufustfirefly	27
forbiddenmagic	placekeeper	26
phpxmlrpc	dilinger	26
booba	andiazevedo	26
booba	ceja	25
openmathtag	gruime	24
securecobalt	lance_rushing	23
phpmywebhosting	karyal	23
rbxmlrpc	sdevore	22
sempoicalendar	kedai	21
othello	byhoe	20
xmlrpc_minus_c	joeshaw	18
freecoins2xml	lars_c_persson	18
shuffleboard	andyqua	18
arobase2000	corrino	18
pymaya	remkon	17
maya_minus_tweak	sbp101	16
phpmywebhosting	mattmann72	16
booba	hboehme	16
dbrb	alistairb	16
mayahttpd	funmaya	15
phpmywebhosting	dark-shadow	15
malayalam_minus_gnome	baijum81	15
openmagic	uid56143	15
huff	lowzl	14
phpmywebmail	bmuskalla	13
cdlibrarydb	nkanwar	13

Continued on next page

Table 4.4: SCM results for SourceForge Malaysian developers

<b>Project name</b>	<b>Committer</b>	<b>Commits</b>
liquidmaya	pickler	13
hobarte	shaunxcore	13
shuffle_minus_cmd	pberndt	12
ejpassword	edball	11
xfiles	marrs	11
aspxmlrpc	wccartd	11
booba	gmartin2004	11
malayalamlinux	shaji	10
liquidmaya	scruby	10
cgoban1	wmshub	10
openmark	benfy	8
mod_minus_xmlrpc	andrewby	8
phpmywebhosting	taher	7
cgoban1	godisch	6
uothello	gborios	6
liquidmaya	kenmcgaugh	6
xfilefinder	kidkiller	5
arobase2000	michaeldiot	5
xmlrpcplibmulti	eries	5
thexfile	rsquared	4
rbxmlrpc	diehardmm	4
sempoicalendar	johntynan	4
mariasite	deerwood	4
phpmywebhosting	lylix	4
liquidmaya	arpflush	3
forbiddenmagic	py-ro	2
objmap	uid48386	2
phpmywebhosting	spaanane	2
xmlrpc	wsargent	1
mobapackage	selandro	1
booba	christianpfrang	1
booba	kaleko	1
booba	mwojciech	1
phpmywebhosting	macvampi	1
arias	rfox	1

**Mailing list information (raw data)**

Table 4.5: Table with all the different posters to the *oscc* mailing lists and their total number of posts

<b>E-mail</b>	<b>Number of e-mails sent</b>
ashamril@oscc.org.my	2
iza@oscc.org.my	1
izam@oscc.org.my	2
janarthan@mois.gov.my	1
ketan@peopleassociates.com	1
mailing-list@oscc.org.my	20
megat@komnas.com	1
megat@oscc.org.my	5
mohdzul@imedia.upm.edu.my	1
muniery@gmail.com	1
nazrol@serai.org	1
oscc-announce@lists.oscc.org.my	2
oscc-discuss@oscc.org.my	13
sharuzzaman@oscc.org.my	1
yfaizal@oscc.org.my	1
zaharah@oscc.org.my	1