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Report of the workshop on Open Source Software

REPORT OF THE WORKSHOP ON OPEN SOURCE SOFTWARE CODI III (10-11 May 2003)

The digital gap between the developed world and the developing countries is growing at an alarming rate in regions like Africa which does not possess the necessary material and technical resources to enter the information age and to contribute to the development of the world economy. Consequently, open source software has become widespread in technical, government, media and civil circles of African societies due to their low cost of operation and particularly their principles of freedom and sharing. Presently, open software is an unrivalled opportunity for the maintenance of sustainable development in Africa.

Conscious of the stakes in this new concept, Economic Commission for Africa (ECA), AIF and United Nations Educational, Scientific and Cultural Organization (UNESCO) have decided to encourage the debate on open source software. This is why ECA and AIF in a joint effort organized in 2002 the first workshop in Bamako on the theme "Open space software: A strategic focus for Africa"

This Workshop aims at creating a common space for discussion on the methods to be pursued by the countries to introduce open space software in public administration based on the experiences from countries like Brazil, China, France, Germany, Korea, Mexico, the United Kingdom, the United States, Tunisia etc. The recommendations of this Workshop will be incorporated in CODI III for adoption by the Conference of Ministers of Finance and Economic Development scheduled for June 2003.

Madame Karima Bounemra Ben Soltane, Director of DISD in ECA in her welcome remarks praised the joint efforts of ECA and AIF to promote open space software in Africa. His Excellency Mr. Makan Moussa Camara, the OIF representative reviewed the functions of OIF and confirmed the support of his agency to participants in the Workshop in the promotion of open space software in Africa.

Here is a summary of the various presentations:

Open space software, what is it? Why, How? By Mr. Pierre Ouedraogo

In his presentation, Mr. Pierre Ouedraogo of INTIF said that in the first place the issue of open source software is current due to the wide media coverage, the pressure from industries of software proprietors, the end of the neutrality of states as well as the results of the Bamko Conference held in 2000.

He further outlined the characteristics of open space software and proprietary software and draw attention on the differences that exist between "Open Space Software License" in "Open Source Code Licences" and "Free Soft Ware" particularly emphasizing that some open code softwares could be traps as the terms of the licences could allow to become developers once again.

In effect, those considered free according to ATUL are the softwares available in the form of source code, freely redistributable and modifiable according to the conditions similar to the GPL, Berkeley or artistic licences or more generally the recommendations of the group opensource.org (OSD).

The following issues have been selected for discussion:

- The possibility to become producer in a short time with the possibility of the countries of the South becoming industrialized;
- The cost reduction resulting in the narrowing of the digital gap;
- The freedom of access to software resulting in freedom of access to knowledge as well as a revolution in the production and processing of knowledge.

Open space software are generally the outcome of individual initiatives and later develop and evolve through collaborative models, economic models and mixed models associated with these two models.

Finally, Mr. Pierre Ouedraogo concluded that open space software are tools that support good governance.

Legal framework and dissemination tools: by Mr. Francois Pelligrini

An open space software is a software that guarantees the user unlimited right of usage as well as modification and redistribution of the modifications so that the whole community can freely make use of it and particularly benefit from the work of all concerned.

Conscious that open space software would contribute to the attainment of computer self-sufficiency, governments have taken the initiatives to promote the use of open space software in their countries (for example Tunisia, Peru, South Africa etc.).

Fearing to lose their effective monopoly on the software industries, some major enterprises have put pressure on their governments to legislate laws for the preservation of these monopolies and their transformation into monopolies as of right.

The Digital Millennium Copyright Act (DMCA) is one of the laws in force in the United States and will soon be passed in Europe. It guarantees the disseminators the right to tighten the screws on information and compels people to pay to access information.

The Security Systems Standard and Certification Act (SSSCA) is another law underway in the United States. It will only allow the production of materials with control system of certified data by the American Government. However, an understanding between the developers of Intel and the editors of Microsoft software are now going to turn this draft law into reality with TCPA/IP.

The third law authorizes the property rights of the software. Indeed, the software patents do not protect the programmes (what is the use of the copyright) but allows for the monopoly of their associated concepts such as algorithms, the data set formats and the communication protocols. It is a heavy legal risk on small enterprises and the software developers (as free as proprietors) and constitute a threat for the technological innovation and economic developments.

(<http://www.abul.org/brevets/conferences/conferences.php3>)

It is crucial that countries from the South cooperate, act to prevent protectionist measures to be taken by the countries of the North.

Web. Site in open space software: SPIP case study by Messrs Sylvain Zongo/Haja Ramboassalama

Publication system for internet (SPIP) is open space software designed to manage a dynamic newspaper web site. This software which was launched in July 2001 is currently in 1.5.2. <http://www.spip.org> and based on the interface PHP engine <http://www.php.org> and on the data base MySQL<http://www.mysql.org>.

The installation, configuration and utilization of software do not require a specific technical knowledge in computer sciences.

SPIP provides for the complete separation and distribution of three types of task between different persons: the graphic composition, the editorial contribution through the proposal of articles and news in brief and the editorial management of the site.

The principal objective providing for the publication of the information on SPIP is the article. The editing of articles is very simple as it is done through a graphic interface on the web.

SPIP also provides for the management of news in brief, forums and petitions.

Finally, SPIP incorporates a very simplified system of statistics that makes it possible to assess the popularity of articles and headings as well as the search engine based on the system word indexing. The site of the newspaper, le monde diplomatique (<http://www.monde-diplomatique.fr>) is on SPIP. The documentation of the software is available at the following address: www.spip.org.

The State and open space software in Tunisia: By Mr. Majed KHALFALLAH

The contribution of Mr. Majed Khalfallah, Secretary General of the Tunisian Open Space Software Association is an overview on the Tunisian experience in the development of open space software and the results gained through the involvement of the highest level in the State.

The first symposium on space software reviewed the first open space software projects which led to the establishment of the association ATULL whose web site is <http://www.atull.tn>

and the emergence of several local and specialized enterprises in services related to open space software.

He explained how the Tunisian Government after having taken note of the cost of proprietary software payable in foreign exchange and the technological innovation emerging from open space software recommended that account should be taken of this type of software in the computer projects.

This policy led to the emergence of several initiatives aimed at training the managers and Tunisian students working in the open space software.

Mr. Majed Khalfallah ended by describing the efforts made by Tunisia Telecommunication towards the development of local softwares based on the open space software.

The security of the network systems: Messrs Cedruc Blancher/Sid'Ahmed Fadel

The contribution focused on the benefits of GNU/LINUX for the construction of a secured information system. He made a list of the advantages and disadvantages of using such a system and presented the principal actions to secure the services and software on the GNU/LINUX system. He later outlined the methods to be pursued to strengthen it.

He dealt in particular, with the case of fire walls with the open space software Netfilter. He outlined the characteristics, the operation and the strong points in comparison to other similar tools. It was shown that Netfilter constitute the best option in most cases.

OSIDAMS (opensource) software. Internationally Developed Data Analysis and Management Software package by: MAKANE Faye.

The IDAMS software is developed and maintained by several experts from different countries hence its name "Internationally Developed Data Analysis and Management Software Package". IDAMS is a tool that helps professionals to carry out analysis or manipulate digital or statistical analysis.

The instruction manual is available in several languages namely English, French, Spanish, Arabic and Russian.

The windows version is available only in English and French. It not only permits the manipulation, monitoring and updating of data but it also has windows interfaces facilitating its processing. It also has a wide range of functions and the instruction manuals are accessible on line.

He later appealed for the collaboration of African developers in producing a free OSIDAMS (opensource IDAMS) version under GPL in order to permit a better maintenance, durability and proper distribution.

A meeting of OSIDAMS developers is scheduled to be held in Africa in July and there are plans to invite a group of committed Africans to the meeting.

Management software for an FAI in Cote d'Ivoire: By Mr. Didier KLA

The company Aviso de Cote d'Ivoire Telecommunication, internet access provider uses the software Extent RBS for the authentication, billing and the software PowerCustomer for business management. The software RBS is commercialized project by an Israeli Company Extent and the PowerCustomer software was developed for Aviso by an Ivorian Company.

Following the frequent malfunction of these softwares due to the incompatibility between the two systems, the Aviso engineer, member of the A13L association decided to develop a unique application for business management, billing and authentication of subscribers. The design for this application was a modular architecture and based on open space software.

Following a review of the different tools and systems available for the development of this application, the option focused on:

- IcRadios as an authenticate server;
- MySQL as a management of database system;
- LINUX as a development system;
- PHP and Perl as programming languages.

This application is functioning and operational for the past few months. It is very consistent.

A13L plans to make available, this software to the international community for the pursuit of its development efforts. In this regard a working group will be established very soon.

Issues discussed

- What role should the government play in the development of open space software in the public administration and what are the limitations in the implementation of these measures?
- What is the role of the civil society in the dissemination and utilization of open space software and state support for undertaking positive action in this field?
- How can this open space software including LINUX contribute to the protection of civil liberties and freedom of speech ?
- What immediate measures should be taken for the building of a Pan-African mutual assistance and exchange of information and experience associated with open space software?
- The importance of training on open space is to assist in their introduction in Africa and emergence of a software industry.
- How do you sensitize lawmakers and African States and the risk of software patents and their utilization as an arm of strategic domination through the control of the management of information?

These discussions led to the following recommendations which are annexed to this report.

At the end of two days of pre-conference discussion to CODI III, the workshop of the association of open space software users focused on the potentials of open space software, improving public administration in Africa as well as the need to strengthen the synergies through the creation of an African association of open space software users.

It emerged from the workshop that the open space software could significantly improve the all-out development of information for good governance in Africa and in particular public information through:

- The acceleration of the circulation of public information;
- The reduction of project cost by safeguarding both the interest of the providers and the customers as well as the public. The impact of ICTS goes beyond the technological framework;
- The development of software industry in Africa;
- The reduction of the impact of corruption, counterfeit and piracy which encourages respect for laws and regulations and emergence of the rule of law for all, and the respect of values of justice and equity.

Finally, this can only be done with a very strong economic model from the open space software industry, supported by fiscal incentives and through adequate financing programmes as well as through a systematic refusal by African Governments to pass legislation that would lead to abusive monopolies and economically unjustified which are detrimental to innovation, development and computer self-sufficiency such as the DMCA regulations and the extension of the potential of granting patents to software.

The members of Rapporteur General Subcommittee

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Hicham FELLALI (Morocco)
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Gorfu Assefa (Ethiopia)

RECOMMENDATIONS

CODI III

Workshop on Free Software organized by ECA and the Francophony International Agency (AIF) at the United Nations Conference Centre, Addis Ababa on 10, 11 and 14 May 2003

We the representatives of governments, intergovernmental organizations/national free software users and developers, the private sector and the civil society, meeting preparatory to and during the workshop of CODI III on 10, 11 and 14 May 2003, at the initiative of ECA and AIF at the United Nations Conference Centre in Addis Ababa, Ethiopia.

- Noting that the growing impoverishment of our countries and the drastic reduction in public development assistance calls for a better redistribution and efficient use of the scarce resources generated by African men and women;
- Considering the digital divide between Africa and the rest of the world and among African countries whose populations are at a disadvantage for being among the lowest in the world in terms of access to new information and communications technologies;
- Considering the adoption of free software by a considerable number of countries in the world as a good governance measure;
- Hereby call on the authorities, civil society organizations, private sector enterprises, international organizations and cooperation agencies to assume their collective responsibilities.

To this end, we put forward the following recommendations aimed at ensuring that (the digital divide becomes a development incentive).

With respect to the public sector, we recommend:

1. The adoption of legislative and regulatory measures on Free Software use in African Public Administrations in order to reduce the dependency on proprietary software whose too restrictive and already very costly user licenses puts a strain on the public finances of our countries.
2. {We call on countries to oppose, by legislative and regulatory measures, the propagation within our countries of legislations promoting excessive monopolistic positions detrimental to innovation, development and self-sufficiency in information such as legislations of the Digital Millennium Copyright (DMCA) type and the extension of patentability to the field of software and commercial methods.}
3. {To make continued and sustained approaches to United Nations Educational, Scientific and Cultural Organization (UNESCO) with a view to having the Free Software registered as an immaterial common heritage of mankind}.

4. Opening up of universities, secondary, general, technical and vocational institutions for study and use and for the development of free software through the introduction of specific programmes on free software into their syllabuses.
5. Sensitization and mobilization of African public opinion, through large scale national and continental actions built around the Bamako-2002 Declaration which emerged from the deliberations of the African Regional Conference Preparatory to the World Summit on Information Society as well as the NTIC programme of the New Partnership for African Development (NEPAD) on the pressing need to move towards free software.
6. Submission of draft text of a Pan-African Free Software Day by the African Union through the country responsible for the NTIC component of NEPAD, for its adoption.
7. Financing of or assistance to innovative projects for the construction and emergence of national free software design and development industries.

With respect to the private sector, we recommend:

8. The creation of a partnership based on North-South and South-South economic Model mutually advantageous for the emergence of a true African free software industry.
9. Intra-African collaboration through the development of African competencies in free software and dissemination on a single gateway of success stories and the outcomes of African research on the use of free software.

With respect to the civil society, we recommend:

10. The adoption of a complementary political activism which does not place the free software outside the proprietary software but as quality alternative tools that can be acquired more cheaply.
11. To ensure, through constant advocacy in our countries, the establishment of associations and laboratories for large-scale popularization of the philosophy and stakes of the free software before the general public and in particular the youth, women and the African media.

With respect to international organizations and cooperation agencies, we recommend:

12. The preparation of an extensive African capacity building programme in the field of free software between now and the second phase of the World Summit on Information Society (WSIS) scheduled to be held in Tunis in 2005, through the establishment and expansion of training centers and developers networks.
13. The adoption of the level of free software use as indicator of good governance and sustainable development in national cooperation policies in Africa

CODI III

Workshop on Free Software organized by ECA and AIF at the United Nations Conference Centre, Addis Ababa, 10,11 and 14 May 2003.

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