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IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is about information processing may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

Luis Corral Alberto Sillitti
Giancarlo Succi Jelena Vlasenko
Anthony I. Wasserman (Eds.)

Open Source Software: Mobile Open Source Technologies

10th IFIP WG 2.13 International Conference
on Open Source Systems, OSS 2014
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Proceedings



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Preface

The International Conference on Open Source Systems (OSS) celebrated 10 years of interchange, discussion, progress, and openness. This year we received a relevant number of submission and workshop proposals, on all aspects of open source. Moreover, the conference was honored with the presence of distinguished speakers from leading technology companies who shared their experience on how to achieve success on top of open source technologies. A total of 37 high-quality contributions from 18 countries were accepted in the final program, thanks to the effort and coordination of the program chairs and the rigorous reviews of the Program Committee.

In 2014, OSS traveled to Latin America, landing in the beautiful city of San Jose, capital of the lively Republic of Costa Rica. OSS 2014 took place in Latin America, a region that experiences an enthusiastic and continuous growth in the development and implementation of open source technologies. The high participation of Latin American authors in the main program of the conference was remarkable, as was the celebration of the First Latin Colloquium on Open Source Software. This colloquium brought together authors and audience members speaking diverse Latin languages, such as Catalan, French, Italian, Portuguese, Romanian, Spanish, etc.

OSS 2014 presented as a featured topic “Mobile Open Source Technologies.” Given the widespread diffusion of mobile devices and the relevance of open source operating systems for such devices (not only Android, but also Sailfish, Ubuntu, and others) the 10th edition of the conference solicited in particular submissions that focus on this area of open source, targeting their architectures, design choices, programming languages, etc.

This volume presents the 37 peer-reviewed contributions that made up the main program of OSS 2014. We organized the contents in eight parts, each concerning a relevant area of open source: open source visualization and reporting; open source in business modeling; open source in mobile and Web technologies; open source in education and research; development processes of open source products; testing and assurance in open source projects; global impact on open source communities and development; and case studies and demonstrations of open source projects. We heartily believe that this book will provide useful insights into the current state of the art and the practice of open source software development, technologies, project management, education, and applications.

For one decade, the OSS series of conferences has been a key reference to the open source research and practitioner community. This would have not been possible without all software developers, authors, reviewers, sponsors, keynote speakers, organization committees, local liaisons and all the involved staff who

generously contributed to make OSS successful since its very first edition. We would like to gratefully thank them all for their interest, time, and passion.

March 2014

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Table of Contents

Open Source Visualization and Reporting

Code Review Analytics: WebKit as Case Study	1
<i>Jesús M. González-Barahona, Daniel Izquierdo-Cortázar, Gregorio Robles, and Mario Gallegos</i>	
Navigation Support in Evolving Open-Source Communities by a Web-Based Dashboard	11
<i>Anna Hannemann, Kristjan Liiva, and Ralf Klamma</i>	
Who Contributes to What? Exploring Hidden Relationships between FLOSS Projects	21
<i>M.M. Mahbulul Syeed and Imed Hammouda</i>	
How Do Social Interaction Networks Influence Peer Impressions Formation? A Case Study	31
<i>Amiangshu Bosu and Jeffrey C. Carver</i>	
Drawing the Big Picture: Temporal Visualization of Dynamic Collaboration Graphs of OSS Software Forks	41
<i>Amir Azarbakht and Carlos Jensen</i>	

Open Source in Business Modeling

Analyzing the Relationship between the License of Packages and Their Files in Free and Open Source Software	51
<i>Yuki Manabe, Daniel M. German, and Katsuro Inoue</i>	
Adapting SCRUM to the Italian Army: Methods and (Open) Tools	61
<i>Franco Raffaele Cotugno and Angelo Messina</i>	
Applying the Submission Multiple Tier (SMT) Matrix to Detect Impact on Developer Interest on Open Source Project Survivability	70
<i>Bee Bee Chua</i>	
FOSS Service Management and Incidences	76
<i>Susana Sánchez Ortiz and Alfredo Pérez Benitez</i>	
Open-Source Software Entrepreneurial Business Modelling	80
<i>Jose Teixeira and Joni Salminen</i>	

Open Source in Mobile and Web Technologies

Towards Understanding of Structural Attributes of Web APIs Using Metrics Based on API Call Responses	83
<i>Andrea Janes, Tadas Remencius, Alberto Sillitti, and Giancarlo Succi</i>	
Open Source Mobile Virtual Machines: An Energy Assessment of Dalvik vs. ART	93
<i>Anton B. Georgiev, Alberto Sillitti, and Giancarlo Succi</i>	
Improving Mozilla's In-App Payment Platform	103
<i>Ewa Janczukowicz, Ahmed Bouabdallah, Arnaud Braud, Gaël Fromentoux, and Jean-Marie Bonnin</i>	
A Performance Analysis of Wireless Mesh Networks Implementations Based on Open Source Software	107
<i>Iván Armuelles Voinov, Aidelen Chung Cedeño, Joaquín Chung, and Grace González</i>	
Use of Open Software Tools for Data Offloading Techniques Analysis on Mobile Networks	111
<i>José M. Koo, Juan P. Espino, Iván Armuelles, and Rubén Villarreal</i>	

Open Source in Education and Research

Crafting a Systematic Literature Review on Open-Source Platforms	113
<i>Jose Teixeira and Abayomi Baiyere</i>	
Considerations Regarding the Creation of a Post-graduate Master's Degree in Free Software	123
<i>Sergio Raúl Montes León, Gregorio Robles, Jesús M. González-Barahona, and Luis E. Sánchez C.</i>	
Lessons Learned from Teaching Open Source Software Development	133
<i>Becka Morgan and Carlos Jensen</i>	
A Successful OSS Adaptation and Integration in an e-Learning Platform: TEC Digital	143
<i>Mario Chacon-Rivas and Cesar Garita</i>	
Smart TV with Free Technologies in Support of Teaching-Learning Process	147
<i>Eugenio Rosales Rosa, Abel Alfonso Fúrvida Donéstevez, Marielis González Muñoz, and Allan Pierra Fuentes</i>	

Development Processes of Open Source Products

Barriers Faced by Newcomers to Open Source Projects: A Systematic Review	153
<i>Igor Steinmacher, Marco Aurélio Graciotto Silva, and Marco Aurélio Gerosa</i>	
Does Contributor Characteristics Influence Future Participation? A Case Study on Google Chromium Issue Tracking System	164
<i>Ayushi Rastogi and Ashish Sureka</i>	
A Layered Approach to Managing Risks in OSS Projects	168
<i>Xavier Franch, Ron Kenett, Fabio Mancinelli, Angelo Susi, David Ameller, Ron Ben-Jacob, and Alberto Siena</i>	
A Methodology for Managing FOSS Migration Projects	172
<i>Angel Goñi, Maheshwar Boodraj, and Yordanis Cabreja</i>	
The Agile Management of Development Projects of Software Combining Scrum, Kanban and Expert Consultation	176
<i>Michel Evaristo Febles Parker and Yusleydi Fernández del Monte</i>	

Testing and Assurance on Open Source Projects

An Exploration of Code Quality in FOSS Projects	181
<i>Iftekhar Ahmed, Soroush Ghorashi, and Carlos Jensen</i>	
Polytrix: A Pacto-Powered Polyglot Test Matrix	191
<i>Max Lincoln and Fernando Alves</i>	
Flow Research SXP Agile Methodology for FOSS Projects	195
<i>Gladys Marsi Peñalver Romero, Lisandra Isabel Leyva Samada, and Abel Meneses Abad</i>	
How to Support Newcomers Onboarding to Open Source Software Projects	199
<i>Igor Steinmacher and Marco Aurélio Gerosa</i>	

Global Impact on Open Source Communities and Development

The Census of the Brazilian Open-Source Community	202
<i>Gustavo Pinto and Fernando Kamei</i>	
Cuban GNU/Linux Nova Distribution for Server Computers	212
<i>Eugenio Rosales Rosa, Juan Manuel Fuentes Rodríguez, Abel Alfonso Fírvida Donéstevez, and Dairelys García Rivas</i>	

A Study of the Effect on Business Growth by Utilization and
 Contribution of Open Source Software in Japanese IT Companies 216
Tetsuo Noda and Terutaka Tansho

**Case Studies and Demonstrations of Open Source
 Projects**

USB Device Management in GNU/Linux Systems 218
*Edilberto Blez Deroncelé, Allan Pierra Fuentes,
 Dayana Caridad Tejera Hernández, Haniel Cáceres Navarro,
 Abel Alfonso Fírvida Donéstevez, and Michel Evaristo Febles Parker*

PROINFODATA: Monitoring a Large Park of Computational
 Laboratories 226
*Cleide L.B. Possamai, Diego Pasqualin, Daniel Weingaertner,
 Eduardo Todt, Marcos A. Castilho, Luis C.E. de Bona, and
 Eduardo Cunha de Almeida*

Book Locator: Books Manager 230
Dairelys García Rivas

Automation of Agricultural Irrigation System with Open Source 232
Bladimir Jaime Pérez Quezada and Javier Fernández

When Are OSS Developers More Likely to Introduce Vulnerable Code
 Changes? A Case Study 234
*Amiangshu Bosu, Jeffrey C. Carver, Munawar Hafiz,
 Patrick Hilley, and Derek Janni*

Author Index 237